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Fluke Corporation is the world leader in compact and professional electronic test tools. From industrial maintenance to commercial building operations, Fluke tools deliver the testing and troubleshooting capabilities to keep the world up and running.

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What's New at Fluke



Fluke 1770 Series Three-Phase Power Quality Analyzers

Automatic measurements. More flexibility. Better power quality troubleshooting.

- Automatically measure power and power quality parameters
- At-a-glance power quality health for faster troubleshooting
- Easily view V/A/Hz, power, dips, swells, and harmonics data
- Capture high-speed transients up to 8 kV
- Power directly from measurement circuit without a line cord

For more information on the Fluke 1770 Series, see page 97



Fluke TiS75+ Thermal Camera

Be proactive instead of reactive.

- 384 x 288 infrared resolution
- Asset Tagging
- Touchscreen IR Fusion™
- IS3 and AVI video recording
- Measure up to 550 °C
- Dew-point calculation

For more information on the Fluke TiS75+, see page 61



Fluke 729 Pro Automatic Pressure Calibrator

Portable pressure calibrator with replaceable module.

- Automatic pressure generation and regulation to 1000psi
- Replaceable internal pressure control modules
- Built-in test template, one-key calibration
- HART communication
- Pressure leakage testing
- Automatic fine-pressure adjustment, automatic pressure stabilization
- Powerful, replaceable Li-ion battery

For more information on the Fluke 729 Pro, see page 127



Fluke 190 Series III ScopeMeter® Test Tools

- Rated for industrial environments CAT III 1000 V/CAT IV 600 V
- Automatically capture, view and analyze complex waveforms
- Large, bright color display for easy in-the-field viewing
- USB and Wi-Fi download for analyzing data with FlukeView2 software
- Up to four independent floating isolated inputs, up to 1000 V

For more information on the Fluke 190 Series III, see page 104



Fluke MDA-550-III Motor Drive Analyzer

Simplify complex motor-drive troubleshooting with guided test setups and automated drive measurements.

- Measure key motor-drive parameters
- Guided testing with graphical step-by-step connection diagrams
- Preset measurement profiles reduce setup complexity
- Built-in report writing capabilities
- Easily produce as-found and as-left troubleshooting reports
- Measure additional electrical parameters with full 500MHz oscilloscope

For more information on the Fluke MDA-550-III, see page 106



Fluke 1535 and 1537 2500V Insulation Resistance Meter Digital High-Voltage Megohmmeter

- Up to 500 GΩ insulation resistance measurement range
- Fast-measurement design, faster & stable resistance reading, higher efficiency
- Automatic calculation of polarization index (PI) and dielectric absorption ratio (DAR)
- Low power design meets the requirements of high-intensity work: up to 1300 times of 2500 V measurement, and up to 6500 times of 250 V measurements

For more information on the Fluke 1535/1537, see page 79



Fluke 378 FC Non-Contact Voltage True-rms AC/DC Clamp Meter with iFlex

Voltage and current measurements with FieldSense™ technology.

- Measure voltage and current with your clamp jaw
- Faster, safer testing – all without touching a live wire – using FieldSense™ technology
- Power quality indicator shows whether equipment or power line is faulty
- Complete 3-phase voltage and current tests in 3 quick steps

For more information on the Fluke 378 FC, see page 29



Compact Fluke PTi120 400C Pocket Thermal Camera

Portable thermal camera for industrial inspection.

- Fully radiometric thermal imager gives you measurement data to the pixel with 120 x 90 infrared resolution (10,800 pixels)
- 3.5" LCD touchscreen display for easy troubleshooting
- -20 °C to +400 °C temperature measurement range

For more information on the Fluke PTi120 400C, see page 58



Fluke 393 FC CAT III 1500 V True-rms Clamp Meter with iFlex

The world's first CAT III 1500 V true-RMS clamp meter.

- Measure safely with CAT III 1500 V rated clamp meter
- Thin jaw for access to cables in crowded combiner boxes
- Sturdy IP54 rated for outdoor use
- Work efficiently with dc power measurement, audio polarity and visual continuity

For more information on the Fluke 393 FC, see page 30



Fluke 404E, 406E, 405, 408 and 410 Laser Distance Meter

These Laser Distance Meters have the Fluke durability and quality you expect.

- Quickly measure distance, calculate area / volume / pythagoras
- Auto level and height
- Built to withstand rainy or dusty conditions: 1-meter drop tested with rated IP54 (Fluke 404E / 406E), IP65 (Fluke 405 / 408 / 410)
- Fluke 405 / 408 / 410 provide additional features as: Universal tripod interface, easy to use. Type-C charging port, strong endurance. 2-inch HD display, clear viewing in full sunlight

For more information on the Fluke 404E, 406E, 405, 408 and 410, see page 48

Fluke Connect®

Take advantage of the benefits of Fluke Connect® by seamlessly gathering and sharing inspection results instantly. By using the Fluke Connect® App, you can efficiently and safely capture, store and share maintenance data without leaving the field. You can securely connect and collaborate with others, so they can see what you see.

Fluke Connect is only available in selected countries. Please check with your local distributor for available models.



SEE IT. SAVE IT. SHARE IT.

All the facts, right in the field.

Download the FREE app!

The Fluke Connect App that turns your phone into a Fluke Tool.

By using the Fluke Connect® App, you can efficiently and safely capture, store and share maintenance data without leaving the field. You can securely connect and collaborate with others, so they can see what you see.



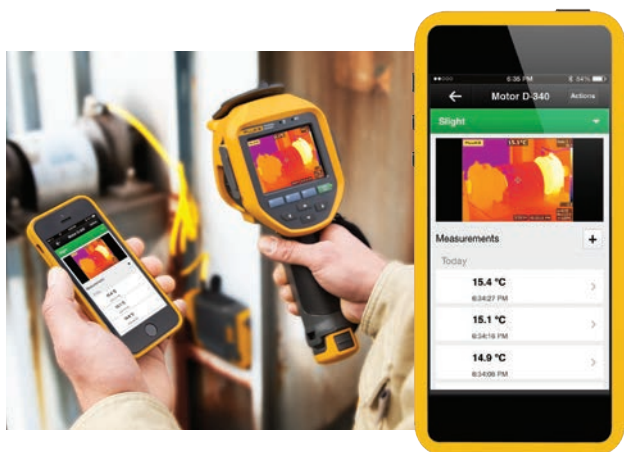
Share from anywhere

Stay on the same page even when you and your team are in different places, only with ShareLive™ video call. Securely connect and collaborate with others, so they can see what you see. Get approvals without leaving the field.



Troubleshoot faster

Instantly trend and monitor intermittent problems with TrendIt™ graphs so you can easily identify trends and stop problems before they happen. Seeing is believing-trend data over time and prove your point.



Save Time Reporting

Make better decisions faster than before. Organise your measurements by asset in one location with EquipmentLog™ history. Measure once, and cut out the paper with AutoRecord™ measurements.



Lock down your data

The Fluke Cloud™ storage infrastructure has been built to be one of the most flexible and secure cloud computing environments available today. Our cloud service provider uses state-of-the-art electronic surveillance, multi-factor access controls and 24/7 data centre staffing to make Fluke Cloud one of the most flexible and secure cloud computing environments available.

Fluke Connect® Selection Guide

The Fluke Connect App displays readings from up to ten modules on the iPhone and six modules on an Android device. A vast range of Fluke Infrared Cameras display their own measurements plus readings from up to five wireless modules. The 3000 FC Wireless Digital Multimeter displays its own readings plus measurements from up to three wireless modules. The 173X Power Loggers and 174X Power Quality Loggers display their own measurements plus readings from up to two wireless modules.

Fluke Connect™ tools	Fluke Connect App – iOS and Android™	TiX580 Infrared Cameras	Ti480PRO Infrared Cameras	PTi120 400C/TiSxx Series Infrared Cameras	3000 FC Digital Multimeter	902 FC True-rms HVAC Clamp Module	376/375/374 FC True-rms Clamp Module	a3000 FC/a3001 FC AC Current Clamp Module	a3002 FC AC/DC Current Clamp Module	a3003 FC/a3004 FC DC Current Clamp Module	v3000 FC AC Voltage Module	v3001 FC DC Voltage Module	t3000 FC Temperature Module	1555/1550C Insulation Resistance Testers	1742/1746/1748 Power Quality Loggers	1732/1734/1736/1738 Electrical Loggers	729 FC Automatic Pressure Calibrator	787B/789 ProcessMeter™	1587 FC Insulation Multimeter	1664 FC Multifunction Installation Tester	805 FC Vibration Tester	125B/124B/123B ScopeMeters®	279 FC Digital Thermal Multimeter	1630-2 FC Earth Ground Clamp	368/369 FC Leakage Current Clamps	Fluke 377 FC / 378 FC Clamp Meter	Fluke 393 FC Clamp Meter
Fluke Connect App – iOS and Android™	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
TiX580 Infrared Cameras	•				•	•	•	•	•	•	•	•	•														
Ti480PRO Infrared Cameras	•				•	•	•	•	•	•	•	•	•														
PTi120 400C/TiSxx Series Infrared Cameras	•				•	•	•	•	•	•	•	•	•														
3000 FC Digital Multimeter	•	•	•					•	•	•	•	•	•		•	•											
a3000 FC/a3001 FC AC Current Clamp Module	•	•	•	•	•										•	•											
902 FC True-RMS HVAC Clamp Meter	•	•	•	•	•										•	•											
376/375/374 FC True-rms Clamp Meters	•	•	•	•	•										•	•					Include 377, 378,393						
a3002 FC AC/DC Current Clamp Module	•	•	•	•	•										•	•											
a3003 FC/a3004 FC DC Current Clamp Module	•	•	•	•	•										•	•											
v3000 FC AC Voltage Module	•	•	•	•	•										•	•											
v3001 FC DC Voltage Module	•	•	•	•	•										•	•											
t3000 FC Temperature Module	•	•	•	•	•										•	•											
1555/1550C Insulation Resistance Testers	•																										
1742/1746/1748 Power Quality Loggers	•				•	•	•	•	•	•	•	•	•														
1732/1734/1736/1738 Electrical Loggers	•				•	•	•	•	•	•	•	•	•														
787B/789 ProcessMeter™	•																										
1587 FC Insulation Multimeter	•																										
1664 FC Installation Tester	•																										
805 FC Vibration Tester	•																										
125B/124B/123B ScopeMeters®	•																										
279 FC Thermal Multimeter	•																										
1630-2 FC Earth Ground Clamp	•																										
368/369 FC Leakage Current Clamps	•																										
ir3000 FC Wireless Connector	•	Connect adapter to: Fluke 787B, 789, 289, 287, 1550C, 1555																									

Connect adapter to: Fluke 787B, 789, 289, 287, 1550C, 1555

Fluke a3000 FC, a3001 FC, a3002 FC Wireless Current Clamp Modules



Fluke a3000 FC

a3000 FC Wireless AC Current Clamp Module

A true RMS Current Clamp Meter that wirelessly relays measurements to other Fluke Connect® enabled master units.

- Measure up to 400 A AC
- Logging function: record and save up to 65,000 readings
- Use as a standalone meter or as part of a system
- Inrush function
- Weight: 0.22 kg
- Three year warranty



Fluke a3001 FC

a3001 FC Wireless iFlex™ AC Current Module

A iFlex™ AC Current Module that wirelessly relays measurements to other Fluke Connect enabled master-units. It allows you to measure around awkward sized conductors or get into tight spaces and makes wire access easier.

- Measure up to 2500 A AC
- Logging function: record and save up to 65,000 readings
- Use as a standalone meter or as part of a system
- Inrush function
- Weight: 0.22 kg
- Three year warranty



Fluke a3002 FC

a3002 FC Wireless AC/DC Current Module

For use with the i410 or i1010 AC/DC current clamps (sold separately). Wirelessly relay measurements from the i410 or i1010 clamp accessory to other Fluke Connect™ enabled master units.

- Measure up to 400 A AC or 400 A DC with i410
- Measure up to 600 A AC or 1000 A DC with i1010
- Use as a meter alone or as part of a system
- Record and save up to 65,000 readings
- Weight: 0.255 kg
- Three year warranty



Specifications	a3000 FC	a3001 FC	a3002 FC
Range	0.5 A to 400.0 A AC	0.5 A to 2500 A AC	up to 600 A AC and 1000 A DC (with I1010 Current Clamp)
Resolution	0.1 A		
Accuracy	400.0 A: 2 % ± 5 digits (10Hz to 100Hz), 2.5 % ± 5 digits (100Hz to 500Hz)	3 % ± 5 digits (5Hz to 500Hz)	AC: 1.0% + 3 DC: 0.5% + 3 (45Hz to 1000Hz)
Inrush	Max displayed reading: 999.9A		
Crest Factor (50Hz/60Hz)	3 at 500 A, 2.5 at 600 A, 1.42 at 1000 A, add 2 % for C.F. > 2	3.0 at 1100 A, 2.5 at 1400 A, 1.42 at 2500 A, add 2 % for C.F. > 2	
LCD w/backlight	3½ digits		3 ½ digits, 6000 counts, 4/ sec update rate
Log rate/interval	1 sec minimum/adjustable by PC or FC App		
Battery type/life	2 AA, NEDA 15 A, IEC LR6 / 400 hours		
RF communications	2.4 GHZ ISM Band		
RF communication range	Open air, unobstructed: Up to 20 m. Obstructed, sheetrock wall: Up to 6.5m. Obstructed, concrete wall or steel electrical enclosure: Up to 3.5 m		
Operating & Storage temp	-10 °C to +50 °C / -40 °C to +60 °C		
Temperature coefficient	Add 0.1 X (specified accuracy)/ °C (<18 °C or >28 °C)		
Operating humidity	0 % to 90 % (0 °C to 35 °C), 0 % to 75 % (35 °C to 40 °C), 0 % to 45 % (40 °C to 50 °C)		
EMC	EN 61326-1:2006		
Safety compliance	IEC 61010-1, 600 V CAT III, 3rd edition Pollution Degree 2	IEC 61010-1, 600 V CAT IV/1000 V CAT III, 3rd edition Pollution Degree 2	
Safety rating	CAT III 600 V	CAT IV 600 V, CAT III 1000 V	
Certifications	CSA, CE, FCC: T68-FBLE IC: 6627A-FBLE		
Ingress Protection rating	IP30	IP42	
Jaw Opening	64 mm	25.4 cm coil	
Size (HxWxD in cm)	16.5 x 6.35 x 3.56	16.5 x 6.35 x 1.4	16.0 x 6.6 x 3.8
Save and record	Up to 65,000 readings		

*Fluke Connect is only available in selected countries. Please check with your local distributor for available models.



Recommended Accessories


i410/i1010
Current Clamp
(for a3002 FC)
See page 158

PC ADAPTER
Fluke Connect®
Wireless PC Adapter
See page 11/163

Recommended Kits

Buy more, Save more


Fluke Wireless a3000 FC
Current Clamp Kit

Fluke Wireless a3001 FC iFlex™
AC Current Kit

For more details see page 167

Included Accessories

iFlex™ i2500 Flexible Current Probe (a3001FC), Magnetic Hanging Strap (a3002FC).

Ordering Information

FLK-A3000 FC Wireless AC Current Clamp Module

FLK-A3001 FC Wireless iFlex AC Current Module

FLK-A3002 FC Wireless AC/DC Current Module

FLK-A3000 FC KIT Wireless AC Current Clamp Kit

FLK-A3001 FC KIT Wireless iFlex AC Current Kit

Fluke a3003 FC and a3004 FC Wireless Current Clamp Modules



Fluke a3003 FC



a3003 FC Wireless 2000 A DC Current Clamp Module

The a3003 is the tool of choice for high current DC ammeter applications that require measurements up to 2000 A DC.

The extra-wide jaw easily clamps around large conductors, typically found in mining, utility, marine, rail or other heavy manufacturing industries where large DC currents or large current carrying cables are found.

The a3003's unique jaw construction allows for a wide measurement range meaning that you can accurately make measurements from 10 A DC to 2000 A DC.

- Measures from 10 A to 2000 A DC
- Large jaw size (64 mm) for measuring large, high current conductors
- Logging function: record and save up to 65,000 readings
- Weight: 0.65 kg
- Three year warranty



Fluke a3004 FC



a3004 FC Wireless 4-20 mA DC Clamp Module

A fully functional current clamp meter the a3004 tests or troubleshoots 4-20 mA control loops used with drive systems, PLC's, or building energy management systems. Now you can troubleshoot and repair 4-20 mA loops without breaking the loop or bringing down the system and save time.

- Send data to your laptop and go from logging to analysis and diagnosis.
- Use the Fluke Connect® wireless USB adapter to collect logged data from remote modules by walking past a working module and downloading logged data
- Logging function: record and save up to 65,000 readings
- Perform for analysis with your PC and share the results using Fluke Cloud™ storage and ShareLive™ video call
- Weight: 0.299 kg
- Three year warranty



Recommended Accessories



PC ADAPTER
Fluke Connect® Wireless PC Adapter
See page 11/163

Download the FREE Fluke Connect App today



Included Accessories

2000 A Clamp Attachment (a3003),
4-20 mA Clamp Attachment
(a3004), Batteries, Hanging Strap,
Quick Start Guide.

Ordering Information

FLK-A3003 FC Wireless 2000 AMP
DC Module

FLK-A3004 FC Wireless 4-20 mA
DC Module

Specifications	a3003 FC	a3004 FC
Range	1.0A to 999.9 A DC 1000 A to 2000 A DC	0.05 mA to 20.99 mA DC 21.0 mA to 99.9 mA DC
Resolution	0.1 A 1 A	0.01 mA 0.1 A
Accuracy	2% ± 5 digits 2.5% ± 5 digits	0.2% ± 5 digits 1.0% ± 5 digits
LCD w/backlight	3½ digits	
Log rate/interval	1 sec minimum/adjustable by PC or front pannel	
Battery type	2 AA, NEDA 15 A, IEC LR6	
Battery life	120 hours	45 hours
Memory	Record up to 65,000 readings	
RF communications	2.4 GHz ISM Band	
RF communication range	Open air, unobstructed: Up to 20 m, Obstructed, sheetrock wall: Up to 6.5 m, Obstructed, concrete wall or steel electrical enclosure: Up to 3.5 m	
Operating Temperature	-10°C to +50°C	
Storage Temperature	-40°C to +60°C	
Temperature coefficient	Add 0.1 X (specified accuracy) /°C (< 18°C or > 28°C)	
Operating humidity	90% at 35°C, 75% at 40°C, 45% at 50°C	
Altitude	Operating 2,000 m, Storage 12,000 m	
EMC	EN 61326-1:2013	
Safety compliance	IEC 61010-1, CAT IV 600 V, CAT III 1000 V, 3rd edition	
Safety rating	CAT IV 600 V, CAT III 1000V	
Certifications	cCSAus, CE, FCC: T68-FBLE IC: 6627A-FBLE	
Ingress Protection rating	IP42	
Jaw Opening	64 mm	4.5 mm
Size (HxWxD in cm)	16.5 x 6.35 x 3.56	16.5 x 6.35 x 1.4

*Fluke Connect is only available in selected countries.
Please check with your local distributor for available models.

Fluke v3000 FC AC and v3001 FC DC Wireless Voltage Modules



Fluke v3000 FC



Fluke v3001 FC



v3000 FC Wireless True-RMS AC Voltage Module

A fully functional True-RMS Voltage Meter that wirelessly relays AC voltage measurements to other Fluke Connect® enabled master units.

- True-RMS AC Voltage Module
- Measure up to 1000 V
- Use as a standalone meter or as part of the system
- Record and save up to 65,000 readings
- Weight: 0.22 kg
- Three year warranty

AC Voltage

Range ¹	Resolution	Accuracy ^{2,3,4}	
		45 Hz to 500 Hz	500 Hz to 1 kHz
6.000 V	0.001 V	1.0 % + 3	2.0 % + 3
60.000 V	0.01 V		
600.0 V	0.1 V		
1000 V	1 V		

¹ All AC voltage ranges are specified from 1 % of range to 100 % of range.

² Crest factor of ≤ 3 at full scale up to 500 V, decreasing linearly to crest factor ≤ 1.5 at 1000 V.

³ For non-sinusoidal waveforms, add (2 % of reading + 2 % full scale) typical, for crest factor up to 3.

⁴ Do not exceed 106 V-Hz.

v3001 FC Wireless DC Voltage Module

A fully functional DC Voltage Meter that wirelessly relays DC voltage measurements to other Fluke Connect enabled master units.

- Measure up to 1000 V DC
- Use as a standalone meter or as part of the system
- Record and save up to 65,000 readings
- Weight: 0.255 kg
- Three year warranty

DC Voltage

Function	Range	Resolution	Accuracy
mV DC	600.0 mV	0.1 mV	0.09 % + 3
	6.000V	0.001 V	
	60.00 V	0.01 V	0.09 % + 3
V DC	600.0 V	0.1 V	
	1000 V	1 V	0.15 % + 2

Specifications	v3000 FC / v3001 FC
LCD w/backlight	3½ digits, 6000 counts, updates 4/sec
Battery type	2 AA, NEDA 15 A, IEC LR6
Log rate/Interval	Adjustable by PC from 1 sec to 1 hr, default 1 min
Battery life	400 hours
Memory	Record up to 65000 readings
RF communications	2.4 GHZ ISM Band
RF communication range	Open air, unobstructed: Up to 20 m, Obstructed, sheetrock wall: Up to 6.5 m, Obstructed, concrete wall or steel electrical enclosure: Up to 3.5 m
Operating temperature	-10 °C to +50 °C
Storage temperature	-40 °C to +60 °C
Temperature coefficient	0.1 X (specified accuracy)/°C (< 18 °C or > 28 °C)
Operating humidity	90 % at 35 °C, 45 % at 40 °C, 45 % at 50 °C
Altitude	Operating: 2,000 m, Storage: 12,000 m
EMC	EN 61326-1:2006
Safety compliance	ANSI/ISA 61010-1 / (82.02.01): 3rd edition, CAN/CSA-C22.2 No 61010-1-12: 3rd edition, UL 61010-1: 3rd edition, IEC/EN 61010-1:2010
Safety rating	CAT IV 600 V, CAT III 1000 V
Certifications	CSA, CE, FCC: T68-FBLE IC: 6627A-FBLE
Ingress Protection (IP) rating	IP42
Pollution Degree	2
Size (HxWxD)	16.5 cm x 6.35 cm x 1.4 cm

*Fluke Connect is only available in selected countries. Please check with your local distributor for available models.



Recommended Accessories



AC87
Heavy Duty Bus Bar
Clip Set
See page 149



AC220
SureGrip™ Alligator
Clips
See page 149



PC ADAPTER
Fluke Connect®
Wireless PC Adapter
See page 11/163

Recommended Kits

Buy more, Save more



Fluke Wireless v3000 FC AC Voltage Kit



Fluke Wireless v3001 FC DC Voltage Kit



Fluke Wireless v3003 FC AC-DC Voltage Measurement Kit

For more details see page 167

Included Accessories

v3000 FC: TL224 Test Leads, AC285 Alligator Clips, Magnetic Hanging Strap.

v3001 FC: TL222 Test Leads, AC220 Alligator Clips, Magnetic Hanging Strap

Ordering Information

FLK-V3000 FC Wireless AC Voltage Module

FLK-V3001 FC Wireless DC Voltage Module

FLK-V3000 FC KIT Wireless AC Voltage Kit

FLK-V3001 FC KIT Wireless DC Voltage Kit

FLK-V3003 FC KIT Wireless AC-DC Voltage Measurement Kit

Fluke t3000 FC Wireless K-Type Temperature Module



Fluke t3000 FC



The Fluke t3000 FC Wireless K-Type Temperature Module is one member of a family of wireless test tools that let you share test data using the Fluke Connect® app with ShareLive™ video call.

Fluke Connect Wireless Test Tools put tools, not your body, near live electrical panels. It's simple. Connect the t3000 FC wireless temperature module, or any of the other Fluke Connect remote modules, and read the results on the Fluke Connect Wireless Multimeter or a portable PC from a safe distance.

Better still, the Fluke Connect test tools can send measurement data to your smartphone, so you can save and share measurements from the field with your team anytime, from anywhere.

Using t3000 FC temperature modules, you can:

- Spot temperature differences between three phases in 1/3 the time of previous methods.
- Send data to your laptop and go from logging to analysis and diagnosis
- Record over time to monitor circuit load changes for an hour, a shift or a week
- Use the Fluke Connect wireless USB adapter to collect logged data from remote modules by walking past a working module and downloading logged data
- Perform for analysis with your PC and share the results using Fluke Cloud™ storage and ShareLive™ video call. View data or graphs to get input from team members
- Logging function: record up to 65,000 readings
- Three year warranty

Specifications	t3000 FC
Range	K-type: -200 °C to 1000 °C (Temperature probe dependant)
Resolution	0.1 °C
Accuracy	± [0.5 % + 0.3 °C] counts
Input terminals	K-type mini
LCD w/backlight	3 ½ digits
Log rate/interval	1 sec minimum/adjustable by PC and FC app on smart phone
Battery type	2 AA, NEDA 15 A, IEC LR6
Battery life	400 hours
Memory	Record up to 65,000 readings
RF communications	2.4 GHZ ISM Band
RF communication range	Open air, unobstructed: Up to 20 m, Obstructed, sheetrock wall: Up to 6.5 m, Obstructed, concrete wall or steel electrical enclosure: Up to 3.5 m
Operating temperature	-10 °C to +50 °C
Storage temperature	-40 °C to +60 °C
Temperature coefficient	0.01 % of reading +0.03 °C per °C
Temperature scale	ITS-90
Operating humidity	90 % at 35 °C, 75 % at 40 °C, 45 % at 50 °C
Altitude	Operating: 2,000 m, Storage: 12,000 m
EMC	EN 61326-1:2006
Safety compliance	IEC 61010-1, CAT I, 3rd edition Pullution Degree 2
Certifications	CSA, CE, FCC: T68-FBLE IC: 6627A-FBLE
Ingress Protection rating	IP42
Pullution Degree	2
Size (HxWxD) and Weight	16.5 cm x 6.35 cm x 1.4 cm; 0.22 kg

*Fluke Connect is only available in selected countries. Please check with your local distributor for available models.



Recommended Accessories



80PK-24
SureGrip™ Air
Temperature Probe
See page 154

80PK-9
General
Purpose Probe
See page 154



80PK-11
Type-K Flexible Cuff
Thermocouple Tem-
perature Probe
See page 154



PC ADAPTER
Fluke Connect®
Wireless PC Adapter
See page 11/163

Recommended Kits

Buy more, Save more



Fluke Wireless t3000 FC Temperature Kit

For more details see page 167

Download the FREE Fluke Connect App today



Included Accessories

80PK-1 K-Type Bead Thermocouple
Magnetic Hanging Strap.

Ordering Information

FLK-T3000 FC Wireless K-Type
Temperature
Module

FLK-T3000 FC KIT Wireless FC
Temperature Kit

Fluke Connect® Accessories



Fluke Connect®
ir3000FC Connector



Fluke Connect® ir3000 FC Connector

Connect your Fluke Test Tool with the ir3000 FC Connector and get all the benefits of the Fluke Connect mobile app. If you already have a Fluke 287/289 Digital Multimeter or Fluke 789 Process Tool in your tool box or tool belt or are considering purchasing one, add the ir3000 FC Connector so you can communicate with the Fluke Connect app.

- Fluke Connect ir3000 FC Connector allows you to wirelessly transfer data from your existing Fluke 287, 289 Digital Multimeters, Fluke 789 ProcessMeter™ and Fluke 1550C/1555
- Insulation Resistance Testers to your smart phone
- Fits over the IR port of your existing Fluke tools
- Immediately enables you to graph, save, and share the tool's readings with your team from your smart phone
- Identify and diagnose problems quickly and confidently
- Efficiently and safely capture real-time readings of the primary display from the field
- Share results instantly with your team
- Upgradeable by USB
- Three year warranty

Supported Fluke Tools:

- DMMs: 287, 289
- Process Tool: 789, 787B
- Insulation: 1550C, 1555

Supported Smart Phones:

- Android™ 4.4 & up
- iPhone® 4s & later



Specifications	ir3000 FC
Battery type	Two AAA Alkaline batteries, ANSI-24A IEC-LR03
Battery life	6 hours of continuous transmission
RF communications	2.4 GHz ISM Band
RF communication range	Open air, unobstructed: Up to 20m Obstructed, sheetrock wall: Up to 6.5m Obstructed, concrete wall or steel electrical enclosure: Up to 3.5m
Temperature	Operating: -10 °C to 50 °C Storage: -20 °C to 60 °C
Certifications	CSA, FCC, CE, IC
Size (HxWxL)	3.2cm x 7.6cm x 6.4cm
Compatibility*	Fluke 287, 289, 789, 1550C, 1555

*At time of catalogue print, Fluke's ir3000 FC Connector is currently compatible with only the Fluke 287, 289 and 789 test tools. For updates on Fluke Connect test tool compatibility, go to www.fluke.com/sg/connect.



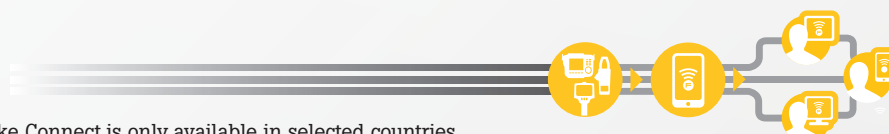
Fluke Connect®
PC Adapter



Fluke Connect® Wireless PC Adapter

Fluke 3000 FC Wireless Test Tools show real-time measurements from remote modules up to 20 metres away on your PC. Fluke FC wireless test tools work together to help you troubleshoot faster.

The PC3000 FC Adapter and Software help you understand the information you measure. When you need to get information back to a PC the PC3000 FC Adapter and Software wirelessly collects up to 65,000 sets of time stamped MIN/MAX/AVG readings from FC remote modules. Software can display live readings from up to six modules simultaneously. Allows custom logging intervals and custom names for modules. Includes Windows SW3000 software.



*Fluke Connect is only available in selected countries. Please check with your local distributor for available models.



Built with
**FLUKE
CONNECT™**

See it. Save it. Share it.
All the facts,
right in the field.

Fluke Connect with ShareLive™ is the only wireless measurement system that lets you stay in contact with your entire team without leaving the field. The Fluke Connect mobile app is available for Android™ (4.3 and up) and iOS (4s and later) and works with over 50 different Fluke products—the largest suite of connected test tools in the world. There are more on the way; go to: www.fluke.com/sg/connect to find out more.

Download the FREE Fluke Connect app at:



Smart phone not included with purchase

Ordering Information

FLUKE-IR3000 FC Fluke Connect®
ir3000 Connector

FLK-PC3000 FC Fluke Connect®
Wireless PC
Adapter

Digital Multimeters

Fluke Digital Multimeters (DMMs) are on more tool belts, finding more problems, than any other comparable test tools. Each industrial meter is tested to the extreme: drop, shock, humidity, you name it. Every Fluke Digital Multimeter gives you what you need: accurate measurements; consistent, reliable performance; attention to safety; and the strongest warranty available.



Digital Multimeter Selection Guide

Models	Advanced meters				Wireless meters		Industrial Maintenance and Field Service meters				Compact meter				Automotive meters		Insulation Testers		Specialty meters				
	77-4	87 V	87 V MAX	287	289	233	3000 FC	175	177	179	110	113	114	115	116 HVAC	117	88V	1577	1587 FC	27 II	28 II	28IEX	279 FC
Basic features																							
Counts	6000	20000	20000	50000	50000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	20000	6000	6000	6000	20000	20000	6000
True-RMS readings	No	ac	ac	ac+dc	ac+dc	ac	ac	AC	AC	ac	ac	ac	ac	ac	ac	ac	AC	AC	AC	ac	ac	ac	ac
Basic dc accuracy	0.3%	0.05 %	0.05 %	0.025 %	0.025 %	0.25 %	0.09 %	0.15 %	0.09 %	0.09 %	0.5 %	0.5 %	0.5 %	0.5 %	0.5 %	0.5 %	0.1 %	0.2%	0.09%	0.1 %	0.05 %	0.05 %	0.09 %
AC bandwidth	2%	20 kHz	20 kHz	100 kHz	100 kHz															30 kHz	20 kHz	20kHz	
Auto/manual ranging	Both	•/•	•/•	•/•	•/•	•/•	•/•	•/•	•/•	•/•	•/•	•/•	•/•	•/•	•/•	•/•	•/•	•/•	•/•	•/•	•/•	•/•	•/•
ATEX II 2G Ex ia IIC T4 safety rating Z1/Z2	No																						
Measurements																							
Voltage AC/DC	1000V	1000 V	1000 V	1000 V	1000 V	1000 V	1000 V	1000 V	1000 V	1000 V	600 V	600 V	600 V	600 V	600 V	600 V	1000V	1000 V	1000 V	1000 V	1000 V	1000 V	1000 V
Current AC/DC	10A	10 A	10 A	10 A	10 A	10 A	400 mA	10 A	10 A	10 A							10 A	400mA	400mA	10 A	10 A	10 A	10 A
Resistance	50.00 MΩ	50 MΩ	50 MΩ	500 MΩ	500 MΩ	40 MΩ	50 MΩ	50 MΩ	50 MΩ	50 MΩ	40 MΩ	40 MΩ	40 MΩ	40 MΩ	40 MΩ	40 MΩ	50 MΩ	50 MΩ	50 MΩ	50 MΩ	50 MΩ	50 MΩ	50 MΩ
Frequency	99.99 kHz	200 kHz	200 kHz	1 MHz	1 MHz	50 kHz	100 kHz	100 kHz	100 kHz	100 kHz	100 kHz	100 kHz	100 kHz	100 kHz	100 kHz	100 kHz	200 kHz	100 kHz	100 kHz	200 kHz	200 kHz	200 kHz	100 kHz
Capacitance	9999 μF	9.999 μF	9.999 μF	1 pF to 100mF	1 pF to 100mF	9.999 μF	9.999 μF	9.999 μF	9.999 μF	9.999 μF	9.999 μF	9.999 μF	9.999 μF	9.999 μF	9.999 μF	9.999 μF	9.999 μF	9.999 μF	9.999 μF	9.999 μF	9.999 μF	9.999 μF	9.989 μF
Temperature		+1090 °C	+1090 °C	+1350 °C	+1350 °C	+400 °C				+400 °C					+400 °C				+500 °C	+1090 °C	+1090 °C	+1090 °C	
Conductance		50 nS	60 nS	50 nS	50 nS												60 nS		60 nS	60 nS	60 nS	60 nS	
Duty cycle/pulse width		•/–	•/–	•/•	•/•												•/•		•/–	•/–	•/–	•/–	
Continuity/diode test		•	•	•	•																		
Motor Drive (ASD) Measurements																							
VoltAlert™, non-contact voltage detection																							
VCHEK™																							
LoZ: low input impedance																							
Microamps		•	•	•	•																		
Insulation Test																							
Number of insulation test ranges																		2	5				
Display																							
Removable wireless display						•																	
Dot matrix display						•																	
Dual display						•																	
Analog bargraph						•																	
Backlight		Two level	Two level	Two level	Two level	•														Two level	Two level	Two level	•
Graphical trend display																							
Diagnostics and data																							
Min/Max recording with time stamp		•/–	•/–	•/•	•/•	•/–	•/–	•/–	•/–	•/–	•/–	•/–	•/–	•/–	•/–	•/–	•/–		•/–	•/–	•/–	•/–	•/–
Fast Min/Max	•	250 μs	250 μs	250 μs	250 μs	•/•	•/•	•/•	•/•	•/•							250 μs		250 μs	250 μs	250 μs	250 μs	•/•
Display Hold/Auto (Touch) Hold	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Relative reference							(with app)																(with app)
Stand alone logging							(with app)																(with app)
Trend Capture							(with app)																(with app)
Readings memories				10,000	10,000		(with app)																(with app)
USB interface																							
Other features																							
Real time clock																							
Automatic selection, AC/DC volts																							
Closed case calibration		•																					
Separate battery/fuse access		•/–	•/•	•/•	•/•	•																	
Operating temperature range	–10 °C to +50 °C	–20 °C to +55 °C	–40 °C to +55 °C	–20 °C to +55 °C	–20 °C to +55 °C	–10 °C to +50 °C	–10 °C to +50 °C	–10 °C to +50 °C	–10 °C to +50 °C	–10 °C to +50 °C	–10 °C to +50 °C	–10 °C to +50 °C	–10 °C to +50 °C	–10 °C to +50 °C	–10 °C to +50 °C	–10 °C to +50 °C			–40 °C to +55 °C	–40 °C to +55 °C	–15 °C to +50 °C	–15 °C to +50 °C	
Warranty and electrical safety																							
Input alert	•																						•
IP Rating	IP30	IP67	IP67				IP54				IP42	IP42	IP42	IP42	IP42	IP42			IP67	IP67	IP67	IP40	
Safety rating [EN 61010]	•	1000V	1000 V	1000 V	1000 V	1000 V	1000 V	1000 V	1000 V	1000 V	600 V	600 V	600 V	600 V	600 V	600 V	1000V	1000 V	1000 V	1000 V	1000 V	1000 V	1000 V
Safety rating [EN 61010]	•	600 V	600 V	600 V	600 V	600 V	600 V	600 V	600 V	600 V	600 V	600 V	600 V	600 V	600 V	600 V	600V			600 V	600 V	600 V	600 V

Fluke 279 FC True-RMS Thermal Multimeter



Fluke 279 FC



Find. Repair. Validate. Report.

The industry first Fluke 279 FC is a full-featured digital multimeter with integrated thermal imaging and is designed to increase your productivity and confidence. The thermal multimeter helps you find, repair, validate, and report many electrical issues quickly so that you are confident problems are solved.

- Full-featured multimeter with built-in thermal imager
- 15 measurement functions including: AC voltage with lowpass filter, DC voltage, Resistance, Continuity, Capacitance, Diode test, Min/Max/Avg, AC current (with iFlex), Frequency
- Thermal imaging reveals many electrical issues quickly and safely, eliminating the need for time-consuming testing and validation
- Two-in-one tool is designed to increase productivity – no need to go back to the truck or office to retrieve a shared camera or wait for the thermographer– do more in less time
- iFlex expands your measurement capabilities – get into tight, hard to reach spaces for current measurement (up to 2500 A AC)
- Save measurements and images while communicating wirelessly with a smart phone up to 6.1 metres away (no obstructions)
- Rechargeable lithium ion battery allows for a for a full work day (10+ hours) under normal conditions
- Image resolution–80 x 60
- 3.5 in /8.89 cm colour LCD screen
- CAT III 1000 V, CAT IV 600 V measurement category
- Three year warranty

*Fluke Connect is only available in selected countries. Please check with your local distributor for available models.

DMM

Basic dc accuracy	0.09%
Bandwidth	1% 45 Hz to 65 Hz, full time low pass filter
Voltage	AC/DC 1000 V
Current AC	iFlex Flexible Current Probe (included with the 279 FC/iFlex)
Resistance	50 MΩ
Frequency	100 kHz
Capacitance	9,999 μF
Continuity with beeper	Yes
Diode test	Yes
Min/Max recording	Yes
Display Hold	Yes

Infrared Camera

Infrared resolution	80 x 60
Image capture frequency	8 Hz
Field of View	36° (w) x 27° (h)
NETD	≤200 mK
Infrared spectral band	7.5 to 14 microns
Center point	Yes (with center point temp)
Focus mechanism	Fixed focus
Temperature Range	-10 °C to 200 °C Accuracy: ±5 °C or (±5% as tested)
Emissivity	0.95 fixed
Background compensation	20 °C fixed
Memory storage	Approximately 100 images (internal)
File format	Non-radiometric .is2

Other

Battery type	Rechargeable lithium-ion battery (charge time: 4.5 hours)
Operating temperature	-10 °C to 50 °C
Storage temperature	-20 °C to 60 °C
Relative humidity	0% to 90% (0 °C to 35 °C) 0% to 75% (35 °C to 40 °C) 0% to 45% (40 °C to 50 °C)
Altitude	2,000 meters (6,561 feet)
Temperature coefficient	Add 0.1 x specified accuracy for each °C above 28 °C or below 18 °C
Ingress Protection	(IP) IP40 (non-operating)
Certifications	CE, CSA, FCC
Safety compliance	IEC 61010-1: Pollution degree 2; IEC 61010-2-033: CAT III 1000 V/CAT IV 600 V
EMC	EN 61326-1:2012
Size	215.9 x 93.9 x 57.1 mm
Weight	0.793 kg

Recommended Accessories



12500-10
10 inch iFlex® Flexible
Current Probe
See page 29



12500-18
18 inch iFlex® Flexible
Current Probe
See page 29



BC500
AC Power Charger



BP500
Lithium-Ion Battery
3000 mAh battery



C280
Carrying Case
See page 160



MC6
Fluke MeterCleaner™
Wipes
See page 163

Recommended Kits

Buy more, Save more



Fluke 279FC 1/B TRMS Combo Kit

For more details see page 168



TL75 Test Leads, Rechargeable Lithium-ion Battery, Charger, 18-inch (45.72 cm) iFlex Flexible Current Probe, Hanging Strap, Soft Carrying Case.
279 FC 1/B KIT ALSO INCLUDES: Additional Lithium-ion Battery.

Ordering Information

FLUKE 279 FC/ TRMS Thermal IFLEX Multimeter with iFlex

FLUKE 279 FC 1/B KIT TRMS Thermal Multimeter with iFlex and Extra Battery Kit

Fluke 3000 FC Wireless Digital Multimeter



Fluke 3000 FC



See it. Save it. Share it.

The Fluke 3000 FC True-RMS Wireless Multimeter and Fluke Connect® wireless test tools put tools, not your body, near live electrical panels. It's simple. Just de-energise the cabinet, open the panel while wearing PPE and connect the remote modules, whether they are voltage modules, current clamps, flexible current loops or thermometers. Then read the results on the 3000 FC Wireless Multimeter from a safe distance. You can display the meter measurement, plus readings from up to 3 wireless modules, while reducing the risk of arc flash by separating yourself from hazardous measurement situations.

Better still, the Fluke 3000 FC Series Wireless Multimeter can send measurement data to your smartphone, so you can save and share measurements from the field with your team anytime, from anywhere.

Other capabilities of Fluke Connect and the 3000 FC Multimeter.

- Connect to your PC with USB dongle (optional) for analysis and diagnosis in detail
- Perform for analysis with your smartphone and the FC App and share the results using Fluke Cloud™ storage and ShareLive™ video call. View data or graphs to get input from team members

The Fluke 3000 FC Series Wireless Multimeter with the Fluke Connect app has all the essentials for convenient test and measurement troubleshooting.

- AC and DC voltage measurements to 1000V
- AC and DC current with 0.01 mA resolution
- Continuity, resistance, diode test, capacitance and frequency measurements
- MIN/MAX Recording
- CAT III 1000 V, Cat IV 600 V; IP54
- Three year warranty

*Fluke Connect is only available in selected countries. Please check with your local distributor for available models.

Recommended Accessories



TL238
SureGrip™
Test Lead Set
See page 150



C35
Soft Carrying Case
See page 160



PC ADAPTER
Fluke Connect™
Wireless PC Adapter
See page 11/163

Recommended Kits

Buy more, Save more

Fluke 3000 FC General Maintenance System

Fluke 3000 FC Industrial System

Fluke 3000 FC HVAC System
Fluke 3000 FC/1AC-II
Wireless Multimeter and
Non-Contact Voltage

Detector Kit

Fluke 3000 FC/EDA2 Wireless
Multimeter and Deluxe Acces-
sories Combo Kit

Fluke 3000 FC/TPAK Wire-
less Multimeter and Magnetic
Hanger Combo Kit

For more details see page 167

Functions	Range	Basic Accuracy
AC voltage	600.0 mV, 6.000 V, 60.00 V, 600.0 V, 1000V	1.0 % + 3
DC voltage	600.0 mV, 6.000 V, 60.00 V, 600.0 V, 1000V	0.09 % + 2
Continuity	600 Ω	Meter beeps at < 25 Ω, beeper detects opens or shorts of 250 μs or longer
Resistance	600 Ω, 600.0 Ω, 6.000 kΩ, 60.00 kΩ, 600.0 kΩ, 50.00 MΩ	0.5 % + 1
Diode test	2.000 V	1 % + 2
Capacitance	1000 nF, 10.00 μF, 100.0 μF, 9999 μF ¹	1.2 % + 2
mA AC (45 Hz to 1 kHz)	60.00 mA, 400.0 mA ³	1.5 % + 3
mA DC ²	60.00 mA, 400.0 mA ³	0.5 % + 3
Frequency	99.99 Hz, 999.9 Hz, 9.999 kHz, 99.99 kHz	0.1 % + 1

¹ In the 9999 μF range for measurements to 1000 μF, the measurement accuracy is 1.2 % + 2.

² Input burden voltage (typical): 400 mA input 2 mV/mA.

³ 400.0 mA accuracy specified up to 600 mA overload.

For all specifications: accuracy is specified for one year after calibration, at operating temperatures of 18 °C to 28 °C, with relative humidity at 0 % to 90 %. Accuracy specifications take the form of ± ([% of Reading] + [Number of least significant digits]).

Included Accessories

TL175 Test Leads, AC175 Alligator Clips, Manual Information Pack.

Ordering Information

FLK-3000 FC	FC Wireless Digital Multimeter
FLK-3000 FC GM	Wireless General Maintenance Kit
FLK-3000 FC IND	Wireless Industrial System Kit
FLK-3000 FC HVAC	Wireless HVAC System Kit
FLK-3000 FC /1AC-II	Wireless Multimeter & Non-Contact Voltage Detector Combo Kit
FLK-3000 FC /EDA2	Wireless Multimeter Deluxe Accessories Combo Kit
FLK-3000 FC /TPAK	Wireless Multimeter & Magnetic Hanger Combo Kit

Fluke 280 Series True-RMS Logging Multimeters



Fluke 289/FC



Find little problems before they become big

The Fluke 287/FC and 289/FC are the next generation in high performance industrial logging multimeters.

These high performance industrial logging multimeters are designed to solve complex problems faster in many applications. Log data and review it graphically on-screen to help minimise downtime.

Communicate wirelessly with your smart phone directly from the field with the Fluke Connect® app and get quick answers or next step authorisations faster than ever before. It's as simple as adding the Fluke ir3000 FC Connector to the standard Fluke 287 and 289 (connector sold separately).

- Large 50,000 count, 1/4 VGA dot matrix display with white backlight
- Logging function with expanded memory for unattended monitoring of signals over time. Using on-board TrendCapture, users can graphically review logged readings without needing a PC. Store up to 10,000 recorded events
- Save, name, and recall multiple logging sessions before PC download is necessary
- Field upgradeable and expandable meter lets you stay current as new capabilities are added.
- Two terminal 50 ohm range with 1 milliohm resolution, 10 mA source current. Useful for measuring and comparing differences in motor winding resistance or contact resistance (289/FC)
- Low-pass filter for accurate voltage and frequency measurements on adjustable speed motor drives and other electrically noisy equipment (289/FC)
- Limited lifetime manufacturer's warranty

*Fluke Connect is only available in selected countries. Please check with your local distributor for available models.

Features	287	289
Multiple on screen displays	•	•
True-RMS AC bandwidth	100 kHz	100 kHz
dBV/dBm	•	•
DC mV resolution	1 µV	1 µV
Megohm range up to	500 MΩ	500 MΩ
Conductance	50.00 nS	50.00 nS
Continuity beeper	•	•
Elapse time clock/time of day clock	•	•
Min/Max/Avg/duty cycle/pulse width	•	•
Isolated optical DMM interface with USB PC connection	•	•
Auto/touch hold	•	•
Over 200 hours logging capacity with new power saving function	•	•
Lo Ohm capability	—	•
LoZ volts	—	•
Lo Pass Filter	—	•

Functions	Range	Basic Accuracy
AC volts or DC volts	50.000 mV, 500.00 mV, 5.0000 V, 50.000 V, 500.00 V, 1000.0 V	0.025 % 0.4 % (True-RMS) (AC)
AC current DC current	500.00 µA, 5000.0 µA, 50.000 mA, 400.00 mA, 5.0000 A, 10.000 A	0.15 % 0.7 % (True-RMS)
Temperature (excluding probe)	-200.0 °C to 1350.0 °C	1.0 %
Resistance	50.000 Ω, 500.00 Ω, 5.0000 kΩ, 50.000 kΩ, 500.00 kΩ, 5.0000 MΩ, 50.00 MΩ, 500.0 MΩ	0.05 %
Capacitance	1.000 nF, 10.00 nF, 100.0 nF, 1.000 µF, 10.00 µF, 100.0 µF, 1000 µF, 10.00 mF, 100 mF	1.0 %
Frequency	99.999 Hz, 999.99 Hz, 9.9999 kHz, 99.999 kHz, 999.99 kHz	.005 %

Recommended Accessories



TLK287
Electronic
Test Lead Set
See page 152



TLK289
Industrial
Test Lead Set
See page 152



FVF-SC2
Flukeview Forms Software with Cable
See page 173



C280
Carrying Case
See page 160



I410
AC/DC Current Clamp
See page 158



IR3000 FC
Fluke Connect® ir3000
Connector
See page 11/163

Recommended Kits

Buy more, Save more

Fluke 287 FlukeView® Forms Combo Kit

Fluke 287 FlukeView® Forms Combo Kit with ir3000FC Connector

Fluke 289 FlukeView® Forms Combo Kit

Fluke 289 FlukeView® Forms Combo Kit with ir3000FC Connector

For more details see page 168

Included Accessories

TL175 Test Leads, AC175 Alligator Clips, Probe Holder, Six AA Batteries (installed), Calibration Certificate Sheet.

Ordering Information

FLUKE-287 True-RMS Industrial Logging Multimeter with TrendCapture

FLUKE-289 True-RMS Electronics Logging Multimeter with TrendCapture

FLUKE-287/ FVF KIT FlukeView Forms Combo Kit

FLUKE-289/ FVF KIT FlukeView Forms Combo Kit

FLUKE-287/ FVF/IR3000 KIT Industrial Logging Multimeter and Software Combo Kit

Fluke 83V, 87V & 87V MAX Digital Multimeters



Fluke 87V MAX



Performance and accuracy for maximum industrial productivity

Fluke 80-V Series is equipped with improved measurement functions, troubleshooting features, resolution and accuracy to solve more problems on motor drives, in plant automation, power distribution, and electro-mechanical equipment.

The Fluke 87V and new 87V Max offers a unique function for accurate voltage and frequency measurements on adjustable speed motor drives and other electrically noisy equipment. A built-in thermometer conveniently allows you to take temperature readings without having to carry a separate instrument.

Electrical safety

All inputs are protected to CAT III 1000 V and CAT IV 600 V. They can withstand impulses in excess of 8,000 V to help protect you from arc blast resulting from surges and spikes. Limited lifetime manufacturer's warranty.



Fluke 87V



Fluke 83V

Recommended Accessories



TPAK
Magnetic
Meter Hanger
See page 162



TL220
SureGrip™ Industrial
Test Lead Set
See page 152



TL175
TwistGuard™ Test
Leads
See page 148



TL224
SureGrip™ Silicone
Insulated Test Leads
See page 149



AC285
SureGrip™ Alligator
Clips
See page 149



1400
AC Current Clamp
See page 156



C125
Soft Carry Case
See page 161



CXT80
Extreme Case
See page 161

Recommended Kits

Buy more, Save more



Fluke 87V/E2 Industrial Electrician's Combo Kit

For more details see page 168

Features	83V	87V	87V MAX
True-RMS AC voltage and current for accurate measurements on non linear signals	—	•	•
Selectable filter for accurate voltage and frequency measurements on motor drives	—	•	•
6000 counts, 3-3/4 digits	•	•	•
4-1/2 digit mode for precise measurements (20,000 counts)	—	•	•
Measure up to 10 A, 20 A for up to 30 seconds	•	•	•
Built in thermometer lets you carry one less tool (TC probe included)	—	•	•
Frequency to 200 kHz and % duty cycle	•	•	•
Resistance, continuity and diode test	•	•	•
10,000 µF capacitance range for components and motor caps	•	•	•
Min/Max-Average recording with Min/Max Alert to capture variations automatically	•	•	•
Battery Life with Backlight off	400 hours		800 hours

Functions	Range	Basic Accuracy		
		83V	87V	87 MAX
DC volts	600.0 mV, 6.000 V, 60.00 V, 600.0 V, 1000 V	0.1 %	0.05 %	
AC volts	600.0 mV, 6.000 V, 60.00 V, 600.0 V, 1000 V	0.5 %	0.7 % (True-RMS)	
DC current	600.0 µA, 6000 µA, 60.00 µA, 600.0 mA, 6.000 A, 10.00 A	0.4 %	0.2 %	
AC current	600.0 µA, 6000 µA, 60.00 µA, 600.0 mA, 6.000 A, 10.00 A	1.2 %	1.0 % (True-RMS)	
Temperature (excl. probe)	-200 °C to 1090 °C	—	1.0 %	
Temperature Probe	-40 °C to 260 °C	—	2.2 °C or 2 %	
Resistance	600.0 Ω, 6.000 kΩ, 60.00 kΩ, 600.0 kΩ, 6.000 MΩ, 50.00 MΩ	0.4 %	0.2 %	
Capacitance	10.00 nF, 100.0 nF, 1.000 µF, 10.00 µF, 100.0 µF, 9,999 µF	1.0 %	1.0 %	
Frequency	199.99 Hz, 1.9999 kHz, 19.999 kHz, 199.99 kHz	0.005 %	0.005 %	

Included Accessories

TL175 Test Leads, AC175 Alligator Clips, Yellow Holster (H80M excl. TPAK), 80BK-A Temperature Probe (87V/MAX only), 9 V Battery Installed (83V and 87V Only), Three AA batteries Installed (87V MAX only), User Manual and Technical Notes.

Ordering Information

FLUKE-83V	Industrial Multimeter
FLUKE-87V	True RMS Industrial Multimeter
FLUKE-87V/E2	Industrial Electrician's Combo Kit
FLUKE-87V-MAX	MAX True RMS Industrial Multimeter
FLUKE-87V/IMSK	Industrial Multimeter Service Kit

Fluke 88V Automotive Multimeter



Fluke 88V



The right meter for auto-electric diagnosis

The Fluke 88V Automotive Multimeter is the most powerful automotive multimeter ever offered by Fluke. In addition to having all standard multimeter features like the ability to measure voltage, current, continuity, and resistance, the 88V can perform diode test and pulse width measurements.

This meter can take current measurements up to 20 A for 30 seconds and 10 A continuously. The optional magnetic hanger lets you attach the meter to most steel surfaces for easy set-up and viewing. The 88V is designed to be used in high energy environments like those found on hybrid vehicles.

- 0.1 % DC accuracy
- 4-1/2 digit mode for precise measurements (20,000 counts)
- Measure up to 1000 V AC and DC
- Current measurements up to 10 A, 20 A for up to 30 seconds
- Built-in thermometer for temperature measurements when you need them (temperature probe included)
- Resistance, continuity and diode test
- RPM measurements with inductive pickup (included)
- Millisecond pulse width measurements for fuel injectors
- Magnetic hanger to attach meter to the vehicle and free your hands for other tasks
- Min/Max/Average recording with Min/Max Alert to capture variations automatically
- Peak Min/Max to record transients as fast as 250 μ s
- Relative mode to remove test lead resistance from low ohms measurements
- Auto and manual ranging for maximum flexibility
- Autohold™ to capture stable readings with only one touch of the leads
- Large display digits and two-level bright white backlight for increased visibility
- Analogue bar-graph to track changing or unstable signals
- Input Alert provides audible warning against wrong use of input jacks
- Limited lifetime manufacturer's warranty

Specifications	88V
DCV	Maximum Voltage: 1000 V Accuracy: Fluke 88 V: $\pm (0.1 \% + 1)$ Best Resolution: Fluke 88 V: 0.01 mV
ACV	Maximum Voltage: 1000 V Accuracy: Fluke 88 V: $\pm (0.5 \% + 2)$ AC Bandwidth: Fluke 88 V: 5 kHz Best Resolution: 0.01 mV
DC Current	Maximum Amps: 10 A Amps Accuracy: Fluke 88 V: $\pm (0.4 \% + 2)$ Best Resolution: Fluke 88 V: 0.001 mA
AC Current	Maximum Amps: 10 A Amps Accuracy: Fluke 88 V: $\pm (1.2 \% + 2)$ Best Resolution: 0.001 mA
Resistance	Maximum Resistance: 50 M Ω Accuracy: Fluke 88 V: $\pm (0.4 \% + 1)$ Best Resolution: 0.1 Ω
Capacitance	Maximum Capacitance: 9,999 μ F Accuracy: $\pm (1 \% + 2)$ Best Resolution: 0.01 nF
Frequency	Maximum Frequency: 200 KHz Accuracy: $\pm (0.005 \% + 1)$ Best Resolution: 0.01 Hz
Duty Cycle	Maximum Duty Cycle: 99.9 % Accuracy: within 2 % per KHz + 0.1 % Best Resolution: 0.1 %
Temperature Measurement	-200.0 °C to 1090 °C, 1.0 % excluding probe
80BK Temperature Probe	-40 °C to 260 °C, 2.2 °C or 2 % whichever is greater
Conductance	Maximum Conductance: 60.00 nS Accuracy: $\pm (1.0 \% + 10)$ Maximum Resolution: 0.01 nS
Operating Range	Operating Temperature: -20 °C to 55 °C Storage Temperature: -40 °C to 60 °C
Size and Weight	5.2 cm x 9.8 cm x 20.1 cm, 624 g

Recommended Accessories



Recommended Kits

Buy more, Save more



Fluke 88V/A Automotive Multimeter Combo Kit

For more details see page 168

Included Accessories

High-impact Holster, Test Leads, User Manual and Quick Reference Guide.

Ordering Information

FLUKE-88-5	Automotive Multimeter
FLUKE-88-5/A KIT	Automotive Multimeter Combo Kit

Fluke 170 Series Digital Multimeters

Versatile meters for field service or bench repair



Fluke 179



The three models of the Fluke 170 Series True-RMS Digital Multimeters (179, 177, 175) have the features needed to find most electrical, electro-mechanical and heating and ventilation problems. They are simple to use and have significant improvements over Fluke's standards, and a much larger display that's easier to view.

- True RMS voltage and current measurements
- 0.09% basic accuracy (177, 179)
- 6000 count resolution
- Digital display with analog bargraph and backlight (177, 179)
- Manual and automatic ranging
- Display Hold and Auto Hold
- Frequency and capacitance measurements
- Resistance, continuity and diode measurements
- Temperature measurements (179)
- Min-max-average recording
- Smoothing mode allows filtering of rapidly changing inputs
- Easy battery exchange without opening the case
- Closed case calibration through front panel
- Ergonomic case with integrated protective holster
- EN61010-1 CAT III 1000V / CAT IV 600V
- Measures twice as fast as other multimeters
- Battery life: 200 hours typical for alkaline.
- Size (HxWxL): 4.3 cm x 9.0 cm x 18.5 cm
- Limited lifetime manufacturer's warranty



Fluke 177



Fluke 175

Electrical safety

All inputs are protected to measurement CAT III 1000 V and CAT IV 600 V. These meters can withstand transient impulses in excess of 8000 V to help protect you from arc blasts resulting from surges and spikes.

Features	179	177	175
Max voltage AC/DC	1000	1000	1000
True-RMS	•	•	•
Temperature	•	—	—
Basic DC accuracy	0.09 %	0.09 %	0.15 %
Backlight	•	•	—
Min/Max/Avg	•	•	•
Compatible with ToolPak™ meter hanging kit with magnet	•	•	•
Limited lifetime warranty	•	•	•

Functions	Range	Best accuracy
DC voltage	600.0 mV, 6.000 V, 60.00 V, 600.0 V, 1000 V	± 0.09 % (177 and 179) ± 0.15 % (175)
AC voltage ¹	600.0 mV, 6.000 V, 60.00 V, 600.0 V, 1000 V	± 1.0 % of reading
DC current	60.00 mA, 400.0 mA, 6.000 A, 10.00 A ²	± 1.0 % of reading
AC current ²	60.00 mA, 400.0 mA, 6.000 A, 10.00 A ²	± 1.5 % of reading
Resistance	600.0 Ω, 6.000 kΩ, 60.00 kΩ, 600.0 kΩ, 6.000 MΩ, 50.00 MΩ	± 0.9 % of reading
Capacitance	1000 nF, 10.00 μF, 100.0 μF, 9999 μF	± 1.2 % of reading
Frequency ³	99.99 Hz, 999.9 Hz, 9.999 kHz, 99.99 kHz	± 0.1 % of reading
Temperature (Model 179)	–40 °C to +400 °C	1.0 % of reading

¹ All AC voltage and AC current ranges are specified from 5 % of range to 100 % of range.

² 10 A continuous, 20 A for up to 30 seconds.

³ Voltage frequency is specified from 2 Hz to 100 kHz. Current frequency is specified from 2 Hz to 30 kHz.

Recommended Accessories



TPAK
Magnetic
Meter Hanger
See page 162



TL81A
Deluxe Electronic
Test Lead Set
See page 152



TL175
TwistGuard™ Test
Leads
See page 148



I410
AC/DC Current Clamp
See page 158



AC220
SureGrip™ Alligator
Clips
See page 149



TP220
SureGrip™ Industrial
Test Probes
See page 149



FOM
Fiber Optic Meter
See page 163



80K-15
High Voltage Probe



C35
Soft Carrying Case
See page 160



CAMO C25
Camouflage Carrying
Case
See page 160

Recommended Kits

Buy more, Save more



Fluke 179/EDA2 Industrial Digital Multimeter Combo Kit

For more details see page 168

Included Accessories

Test Leads with 4mm Lantern Tips, 9V Battery (installed) and User Manual, 80BK Temperature Probe (179 only).

Ordering Information

FLUKE-175	True RMS Digital Multimeter
FLUKE-177	True RMS Digital Multimeter
FLUKE-179	True RMS Digital Multimeter
FLUKE-179/EDA2	Electronic's Combo Kit
FLUKE-179/IMSK	Industrial Multimeter Service Kit

Fluke 233 Remote Display Digital Multimeter



Fluke 233



The Fluke 233 Remote Display Digital Multimeter allows you to be in two places at once. The removable display solves several problems. First, you no longer have to hold both the meter and the test leads to make a measurement. It also allows you to measure where the measurement point is separated from controls or where the operator can't stay close to the meter during measurements due to various hazards or moving machinery.

- Wireless technology allows the display to be carried up to 9.1 metres away from the point of measurement for added flexibility
- The removable magnetic display can be conveniently mounted where it is easily seen
- Low-power 802.15.4 wireless technology does not interfere with measurement accuracy
- Use as a conventional multimeter when the display is connected
- True-RMS AC voltage and current
- Built-in thermometer
- Auto power off maximises battery life (400 hours)
- Radio transmitter automatically turns off when the display is connected to the meter
- Record signal fluctuations using the Min/Max function
- Three year warranty

Features

	233
Removable magnetic display	•
True-RMS measurement	•
Digital display counts	6000
Display backlight	•
Built in thermometer	•
Resistance, continuity and diode test	•
Min/Max and average recording	•
Auto power off maximises battery life	•
Radio transmitter automatically turns off when the display is connected to the meter	•
Use as conventional multimeter when the display is connected	•
Safety rating	CAT IV 600V/CAT III 1000 V
Auto and manual ranging	•
Display Hold and AutoHold®	•
Unsafe voltage alert warns for voltages above 30V	•
2 Low batteries indication	•
Ergonomic case with integrated holster	•
Selectable sleep mode preserves battery life	•

Specifications

DC voltage	Range	0.1 mV to 1000 V
	Accuracy	0.25 % + 2
AC voltage	Range	0.1 mV to 1000 V
	Accuracy	1.0 % + 3
DC current	Range	0.001 A to 10 A
	Accuracy	1.0 % + 3
AC current	Range	0.001 A to 10 A
	Accuracy	1.5 % + 3
Resistance	Range	0.1 Ω to 40 MΩ
Capacitance		1000 nF to 9999 µF
Frequency		0.1 Hz to 50.00 kHz
Temperature		-40 °C to +400 °C
Power		3 AA batteries main body, 2 AA batteries display module
Battery life		400 hours
Compliance		CAT IV 600 V , CAT III 1000 V
Size (HxWxL)		5.3 cm x 5.3 cm x 19.3 cm
Weight		604 g

Recommended Accessories



TPAK
Magnetic
Meter Hanger
See page 162



TL220
SureGrip™ Industrial
Test Lead Set
See page 152



80PK-22
SureGrip™ Immersion
Temperature Probe
See page 154



1400S
AC Current Clamp
See page 156/167



80AK-A
Thermocouple Adapter
See page 154



AC285
SureGrip™ Alligator
Clips
See page 149



TL175
TwistGuard™ Test
Leads
See page 148



TLK289
SureGrip™ Industrial
Test Lead Set
See page 152



TP175
TwistGuard™ Test
Probes
See page 149



FTP-1
SureGrip™ Fused
Test Probe Set
See page 150



TL224
SureGrip™ Silicone
Insulated Test Leads
See page 149



C101
Hard Case
See page 161



C35
Soft Carrying Case
See page 160



C781
Meter Case
See page 161

Included Accessories

Test Leads with 4mm Lantern Tips, AC175 Alligator Clips, 80BK-A Temperature Probe, CD, AA Batteries and User Manual.

Ordering Information

FLUKE-233 Remote Display Digital Multimeter

Fluke 110 Series True-RMS Digital Multimeters



Fluke 116

Fluke 117



Dependable Digital Multimeters for Electrical and HVAC purposes

All the models in the Fluke 110 series are True-RMS Multimeters with a large 3-1/2 digit / 6,000 count display. The Fluke 117 includes integrated VoltAlert™ non-contact voltage detector and LoZ ghost voltage detector features to get the job done faster. The Fluke 116 is the HVAC/R Multimeter with temperature, microamps, and LoZ to quickly troubleshoot problems with HVAC/R equipment. The Fluke 115 is a compact meter for a wide variety of electrical/electronic testing applications, while the Fluke 114, 113 and 110 are basic electrical troubleshooting meters designed for "go/no-go" testing.

- VoltAlert™ technology for integrated non-contact voltage detection (117)
- AutoVolt feature for automatic ac/dc voltage selection (117, 116, 114)
- Built in thermometer for HVAC applications (116)
- Microamps to test flame sensors (116)
- VCHEK™ LoZ low impedance measurement function to simultaneously test for voltage/continuity (113)
- LoZ: Low input impedance prevents false readings due to "ghost voltage" (117, 116, 114)
- Large display and white LED backlight to work in poorly lit areas more effectively
- Three year warranty

Specifications	117	115	113	110
VoltAlert™ detector	•	—	—	—
AutoVolt/LoZ	•	—	LoZ	—
Analogue bargraph	•	•	•	•
True-RMS for accurate measurements on non-linear loads	•	•	•	•
Min/Max recording	•	•	•	•
Display hold	•	•	•	•
3-1/2 digits	•	•	•	•
6000 counts	•	•	•	•
CAT III 600 V safety rated	•	•	•	•
			116	114
Temperature			•	—
Microamps			•	—
Frequency			•	—
Capacitance			•	—
Diode test			•	—
AutoVolt/LoZ			•	•
Analogue bargraph			•	•
True-RMS for accurate measurements on non-linear loads			•	•
Min/Max recording			•	•
Display hold			•	•
3-1/2 digits			•	•
6000 counts			•	•

Functions	117	116	115	114	113	110
AC/DC voltage	600 V	600 V	600 V	600 V	600 V	600 V
AC/DC current	10 A	600.0 µA	10 A	—	—	—
Resistance	40 MΩ	40 MΩ	40 MΩ	40 MΩ	60 kΩ	40 MΩ
Capacitance	9,999 µF	9,999 µF	9,999 µF	—	9,999 µF	—
Diode test	•	•	•	—	•	—
Frequency	5 Hz to 99.99 kHz	5 Hz to 99.99 kHz	5 Hz to 99.99 kHz	—	—	—
Temperature		+400 °C		—	—	—
Safety rating	CAT III 600 V	CAT III 600 V	CAT III 600 V	CAT III 600 V	CAT III 600 V	CAT III 600 V

Recommended Accessories


C115
Soft Carrying Case
See page 161

TPAK
Magnetic
Meter Hanger
See page 162

TL175
TwistGuard™ Test
Leads
See page 148

80PK-27
SureGrip™ Industrial
Surface Probe
See page 154

Recommended Kits

Buy more, Save more



Fluke 116/323 HVAC Combo Kit

For more details see page 168



Fluke 179/EDA2 Industrial Digital Multimeter Combo Kit

For more details see page 170

Included Accessories

TL75 Test Leads, Holster, 80BK Integrated Temperature Probe (116), User's Manual and 9 V Battery (installed).

Ordering Information

FLUKE-110	Basic True RMS Digital Multimeter
FLUKE-113	Utility True RMS Digital Multimeter
FLUKE-114	Electrical True RMS Digital Multimeter
FLUKE-115	True RMS Digital Multimeter
FLUKE-116	HVAC True RMS Digital Multimeter
FLUKE-117	Adv. Electrical True RMS Multimeter
FLUKE-116/323	HVAC and Clamp Meter Combo Kit
FLUKE-116/62 MAX+	HVAC Multimeter and Infrared Thermometer Kit
FLUKE-117/323	Electrical Combo Kit
IB117K	117 Multimeter + Insulated Hand Tools Starter Kit

Fluke 27 II, 28 II and 28 IIEx Industrial IP67 Digital Multimeters



Fluke 27 II

Fluke 28 II



The 27 II, 28 II and 28 IIEx-AU Digital Multimeters are designed for tough work environments. All three meters have IP 67 waterproof and dustproof rating. They both have an extended operating temperature range of -15 °C to + 55 °C and 95 % humidity.

- Unique function for accurate voltage and frequency measurements on adjustable speed motor drives and other electrically noisy equipment (28 II, 28 IIEx)
- Built-in thermometer conveniently allows you to take temperature readings without having to carry a separate instrument (28 II, 28 IIEx)
- Hi-resolution 20,000 count display mode (28 II, 28 IIEx)
- Resistance and continuity. Relative mode to remove test lead resistance from low ohms measurements
- Large digit display with bright, two-level backlight
- Backlit keypad buttons allow for easy visibility in low-lit areas
- Optional magnetic hanger for easy setup and viewing freeing your hands for other tasks
- Intrinsically safe certifications from the world's leading certification bodies (28 IIEx)
- Limited lifetime manufacturer's warranty

Features	27 II	28 II	28 II Ex
Tested to withstand a 3 m drop	•	•	•
Wide 1000 V measurement range	•	•	•
True-RMS AC voltage and current for accurate measurements on non-linear signals	—	•	•
Low pass filter	—	•	•
Temperature	—	•	•
Average responding voltage and current measurements	•	—	—
10 A continuous (20 A for 30 seconds)	•	•	•
Frequency and capacitance	•	•	•
Record signal fluctuations using the Min/Max function	•	•	•

Specifications		27 II	28 II	28 II Ex
DC voltage	Range	0.1 mV to 1000 V		
	Accuracy	0.05 % + 1	0.05 % + 1	0.05 % + 1
AC voltage	Range	0.1 mV to 1000 V		
	Accuracy	0.5 % + 3	0.7 % + 4	0.7 % + 4
DC current	Range	0.1 µA to 10 A		
	Accuracy	0.2 % + 4	0.2 % + 4	0.2 % + 4
AC current	Range	0.1 µA to 10 A		
	Accuracy	1.5 % + 2	1.0 % + 2	1.0 % + 2
Resistance	Range	0.1 Ω to 50 MΩ		
Display counts		6000	6000/19,999	6000/19,999
Capacitance		1 nF to 9999 µF		10 nF to 9999 µF
Frequency		0.5 Hz to 199.99 kHz		
Temperature		-200 °C to +1090 °C		-200 °C to +1090 °C
Low pass filter (measurement on VSD's)		Yes		Yes
Compliance		CAT IV 600 V, CAT III 1000 V		
Measurement method		Avg. responding	True-RMS	True-RMS
Power		Two AAA batteries		
Battery life		800 hours		400 hours
Dimensions (DxWxH)		6.35 cm x 10.0 cm x 19.81 cm		
Weight with holster		698.5 g		

Specialty Models Fluke 28 IIEx-AU Intrinsically Safe True-RMS Multimeter

CAT III 1000V/CAT IV
600V electrical
safety rating

II 2 G Ex ia IIC T4



See page 134 for more information.

Recommended Accessories



Included Accessories

TL175 Test Leads, AC175 Alligator Clips, 80BK-A Temperature Probe (28 II), Holster, User Manual, and three AA batteries (installed).

Ordering Information

FLUKE-27II Industrial Multimeter

FLUKE-28II Industrial Multimeter

FLUKE-28IIEx Intrinsically Safe Industrial Multimeter

Fluke 77IV Digital Multimeter



Fluke 77IV



Versatile multimeter for field service or bench repair

The Fluke 77IV Digital Multimeter has the features needed to repair most electrical and electronic problems. This meter is simple to use and has significant improvements over Fluke's original 70 Series with more measurement functions, conformance to the latest safety standards, and a much larger display that is easier to view.

- Wide 1000 V measurement range
- Average responding AC measurements
- 0.3 % accuracy
- 10 amps continuous
- Frequency and capacitance
- Resistance and continuity
- Large display
- Backlight for work in dim areas
- Min/Max to record signal fluctuations
- Integral holster with probe holders
- Free your hands with the optional TPAK magnetic hanger
- Auto and manual ranging
- Battery Life: 400 hours typical
- Weight: 0.42 kg
- Size (HxWxD): 185 mm x 90 mm x 43 mm
- Limited lifetime manufacturer's warranty

Function	Maximum	Max. resolution	Accuracy
Voltage DC	1000 V	1 mV	±(0.3%+1)
Voltage AC	1000 V	1 mV	±(2.0%+2)
Current DC	10 A	0.01 mA	±(1.5%+2)
Current AC	10 A	0.01 mA	±(2.5%+2)
Resistance	50 MΩ	0.1 Ω	±(0.5%+1)
Capacitance	9,999 μF	1 nF	±(1.2%+2)
Frequency	99.99 kHz	0.01 Hz	±(0.1%+1)

Accuracies are best accuracies for each function.

General Specifications

Accuracy is specified for 1 year after calibration, at operating temperatures of 18 °C to 28 °C, with relative humidity at 0 % to 90 %. Accuracy specifications take the form of ±([% of Reading] + [Counts]).

Specifications	77IV
V Maximum voltage between any terminal and earth ground	1000 V
Surge protection	8 kV peak per IEC 61010
W Fuse for mA input	440 mA, 1000 V FAST Fuse
W Fuse for A input	11 A, 1000 V FAST Fuse
Display	Digital: 6,000 counts, updates 4/sec
Bar Graph	33 segments, updates 32/sec
Frequency	10,000 counts
Capacitance	1,000 counts
Operating altitude	2,000 metres
Storage altitude	12,000 metres
Operating temperature	-10 °C to + 50 °C
Storage temperature	-40 °C to + 60 °C
Temperature coefficient	0.1 X (specified accuracy/°C (< 18 °C or > 28 °C))
Electromagnetic compatibility (EN 61326-1:1997)	In an RF field of 3 V/M, accuracy = specified accuracy except in temperature: specified accuracy ± 5 °C
Relative humidity (maximum non-condensing)	90 % to 35 °C; 75 % to 40 °C; 45 % to 50 °C
Battery life	400 hours
Size (HxWxL) and Weight	185mm x 90mm x 43mm; 420 grams
Safety compliance	ANSI/ISA S82.02.01, CSA C22.2-1010.1, IEC 61010 to 1000 V Measurement Category III, 600 V Measurement Category IV
Certifications	CSA, TÜV (EN61010), UL, I, II, (N10140), VDE

Recommended Accessories



1400
AC Current Clamp
See page 156



C35
Soft Carrying Case
See page 160



TPAK
Magnetic
Meter Hanger
See page 162



1400S
AC Current Clamp
See page 156/167



12000 FLEX
AC Current Clamp
Test Leads Test
Lead Kit
See page 156



C781
Meter Case
See page 161

Included Accessories

Test Leads with 4mm Lantern Tips, 9V Battery (installed), Manual Information Pack.

Ordering Information

FLUKE-77-4 Digital Multimeter

Fluke PRV240 and PRV240FS Proving Units



Fluke PRV240



Fluke PRV240 FS



Fluke PRV240 Proving Unit

The Fluke PRV240 Proving Unit is a portable, pocket-sized, battery-powered voltage source. It is unique in that it sources stable AC and DC voltages for both LoZ and HiZ instruments.

- Sources both AC and DC steady-state voltage – supplies 240 V DC/AC
- A single LED indicates functionality, making this unit a simple-to-use solution for verification of your test tool
- Compatible with both high impedance or low impedance multimeters, clamp meters or two pole testers
- Voltage is sourced through recessed contacts that are activated when tested probes are inserted to avoid accidental contact
- Includes Magnetic Hanging Strap
- Long battery life – 5,000 tests per set of four AA batteries
- One year warranty

Fluke PRV240FS Proving Unit

The Fluke PRV240FS Proving Unit is specifically built to prove the functionality of the FieldSense measurement on the Fluke T6 Electrical Testers. It also provides AC and DC voltages for other HiZ instruments in your tool box.

- Reduces the risk of shock and arc flash by validating the functionality of test tools without placing yourself in a potentially hazardous electrical environment
- Can prove functionality of the FieldSense measurement on the T6 Electrical Testers
- Sources both AC and DC steady-state voltage—supplies 240 V DC/AC
- A single switch and a set of LEDs indicate functionality of both the FieldSense “no-test-lead” voltage measurement capability, plus standard AC and DC measurements with test leads
- Compatible with high impedance multimeters or clamp meters
- Voltage is sourced through a central hub designed to test the T6 FieldSense open fork, as well as through recessed contacts that are activated when test probes are inserted to avoid accidental contact
- Long battery life – 2,000 tests per set of four AA batteries
- One year warranty

Specifications	PRV240	PRV240FS
Output voltage	240 V AC RMS or DC ± 10 % ≥ 1 MΩ LoZ >3 kΩ load	240 V AC RMS or DC ± 10 % ≥ 1 MΩ
	60 V AC typical 50 V AC RMS minimum	
LED power indicator	Turns on when output voltage is present	Turns on when output voltage present
Battery	4 AA Alkaline batteries NEDA 24 A IEC LRO3	4 x AA Alkaline batteries NEDA 15 A IEC LR6
Battery life	5000 (5-second duration) test cycles with >1 MΩ load, 300 tests minimum with >3 kΩ load	2000 (10-second duration) test cycles with >1 MΩ load
Operating temperature	-10 °C to +50 °C	-10 °C to +50 °C
Operating altitude	2000 m	2000 m
Dimensions	11.7 cm x 7.4 cm x 2.8 cm, Pollution Degree 2	11.7 cm x 7.4 cm x 4.5 cm
Weight	0.23 kg includes batteries	0.32 kg includes batteries
Safety	IEC61010-1, IEC61010-2-030	IEC61010-1, IEC61010-2-030

Recommended Accessories



TPAK
Magnetic Meter Hanger
See page 162

Recommended Kits

Buy more, Save more



Fluke T6-1000 + PRV240FS Proving Unit Kit

For more details see page 177

Fluke PRV240/FS Applications



Included Accessories

TPAK Hanging Strap, four AA Batteries, Instruction Sheet.

Ordering Information

PRV240	Proving Unit
PRV240FS	Proving Unit
T6-1000 /PRV240FS	T6-1000 & PRV240FS Proving Unit Kit

Fluke 8846A, 8845A and 8808A Precision Bench Multimeters



Fluke 8846A



Fluke 8845A



Fluke 8808A



Fluke 8846A/8845A 6.5 Digit Precision Multimeters

These digital multimeters perform the functions you would expect to see in a multifunction DMM, including measuring volts, ohms and amps. Basic V DC accuracy of up to 0.0024 %, 10 A current range, and a wide ohms range give you an unbeatable combination of measurement capability.

Extend the meters' utility even more with their graphical display modes, including Trendplot™ paperless recorder mode, statistics and histograms—features you won't find on other multimeters

- 6.5 digit resolution
- Up to 0.0024 % accuracy
- Graphical analysis modes: TrendPlot, Histogram and Statistics
- Dual measurement inputs: front/rear
- Dual measurement display
- Wide measurement ranges
- IEEE, LAN, RS-232 interfaces
- USB memory device port (8846A)
- TL2X4 wire measurement technique
- 17025 accredited report of calibration included
- Three year warranty

Fluke 8808A 5.5 Digit Multimeter

The Fluke 8808A multimeter has a broad range of functions, measuring volts, ohms and amps with a basic V DC accuracy of 0.015 %. The meter is easy to use and include innovative functions to simplify routine testing and precision 4 wire resistance measurements.

- 5.5 digit resolution
- Up to 0.015 % accuracy
- Dual measurement display
- Sensitive DC leakage current ranges
- Front panel setup keys
- TL2X4 wire measurement technique
- Three year warranty

Recommended Accessories



TL2X4W-TWZ
2x4-Wire Ohms
Tweezers Test Leads



TL2X4W-PTH
2x4-Wire Ohms Test
Lead

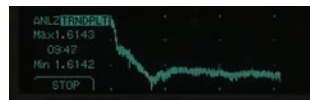


Y8846D
Rack Mount Kit, Dual



884X-CASE
Molded Plastic Case

Sample Screens Fluke 8846A/8845A



Built-in TrendPlot graphically plots extent of drift and intermittent events.



Critical measurement statistics are conveniently displayed together.

Included Accessories

LCI Line Power Cord, Test Lead Set, Spare Line Power Fuse, Programmers Manual/ User Manual on CD-ROM, 884X-USB USB to RS232 Cable Adapter, FVP-BASIC FlukeView® Forms Software Basic Version.

Ordering Information

FLUKE 8808A 5.5 Digit Multimeter

FLUKE 8808A/SU 5.5 Digit Multimeter (Software + Cable)

FLUKE 8845A 6.5 Digit Precision Multimeter

FLUKE 8845A/SU 6.5 Digit Precision Multimeter (Software + Cable)

FLUKE 8846A 6.5 Digit Precision Multimeter

FLUKE 8846A/SU 6.5 Digit Precision Multimeter (Software + Cable)

Calibration & Service Agreement units also available.

Specifications	8808A	8845A	8846A
Display	Dual	Dual, graphical	
Resolution (digits)	5.5	6.5	
Measurements	V AC, V DC, I DC, I AC, Ω, Cont, Diode	V AC, V DC, I DC, I AC, Ω, Cont, Diode	
Basic V DC accuracy (% Reading + % Range)	0.015 + 0.003	0.0035 + 0.0005	0.0024 + 0.0005
Advanced measurements/functions	2x4 wire ohms, freq, i-Leakage dedicated setup keys	2x4 wire ohms, freq, period	2x4 wire ohms, freq, period, capacitance, temp (RTD)
Math	Null, dBm, dB, Min, Max	Null, dBm, dB, Min, Max, Ave, Std Deviation, MX+B	
Analysis	Limit Compare	Limit Compare, TrendPlot, Histogram, Statistics	
USB memory device port	No	No	Yes
Interfaces	RS-232, USB via optional adapter	RS-232, IEEE-488.2, LAN, USB via optional adapter	
Safety rating	CAT I 1000 V, CAT II 600 V	CAT I 1000 V, CAT II 600 V	

Clamp Meters

Wires in tight compact spaces. Panels out of reach. Extra-large conductors. We understand your workspace and have designed products for noise-free, reliable readings. Built on success, digital clamp meters designed by Fluke are known as workhorse current clamp meters. With advanced performance, the amp clamp meter line is designed to be simple to use and gimmick-free.



Clamps Selection Guide

Fluke Clamp Meters	Residential/commercial electrical				General purpose			Industrial electrical		HVAC/R	High-end industrial, utility		Leakage	Wireless	
	323	324	325	365	373	374 FC	375 FC	376 FC	381	902 FC	353	355	368 FC/369 FC	a3000 FC	a3001 FC
Measurements															
AC current	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
AC voltage	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Resistance	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Continuity	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
DC volts	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
DC current	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
True-RMS	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Frequency	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
AC + DC voltage	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
AC + DC current	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Min/Max/Avg	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
4-20 mA (0.01 mA resolution)	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Temperature	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Capacitance	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Measurement logging	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Special Features															
Inrush current mode	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Low Pass filter for VFD's	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
18-inch (45.7 cm) iFlex	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Flexible Current Probe	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Remote display	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Wireless	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Display															
Display hold	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Backlight	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Graphing display	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Specifications															
Jaw opening	30 mm (1.18 in)	30 mm (1.18 in)	30 mm (1.18 in)	18 mm (0.7 in)	32 mm (1.26 in)	34 mm (1.33 in)	34 mm (1.33 in)	34 mm (1.33 in)	34 mm (1.33 in)	30 mm (1.2 in)	58 mm (2.3 in)	58 mm (2.3 in)	40 mm (1.5 in)/61 mm (2.4 in)	34 mm (1.33 in)	254 mm (10 in) coil
Max wire size	300 mm2	300 mm2	300 mm2	17 mm (0.67 in)	400 mm2	400 mm2	400 mm2	400 mm2	400 mm2	300 mm2	400mm ² or 3x 240 mm ²	400mm ² or 3x 240 mm ²	400mm ² or 3x 240 mm ²	400 mm2	
Current range AC RMS	0 to 400.0 A	0 to 40.00 A/400.0 A	0 to 40.00 A/400.0 A	0 to 200.0 A	0 to 600.0 A	0 to 600.0 A (2500 A with iFlex)	0 to 600.0 A (2500 A with iFlex)	0 to 999.9 A (2500 A with iFlex)	0 to 999.9 A (2500 A with iFlex)	0 to 600.0 A	0 to 1400 A	0 to 1400 A	0 to 60 A	0 to 400A	0 to 2500A
Accuracy ac current (50/60 Hz)	± 5 counts	± 5 counts	± 5 counts	± 5 counts	± 5 counts	± 5 counts	± 5 counts	± 5 counts	± 5 counts	± 5 counts	± 5 counts	± 5 counts	± 5 counts	± 5 counts	± 5 counts
AC Response	True-rms	True-rms	True-rms	True-rms	True-rms	True-rms	True-rms	True-rms	True-rms	True-rms	True-rms	True-rms	True-rms	True-rms	True-rms
Current range DC	0 to 400.0 A	0 to 40.00 A/400.0 A	0 to 40.00 A/400.0 A	0 to 200 A	0 to 600.0 A	0 to 600.0 A	0 to 600.0 A	0 to 999.9 A	0 to 999.9 A	0 to 200 µA	0 to 2000 A	0 to 2000 A	0 to 2000 A	0 to 400A	0 to 2500A
Accuracy dc current	± 5 counts	± 5 counts	± 5 counts	± 5 counts	± 5 counts	± 5 counts	± 5 counts	± 5 counts	± 5 counts	± 5 counts	± 5 counts	± 5 counts	± 5 counts	± 5 counts	± 5 counts
Voltage range AC	0 to 600.0 V	0 to 600.0 V	0 to 600.0 V	0 to 600.0 V	0 to 600.0 V	0 to 1000 V	0 to 1000 V	0 to 1000 V	0 to 1000 V	0 to 600.0 V	0 to 600.0 V	0 to 600.0 V	0 to 600.0 V	0 to 600.0 V	0 to 600.0 V
Accuracy ac voltage	± 5 counts	± 5 counts	± 5 counts	± 5 counts	± 5 counts	± 5 counts	± 5 counts	± 5 counts	± 5 counts	± 5 counts	± 5 counts	± 5 counts	± 5 counts	± 5 counts	± 5 counts
Voltage range DC	0 to 600.0 V	0 to 600.0 V	0 to 600.0 V	0 to 600.0 V	0 to 600.0 V	0 to 1000 V	0 to 1000 V	0 to 1000 V	0 to 1000 V	0 to 600.0 V	0 to 600.0 V	0 to 600.0 V	0 to 600.0 V	0 to 600.0 V	0 to 600.0 V
Accuracy DC voltage	± 5 counts	± 5 counts	± 5 counts	± 5 counts	± 5 counts	± 5 counts	± 5 counts	± 5 counts	± 5 counts	± 5 counts	± 5 counts	± 5 counts	± 5 counts	± 5 counts	± 5 counts
Resistance range	0 to 4000 Ω	0 to 4000 Ω	0 to 4000 Ω	0 to 4000 Ω	0 to 6000 Ω	0 to 6000 Ω	0 to 6000 Ω	0 to 6000 Ω	0 to 6000 Ω	0 to 9999 Ω	0 to 9999 Ω	0 to 9999 Ω	0 to 9999 Ω	0 to 9999 Ω	0 to 9999 Ω
Frequency measurement range	5 Hz to 500 Hz	5 Hz to 500 Hz	5 Hz to 500 Hz	5 Hz to 500 Hz	5 Hz to 500 Hz	5 Hz to 500 Hz	5 Hz to 500 Hz	5 Hz to 500 Hz	5 Hz to 500 Hz	5 Hz to 500 Hz	5 Hz to 500 Hz	5 Hz to 500 Hz	5 Hz to 500 Hz	5 Hz to 500 Hz	5 Hz to 500 Hz
Warranty and Safety															
Warranty (years)	2	2	2	3	3	3	3	3	3	3	3	3	1	3	3
Safety rating (EN 61010)	CAT IV 300 V, CAT III 600 V	CAT IV 300 V, CAT III 600 V	CAT IV 300 V, CAT III 600 V	CAT III 600 V	CAT III 600 V, CAT IV 300 V	CAT III 1000 V, CAT IV 600 V	CAT III 1000 V, CAT IV 600 V	CAT III 1000 V, CAT IV 600 V	CAT III 1000 V, CAT IV 600 V	CAT III 600 V	CAT III 1000 V, CAT IV 600 V	CAT III 1000 V, CAT IV 600 V	CAT III 600 V	CAT III 600 V	CAT III 1000 V, CAT IV 600 V
Fluke Connect															
Compatible with Fluke Connect® App															

Fluke 381 Remote Display True-RMS AC/DC Clamp Meter with iFlex™



Fluke 381



The world's most advanced clamp meter

The Fluke 381 True-RMS AC/DC Clamp Meter combines iFlex flexibility with remote reading capability for the ultimate in innovation and safety. Now one technician can do jobs that would otherwise require two people. Clamp the Fluke 381 around a conductor, remove the display and walk across the room to operate controls or remove protective equipment, all while watching real-time readings.

The iFlex™ Flexible Current Probe (included) expands the measurement range to 2500 A AC while providing increased display flexibility. With a cord that runs 6 feet, you can finally measure those tight spaces, awkward sized conductors and disorganised wires.

- Remote display reads measurements up to 9.1 metres away
- iFlex Flexible Current Probe included, 18 inch circumference
- 2500 A AC current measurement with iFlex
- 999.9 A AC and DC current measurement with fixed jaw
- 1000 V AC and DC voltage measurement
- Frequency measurement to 500 Hz
- 60 kΩ resistance measurement
- Min/Max/Avg and inrush recording
- CAT IV 600 V, CAT III 1000 V
- Three year warranty

Fluke 365 Detachable Jaw True-RMS AC/DC Clamp Meter



Fluke 365



Where rugged meets reliable

The Fluke 365 True-RMS AC/DC Clamp Meter offers a small, detachable jaw with 1.2 metres of coil that makes it easy to take and read measurements in tight or hard-to-reach places.

- 200 A AC and DC current measurement with detachable jaw
- 600 VAC and DC voltage measurement
- Detachable jaw makes accessing wires and viewing the display easier
- Built in flashlight/torch allows for easy illumination and identification of wires
- CAT III 600 V
- Compact design fits in your hand and can be used while wearing protective equipment
- State of the art signal processing allows for use in noisy electrical environments while providing stable readings
- Large, easy to read, backlight display automatically sets the correct measurement range so you do not need to change switch positions while taking a measurement
- Three year warranty

See detailed specifications chart on page 27.

Recommended Accessories Fluke381



TL175
TwistGuard™ Test Leads
See page 148



TLK289
Industrial Test Lead Set
See page 152



AC87
Heavy Duty Bus Bar Clip Set
See page 149



FTP-1
SureGrip™ Fused Test Probe Set
See page 150



I2500-10
10 inch iFlex™ Flexible Current Probe
See page 29



C345
Large Soft Case
See page 161

Fluke365



FTPL-1
SureGrip™ Fused Test Probe and Lead Set
See page 150



TL71
Premium Test Lead Set
See page 148



TL220
SureGrip™ Industrial Test Lead Set
See page 152



TL224
SureGrip™ Silicone Insulated Test Leads
See page 149



AC285
SureGrip™ Alligator Clips
See page 149



C43
Small Soft Case
See page 160

Included Accessories

18-inch iFlex™ Flexible Current Probe (Fluke 381 only), Test Leads, Soft Carrying Case, Instruction Card, Safety Information Sheet, two AA Alkaline Batteries.

Ordering Information

FLUKE 381	Remote Display True-RMS AC/DC Clamp Meter with iFlex™
FLUKE 365	Detachable Jaw True-RMS AC/DC Clamp Meter

Fluke 370 Series Clamp Meters



Fluke 378 FC with iFlex™



Be ready for anything

The Fluke 370 Series of True-RMS Clamp Meters provides a range of state-of-the-art features to meet even the most demanding job requirements.

All four of the clamp meters have improved base features such as a large, backlit display, true-RMS standard, CAT IV safety rating and a durably constructed body. Additionally, the 376 FC, 375 FC and 374 FC are a part of the Fluke Connect® family of wireless test tools and are compatible with the iFlex™ Flexible Current Probe (included with the 376 FC, sold separately for the 375 FC and 374 FC), and provide increased measurement readings to 1000 A and 1000 V AC and DC.

Three year warranty.



Fluke 377 FC

Fluke 376 FC

Fluke 375 FC

Fluke 374 FC

Fluke 373

Functions	Range	373	374 FC	375 FC	376 FC	377 FC	378 FC
Current AC	0 to 600.0 A	2% ± 5 counts	2% ± 5 counts	2% ± 5 counts	-		
	0 to 999.9 A	-	-	-	2% ± 5 counts		
Current DC	0 to 600.0 A	-	2% ± 5 counts	2% ± 5 counts	-		
	0 to 999.9 A	-	-	-	2% ± 5 counts		
Voltage AC	0 to 600.0 V	1% ± 5 counts	-	-	-		
	0 to 1000 V	-	1% ± 5 counts	1% ± 5 counts	1% ± 5 counts		
Voltage DC	0 to 600.0 V	1% ± 5 counts	-	-	-		
	0 to 1000 V	-	1% ± 5 counts	1% ± 5 counts	1% ± 5 counts		
Resistance range	-	0 to 6000 Ω	0 to 6000 Ω	0 to 6000 Ω	0 to 60 kΩ		
Jaw opening	-	32 mm	34 mm	34 mm	34 mm		
Max. wire size	-	750 MCM	750 MCM	750 MCM	750 MCM		
Frequency measurement range	-	-	-	500 Hz	500 Hz		



Fluke iFlex™ Flexible Current Probe

Unprecedented measurement flexibility

The iFlex Flexible Current Probe expands the measurement range of select Fluke Clamp Meters to 2500 A AC while providing increased display flexibility, improved wire access and the ability to measure awkward-sized conductors. Available in 18 inch and 10 inch coil sizes.

- Compatible to Fluke 374 FC, 375 FC, 376 FC and 381
- CAT IV 600 V, CAT III 1000 V
- 7.5 mm coil diameter allows measurement in tight spaces
- 1.8 m cable
- Three-year warranty

Visit www.fluke.com/sg/clamps for additional specifications.

Recommended Accessories



TL223-1
SureGrip™ Electrical
Test Lead Set
See page 152



TL224
SureGrip™ Silicone
Insulated Test Leads
See page 149



TL175
TwistGuard™ Test
Leads
See page 148



AC285
SureGrip™ Alligator
Clips
See page 149



I2500-18
18 inch iFlex™ Flexible
Current Probe
See page 29



C43
Small Soft Case
See page 160

Fluke Connect® Enabled



The Fluke 376 FC, 375 FC, and 374 FC are a part of the Fluke Connect family of wireless test tools.

- Trend measurements, pinpoint intermittent faults and transmit results wirelessly by connecting your meter to your phone via Fluke Connect Measurements app
- Create and send reports right from the field
- Stay safely away from the arc flash zone through Bluetooth connectivity

Included Accessories

18-inch iFlex™ Flexible Current Probe (Fluke 376FC only), Test Leads, Soft Carrying Case, Instruction Card, Safety Information Sheet, two AA Alkaline Batteries.

Ordering Information

FLUKE 373	True-RMS AC Clamp Meter
FLUKE 374 FC	True-RMS AC/DC FC Clamp Meter
FLUKE 375 FC	True-RMS AC/DC FC Clamp Meter
FLUKE 376 FC	True-RMS AC/DC FC Clamp Meter with iFlex™
I2500-10 IFLEX™	Flexible Current Probe 25 cm
I2500-18 IFLEX™	Flexible Current Probe 45 cm

*Fluke Connect is only available in selected countries. Please check with your local distributor for available models.


Fluke 393 FC CAT III 1500 V True-rms Clamp Meter with iFlex



The 393 FC CAT III 1500 V True-rms Clamp Meter with iFlex is designed for technicians who work in high voltage dc environment: solar arrays, wind power, electric railways, data centers battery banks for uninterruptible power supplies. The clamp will measure up to 1500 V dc, 1000 V ac, and up to 999.9 A dc or ac through the clamp jaw. The included iFlex flexible current probe extended ac current measurements up to 2500 amps. This clamp has a thin jaw, giving you access to cables in crowded combiner boxes. Test leads are designed with your work in mind, and are also rated to CAT III 1500 V dc.

Other key functions:

- IP54 rated, ideal for work outdoors on solar arrays and wind power systems
- DC power measurement, showing readings in kVA
- Audio Polarity indicator helps prevent accidental miswires
- Visual Continuity turns provide a bright green light in the display, ideal when working in dark and noisy environments
- Logging and reporting of test results via Fluke Connect software
- When measuring ac current the included iFlex flexible current probe gives you unparalleled access to cable in tight spaces. The iFlex probe can be twisted through extremely small spaces and provide accurate current measurements.

Specifications	Fluke 393 FC			
General				
Maximum voltage between any terminal and earth ground	1000 V AC 1500 V DC			
Batteries	2 AA IEC LR6 alkaline			
Display	Dual display with backlight			
Automatic power off	20 minutes			
Electrical				
Accuracy	Accuracy is specified for 1 year after calibration, at operating temperatures of 18 °C to 28 °C, relative humidity at 0 % to 75 %. Accuracy specifications take the form of: ±[(% of Reading) + [Number of Least Significant Digits]].			
Temperature coefficients	Add 0.1 x specified accuracy for each °C > 28 °C or < 18 °C			
AC current: jaw				
Range	999.9 A			
Resolution	0.1 A			
Accuracy	2 % + 5 digits (10 Hz to 100 Hz) 2.5 % + 5 digits (100 Hz to 500 Hz)			
Crest Factor (50/60 Hz)	2.5 @600.0 A 3.0 @500.0 A 1.42 @999.9 A Add 2 % for C.F. >2			
AC current: flexible current probe				
Range	999.9 A 2500 A			
Resolution	0.1 A (≤999.9 A) 1 A (≤2500 A)			
Accuracy	3 % RD + 5 digits (10 Hz to 500 Hz)			
Crest Factor (50/60Hz)	2.5 @1400 A 3.0 @1100 A 1.42@2500 A Add 2 % for C.F. >2			
Position Sensitivity				
	Distance from Optimum	i2500-10 Flex	i2500-18 Flex	Error
	A	0.5 in (12.7 mm)	1.4 in (35.6 mm)	±0.5 %
	B	0.8 in (20.3 mm)	2.0 in (50.8 mm)	±1.0 %
	C	1.4 in (35.6 mm)	2.5 in (63.5 mm)	±2.0 %
	Measurement uncertainty assumes centralized primary conductor at optimum position, no external electrical or magnetic field, and within operating temperature range.			
DC Current				
Range	999.9 A			
Resolution	0.1 A			
Accuracy	2 % RD + 5 digits (When using the "ZERO" function to compensate for offsets)			



Specifications (continued)	Fluke 393 FC
AC voltage	
Range	600.0 V 1000 V
Resolution	0.1 V (≤ 600.0 V) 1 V (≤ 1000 V)
Accuracy	1 % RD + 5 digits (20 Hz to 500 Hz)
DC voltage	
Range	600.0 V 1500 V
Resolution	0.1 V (≤ 600.0 V) 1 V (≤ 1500 V)
Accuracy	1 % RD + 5 digits
mV dc	
Range	500.0 mV
Resolution	0.1 mV
Accuracy	1 % RD + 5 digits
Amps Frequency: Jaw	
Range	5.0 Hz to 500.0 Hz
Resolution	0.1 Hz
Accuracy	0.5 % RD + 5 digits
Trigger Level	5 Hz to 10 Hz, ≥ 10 A 10 Hz to 100 Hz, ≥ 5 A 100 Hz to 500 Hz, ≥ 10 A
Amps frequency: flexible current probe	
Range	5.0 Hz to 500.0 Hz
Resolution	0.1 Hz
Accuracy	0.5 % RD + 5 digits
Trigger Level	5 Hz to 20 Hz, ≥ 25 A 20 Hz to 100 Hz, ≥ 20 A 100 Hz to 500 Hz, ≥ 25 A
Voltage frequency	
Range	5.0 Hz to 500.0 Hz
Resolution	0.1 Hz
Accuracy	0.5 % RD + 5 digits
Trigger Level	5 Hz to 20 Hz, ≥ 5 V 20 Hz to 100 Hz, ≥ 5 V 100 Hz to 500 Hz, ≥ 10 V
DC power	
Range	600.0 kVA (600.0 V dc range) 1500 kVA (1500 V dc range)
Resolution	0.1 kVA 1 kVA
Accuracy	2 % RD + 2.0 kVA 2 % RD + 20 kVA
Resistance	
Range	600.0 Ω 6000 Ω 60.00 k Ω
Resolution	0.1 Ω (≤ 600.0 Ω) 1 Ω (≤ 6000 Ω) 0.01 k Ω (≤ 60.00 k Ω)
Accuracy	1 % RD + 5 digits
Capacitance	
Range	100.0 μ F 1000 μ F
Resolution	0.1 μ F (≤ 100.0 μ F) 1 μ F (≤ 1000 μ F)
Accuracy	1 % RD + 5 digits
Inrush trigger level	5 A



Included Accessories

Fluke 393 FC CAT III 1500 V True-rms Clamp Meter with iFlex:
Fluke 393 FC CAT III 1500 V True-rms Clamp Meter with iFlex, Test leads, CAT III 1500 V rated, right angle plugs, with safety caps, iFlex 18 inch flexible current probe, TPAK magnetic hanging strap, Premium carrying case

Fluke 320 Series True-RMS Clamp Meter



Fluke 324

Fluke 323

Fluke 325



Go to work with the best

True-RMS measurements and optimised ergonomics make the Fluke 320 Series True-RMS Clamp Meters the best general troubleshooting tools for commercial and residential electricians. The 323, 324 and 325 are designed to verify the presence of load current, AC voltage and continuity of circuits, switches, fuses and contacts. These small and rugged clamp meters are ideally suited for current measurements up to 400 A in tight cable compartments. The Fluke 325 also offers DC current and frequency measurements.

- 400 A AC current measurement (AC and DC current; 325 only)
- 600 V AC and DC voltage measurement
- True-RMS AC voltage and current for accurate measurements on non-linear signals
- Resistance measurement to up to 40 kΩ with continuity detection
- Temperature and capacitance measurement (324 and 325 only)
- Frequency measurement (325 only)
- Slim, ergonomic design
- Large, easy to read backlight display (324 and 325 only)
- CAT IV 300 V/CAT III 600 V safety rating
- Hold button
- Two year warranty

Recommended Accessories



C43
Small Soft Case
See page 160



C37
Camouflage Carrying Case



TL175
TwistGuard™ Test Leads
See page 148



TL223-1
SureGrip™ Electrical Test Lead Set
See page 152



L210
Probe Light and Extender
See page 162



MC6
Fluke MeterCleaner™ Wipes
See page 163

Specifications	Residential/Commercial Electrical		Light Industrial
	323	324	325
Measurements			
AC current	•	•	•
AC voltage	•	•	•
Resistance	•	•	•
Continuity	•	•	•
DC volts	•	•	•
DC current	-	-	•
True-RMS	•	•	•
Frequency	-	-	•
Min/Max/Avg	-	-	•
Temperature	-	•	•
Capacitance	-	•	•
Display			
Display hold	•	•	•
Backlight	-	-	•
Specifications			
Jaw opening	30 mm		
Max wire size	600 MCM		
Current range AC RMS	0 to 400.0 A		
Accuracy AC current (50/60 Hz)	2.0 % ± 5 digits	1.5 % ± 5 digits	2.0 % ± 5 digits
AC response	True-RMS		
Current range DC	-	-	0 to 400 A
Accuracy DC current	-	-	2.0 % ± 5 digits
Voltage range AC	0 to 600.0 V		
Accuracy AC voltage	1.5 % ± 5 digits		
Voltage range DC	0 to 600.0 V		
Accuracy DC voltage	1 % ± 5 digits		
Resistance range	0 to 4000 Ω		0 to 40 kΩ
Frequency measurement range	-	-	500 Hz



Included Accessories

Test Leads, Soft Case, User Manual.

Ordering Information

FLUKE 323	True RMS Clamp Meter
FLUKE 324	True RMS Clamp Meter
FLUKE 325	True RMS Clamp Meter

Fluke 350 Series AC/DC True-RMS Clamp Meters



Fluke 355



Versatile, professional and accurate

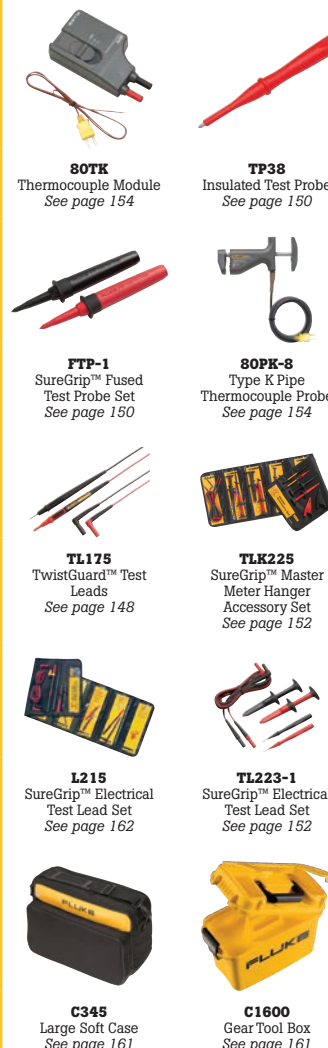
Confidently take reliable readings with the True-RMS Fluke 353 and 355 Clamp Meters—the tools of choice for high current clamp-on amp meter measurements up to 2000 A.

- Reliably handle a wide range of high-current applications with 2000 A AC+DC True-RMS, 1400 A AC, and 2000 A DC
- Large 58 mm jaw
- Inrush current measurement
- High voltage measurement of 1000 V AC+DC True-RMS, 600 V AC, and 1000 V DC (355 only)
- Resistance to 400 K Ω (355 only)
- Continuity beeper (355 only)
- Frequency measurement to 1 KHz
- Selectable low-pass filter mode
- Min/Max/Avg
- Large display with backlight
- Three year warranty

Features	353	355
True-RMS measurements	•	•
Display backlight	•	•
Motor start-up current	•	•
Min/Max/Average	•	•
Voltage AC/DC	–	•
Resistance measurement	–	•
Continuity measurement with beeper	–	•

Functions	Range	353	355
Current AC/DC	0–40.00 A	1.5% \pm 15 counts	1.5% \pm 15 counts
	0–400.0 A	1.5% \pm 5 counts	1.5% \pm 5 counts
	0–2000 A; 1400 AC RMS	1.5% \pm 5 counts	1.5% \pm 5 counts
Crest Factor		2.4	2.4
Voltage AC/DC	0–4.000 V	–	1% \pm 10 counts
	0–40.00 V	–	
	0–400.0 V	–	1% \pm 5 counts
	0–600 V AC RMS	–	
	0–1000 V DC	–	
Resistance	0–400.0 Ω	–	
	0–4.000 k Ω	–	
	0–40.00 k Ω	–	1.5% \pm 5 counts
	0–400.0 k Ω	–	
Continuity beeper	Appr. \leq 30 Ω	–	
Frequency	5.0Hz to 100.0Hz	0.2% \pm 2 counts	0.2% \pm 2 counts
	100.1Hz to 999Hz	0.5% \pm 5 counts	0.5% \pm 5 counts
Power Supply	6 x 1.5V AA NEDA 15A or 1EC LR6		
Battery life	100 hours (with typical usage, backlight off)		
Size (HxWxD)	300 mm x 98 mm x 52 mm		
Jaw opening	58 mm		
Weight	0.814 kg		

Recommended Accessories Fluke 381



Included Accessories

Fluke 353: C43 Soft Meter Case, six AA Batteries, User Manual.

Fluke 355: C43 Soft Meter Case, six AA Batteries, TL224 SureGrip™ Silicone Test Lead Set, TP2 Slim Reach Test Probe Set (2 mm), AC285 SureGrip™ Alligator Clip Set, User Manual.

Ordering Information

FLUKE 353 True RMS AC/DC Clamp Meter

FLUKE 355 True RMS AC/DC Clamp Meter

Fluke 902 FC True-RMS HVAC Clamp Meter



Fluke 902 FC



Improve productivity in the field

The Fluke 902 FC delivers the features necessary to diagnose and repair HVAC systems. Additionally, with Fluke Connect® you can trend measurements, create and send reports right from the field, safely stay away from live equipment.

Applications for HVAC

- 200 μ A DC current measurements to measure flame rod
- Extended resistance range to measure thermistors up to 60k Ω
- Capture flue gas temperature
- Measure start and run motor capacitors
- Measure performance of variable frequency drives
- Temperature measurement from -10 °C to 400 °C
- 1000 μ F capacitance measurement
- CAT III 600V, CAT IV 300V safety rating
- Three year warranty

Functions	Range	Resolution	Accuracy
A AC (via Jaw)	60/600 A	0.01/0.1 A	2.0 % \pm 5 digit (45-65 Hz) 2.5 % \pm 5 digit (65-400Hz)
V AC	600 V	0.1 V	1.5 % \pm 5 digit (45-400Hz)
V DC	600 V	0.1 V	1 % \pm 5 digits
Ohms	600/6,000 /60,000 Ω	0.1/1/10	1 % \pm 5 digits
μ A	200 μ A	0.1 μ A	1 % \pm 4 digits
Contact Temperature	10 to 400 °C	0.1 C/F	1 % \pm 8 digits
Capacitance	100.0/1000 μ F	0.1/1 μ F	1 % \pm 4 digits
Continuity Beeper			
Beep Volume	75 dBA nom. 15 cm from case front		
On Threshold	<=30 Ω		

Recommended Accessories Fluke 902 FC



AC220
SureGrip™ Alligator
Clips
See page 149



TL224
SureGrip™ Silicone
Insulated Test Leads
See page 149



80PK-8
Type K Pipe
Thermocouple Probe
See page 154



80AK-A
Thermocouple Adapter
See page 154



TPAK
Magnetic
Meter Hanger
See page 162



C781
Meter Case
See page 161

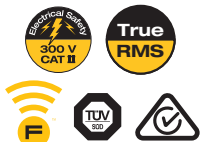
*Fluke Connect is only available in selected countries. Please check with your local distributor for available models.

Fluke 368 FC/369 FC AC True-RMS Leakage Current Clamp Meters



Fluke 369 FC

Fluke 368 FC

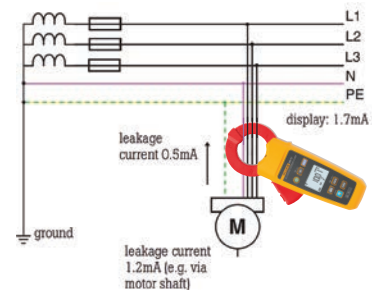


Measure leakage current to track small problems, avoid large problems

The Fluke 360 Series of True-RMS Leakage Current Clamp Meters help users detect, document, record and compare leakage current readings over time as a means of preventing unplanned downtime, and identifying intermittent GFCI and RCD trips, without taking equipment offline.

- True-RMS measurements for accuracy when measuring complex, non-sinusoidal waveforms
- Jaw size: 40 mm (368 FC) and 61 mm (369 FC)
- Current resolution 1 μ A/0.01 mA and 0.01 A/0.1 A
- Frequency range 40 Hz to 1 kHz
- Selectable filter 40 Hz to 70 Hz or wideband 40 Hz to 1 kHz
- Highest resolution of 1 μ A, measure up to 60 A
- Forward-facing LED worklight for use in dark wiring cabinets
- Backlit display; auto backlight off and auto power off for extended battery life.
- Wireless data connectivity via Fluke Connect
- CAT III 600V safety rating
- Three year warranty

Specifications	
Measurement Function	Alternating current
AC Ampere Range	3 mA, 30 mA, 300 mA, 3 A, 30 A, 60 A mA A: manual selection 3 mA, 30 mA, 300 mA: automatic selection 3 A, 30 A, 60 A: automatic selection
Range Selection	
Frequency	40 Hz to 1 kHz
Crest Factor	Three



Included Accessories

Fluke 902 FC: TL75 Test leads, 80BK Integrated DMM Temperature Probe, two AA Alkaline Batteries, Soft Carrying Case, Statement of Calibration Practices and User Manual.

Fluke 368 FC/369 FC: Soft Case, two AA Batteries, Safety Manual.

Ordering Information

FLUKE 902 FC HVAC Clamp Meter

FLUKE 368 FC AC Leakage Current Clamp Meter

FLUKE 369 FC AC Leakage Current Clamp Meter



Battery Testers

Fluke Battery Analysers are the ideal test tool for maintaining, troubleshooting and performance testing individual stationary batteries and battery banks used in critical battery back-up applications in data centres, telecom networks, power distribution systems and more. With an intuitive user interface, a compact design, and rugged construction Fluke Battery Analysers are designed to provide optimum performance and reliability.

Fluke BT500 Series Battery Analysers



Fluke BT521

Fluke BT510



More battery tests. Less time.

Fluke's BT500 Series Battery Analysers cover a broad range of battery test functions ranging from DC voltage and resistance tests to full condition testing using an automated string function testing and the test probe integrated infrared temperature measurement system. 500 Series Battery Analysers are designed for measurements on stationary batteries of all types.

- The world's fastest battery measurements- reduce time of a typical battery measurement with 50% from 8 seconds to 4 seconds.
- Unique CATIII 600V safety rating
- **Key measurements:** Battery resistance, DC and AC voltage, DC and AC current, ripple voltage, frequency and battery temp.
- **Sequence measurement mode:** Automatic or manual sequence testing of battery strings with automatic measurement storage including voltage, resistance and temperature (with BTL21 intelligent test probe).
- **Optimised user interface:** Quick, guided setup ensures you're capturing the right data every time.
- **Intelligent test probe set (BT520 and BT521):** Integrated LCD display, infrared temperature measurement (BT521 only), verbal audio feedback and captures voltage readings and temperature logging automatically or via integrated save button.
- Three year warranty

Functions	Range	Resolution	Accuracy	BT510	BT520	BT520 ANG	BT521	BT521 ANG
Battery Resistance / Strap Resistance ¹	3 mΩ	0.001 mΩ	1% + 8	•	•	•	•	•
	3 mΩ	0.001 mΩ	1% + 68	•	•	•	•	•
	30 mΩ	0.01 mΩ	0.8% + 6	•	•	•	•	•
	30 mΩ	0.01 mΩ	0.8% + 12	•	•	•	•	•
	300 mΩ	0.1 mΩ	0.8% + 6	•	•	•	•	•
V DC	3000 mΩ	1 mΩ	0.8% + 6	•	•	•	•	•
	6 V	0.001 V	0.09 % + 5	•	•	•	•	•
	60 V	0.01 V	0.09 % + 5	•	•	•	•	•
	600 V	0.1 V	0.09 % + 5	•	•	•	•	•
	1000 V	1 V	0.09 % + 5	•	•	•	•	•
V AC (45 Hz to 500 Hz with 800 Hz filter)	600 V	0.1 V	2 % + 10	•	•	•	•	•
Frequency (displayed with Vac and Aac) ²	500 Hz	0.1 Hz	0.5 % + 8	•	•	•	•	•
AC voltage ripple (20 KHz Max)	600 mV	0.1 mV	3 % + 20	•	•	•	•	•
	6000 mV	1 mV	3 % + 10	•	•	•	•	•
ADC/AAC (with accessory Fluke i410)	400 A	1 A	3.5 % + 2	•	•	•	•	•
Temperature	0 °C to 60 °C	1 °C	2 °C	•	•	•	•	•
Meter mode	999 records for each measurement position with time stamp							
Sequence mode	Up to 100 profiles and 100 profile templates (Each profile stores up to 450 batteries) with time stamp							

¹ The measurement is based on AC injection method. The injected source signal is < 100 mA, 1 kHz.

² Trigger level VAC: 10 mV, AAC: 10 A

Specifications	
Size (HxWxD) and Weight	220 x 103 x 58 mm, 850 g
Screen dimensions	77 x 56 mm
Interface	USB mini
Operating temperature	0 °C to 40 °C
Lithium-ion battery charging temperature	0 °C to 40 °C
Operating humidity	Non-condensing (10 °C), <=80 % RH (at 10 °C to 30 °C), <=75 % RH (at 30 °C to 40 °C)
IP rating	IP40
Radio	FCC Class A
Vibration requirements	MIL-PRF-28800F: Class 2
Drop test requirements	1 metre
Temperature coefficients	Add 0.1 x specified accuracy for each degree C above 28 °C or below 18 °C
Safety compliance	600 V CAT III

¹ The measurement is based on AC injection method. The injected source signal is < 100 mA, 1 kHz.

² Trigger level VAC: 10 mV, AAC: 10 A

Recommended Accessories



Included Accessories

4-Wire Test Pin (set), BTL10 Basic Test Lead (set), TL175 TwistGuard™ Test Leads with Adapter, L300 Attachable LED Flashlight (2) (BT520 and BT521 only), BTL20 Intelligent Test Probe Set with extender (no temperature sensor) (BT520 only), BTL21 Intelligent Test Probe Set with extender and temperature sensor (BT521 only), i410 AC/DC Current Clamp (BT521 only), BP500 Lithium-ion Battery, BC500 AC Charger, Mini-USB Cable, Shoulder Strap, Belt Strap, Magnetic Hanging Strap, FlukeView® Battery Management Software, Soft Carrying Case, Spare Fuses (2), Battery Tags (BT520 and BT521 only).

Ordering Information

FLK-BT510	Basic Battery Analyser
FLK-BT520	Battery Analyser
FLK-BT521	Advanced Battery Analyser
FLK-BT520 ANG	Battery Analyser with Angled Probes
FLK-BT521 ANG	Battery Analyser with Angled Probes

Electrical Testers

Fluke's line of electrical testers and voltage detectors are designed for use in every application and in nearly any environment. From non-contact voltage detectors and voltage testers with continuity detectors, to open-jaw current testers and open fork testers with FieldSense® technology (for getting voltage and current measurements without test leads), these testers are accurate, safe and easy to use. You'll also find motor phase rotation testers, fluorescent light testing and voltage meters that are safer than solenoid testers.

Fluke T6 Series Electrical Testers with FieldSense



Fluke T6-600

Fluke T6-1000



Measure voltage without test leads

Measure voltage up to 1000 VAC through the open fork, without test lead contact to live voltage.* Without opening covers or removing wire nuts; on wires up to 4/0 (120 mm²), carrying as much as 200 A. It will change your job.

- FieldSense technology for AC voltage, current and frequency measurement without making electrical contact to live voltage+
- Simultaneous voltage and current display (T6-1000) – shows all power supply measurements at a glance for efficient troubleshooting
- 1 to 1000 V AC or DC (T6-1000); 600 V AC or DC (T6-600)
- 0.1 to 200 A AC
- Resistance 1 Ω to 100 kΩ (T6-1000), 1 Ω to 2000 Ω (T6-600)
- Frequency measurement 45 Hz to 66 Hz (T6-1000)
- Works wire up to AWG 4/0 (17.8 mm jaw opening)
- HOLD button temporarily freezes the reading for easy viewing
- Easy to read display with backlight
- Accepts optional Fluke TPAK Magnetic Meter Hanger for convenient operation
- Two year warranty

+ Voltage measurement requires capacitive path to ground, provided through user in most applications. Ground connection via test lead may be required in some situations.

Specifications		T6-600	T6-1000		
Function	Requires Test Leads	Range	Range	Resolution	Accuracy[1]
FieldSense AC voltage	No	600 V	1000 V	1 V	±(3 % + 3 counts) [2] [3] 45 Hz – 66 Hz
FieldSense AC current	No	200.0 A	200.0 A	0.1 A	±(3 % + 3 counts) 45 Hz – 66 Hz
FieldSense frequency (Hz)	No		45 Hz – 66 Hz	1 Hz	±(1 % + 2 counts) [3]
Volts AC	Yes	600 V	1000 V	1 V	±(1.5 % + 2 counts) 45 Hz – 66 Hz
Volts DC	Yes	600 V	1000 V	1 V	±(1 % + 2 counts)
Resistance	Yes	2000 Ω	2000 Ω	1 Ω	±(1 % + 2 counts)
	Yes		20.00 kΩ	0.01 kΩ	±(1 % + 2 counts)
	Yes		100.0 kΩ	0.1 kΩ	±(1 % + 2 counts)
Safety (measurement category)		600 V CAT III	1000 V CAT III 600 V CAT IV		

Accuracy(1): ± ([% of reading] + [number of least significant digits]). Accuracy is specified for 1 year after calibration, at 18 °C to 28 °C (64 °F to 82 °F) with relative humidity to 90 %. AC conversions are ac-coupled, RMS responding.

Accuracy(2): Add 3 % without an external ground connection. External ground connection required for user wearing insulated gloves, standing on an insulated ladder and otherwise insulated from earth ground.

Accuracy(3): FieldSense specified from 16V to 100% of range.



Fluke T6-1000 PRO Electrical Tester

The new T6-1000 PRO lets you take more measurements in less time. Utilising FieldSense technology, simply connect the black lead to ground with the included heavy-duty alligator clip, slide the wire into the open fork and see both voltage and current at the same time. Measure wires up to AWG 4/0 (120 mm²), carrying as much as 200 A and 1000 V AC. Even with gloves on. It will change how you do your job.

NEW

Recommended Accessories



H-T6
Belt Holster
See page 162



T5-RLS
T5 Replacement
Test Leads



PRV240FS
Proving Unit
See page 24



AC285
SureGrip™ Alligator
Clips
See page 149

Recommended Kits

Buy more, Save more



**Fluke T6-600/62MAX+/1AC
Combo Kit**



**Fluke T6-1000/ H-T6 Holster/
1AC-A1 Combo Kit**



**Fluke T6-1000/PRV240FS
Proving Unit Combo Kit**

For more details see page 169

Included Accessories

Attached test leads with removable 4 mm probe cap and User Documentation.

Ordering Information

T6-600	Electrical Tester
T6-1000	Electrical Tester
T6-1000 PRO	PRO Electrical Tester
T6-600 /62MAX+/1AC	T6-600 Tester, 62MAX+ & 1AC-II Kit
T6-HT6-1AC KIT	T6-1000 Tester, H-T6 Holster & 1AC Kit
T6-1000/PRV240FS	T6-1000 & PRV240FS Proving Unit Kit

Fluke T5 Series Electrical Testers



Fluke T5 Series Voltage, Continuity and Current Testers

The Fluke T5 Electrical Testers let you check voltage, continuity and current with one compact tool. OpenJaw™ current lets you check current up to 100A – without breaking the circuit. Its tough test leads stow neatly in the back of the tester, making it easy to tote the T5 in your tool pouch. Detachable SlimReach™ test probes are customised for national electrical standards. The test leads accept optional accessories such as clips and specialty probes. Available in 600V and 1000V models.

- Excellent front-line troubleshooting and measurement tool
- Available in 600 V and 1000 V models
- Digital display
- OpenJaw™ current measurement
- Rotary switch selects volts, amps and ohms functions
- Heavy-duty test leads
- Two year warranty

Functions	T5-1000	T5-600
Measure AC/DC voltage	1000 V	600 V
Measure AC current (average)	100 A	100 A
Measure continuity	< 25 Ω	< 25 Ω
Measure resistance	1000 Ω	1000 Ω
DC polarity indicator	Yes	Yes
Detachable probe tips with optional probe tips styles	Yes	Yes
Safety rating	1000 V Overvoltage CAT III	600 V Overvoltage CAT III

*Voltage levels will vary depending on country of intended use.

Recommended Accessories



H5
Electrical Tester
Holster
See page 162



TP1
Slim Reach Test Probes
See page 149



T5-KIT
Starter Kit



T5-RLS
T5 Replacement
Test Leads

Included Accessories

Fluke T5-600 & T5-1000: Detachable Probes and Instruction Sheet.

Ordering Information

FLUKE T5-600 Electrical Tester

FLUKE T5-1000 Electrical Tester

FLUKE 1AC-A1-II VoltAlert™ Voltage Detector

FLUKE LVD1A Volt Light

FLUKE LVD2 Volt Light

Fluke VoltAlert™ Family

VoltAlert™ AC non-contact voltage testers from Fluke are easy to use – just place the tip to a terminal strip, outlet, or supply cord. When the tip glows red, you know there's voltage present.

Fluke now offers three models of non-contact voltage detectors, making sure you have the right tool for the job.

Two year warranty.



Fluke LVD1A



Fluke LVD2

Functions	1AC-A1-II	LVD1A	LVD2
Voltage	90 V AC to 1000 V AC	40 V AC to 300 V AC	90 V AC to 900 V AC
CAT Rating	CAT IV 1000V	CAT IV 600V	CAT IV 600V
Voltage Detection	•	•	•
Batteries Included	•	•	•
On/Off Button	•	•	•
Voltbeat™	•		
Audible/Silent	•		
LED Flashlight		•	•

Fluke T Series Voltage and Continuity Testers



Fluke T150

Fluke T130



Fluke T90



Fluke T110, T130, T150



Rugged, high-quality testers for fast test results the way you need them

Fluke's family of Two-Pole Voltage Testers are built with state-of-the-art measurement and safety technology. These testers offer everything you expect from Fluke and a little bit more.

- Rugged, high-quality construction is built to last. This includes a heavy duty molded case, a thicker cord with wear indicator, sturdy battery case, and well fitting and durable probe protector.
- Fast test results the way you need them, with large, easy-to-use buttons, bright backlights, and clear audible and physical indicators designed for any work situation.
- Enhanced ergonomic design feels good in your hand, is easy to use (even with gloves on) and quick, secure probe docking.
- Compliant with regulation HSE GS 38 (tip caps) and IEC EN 61243-3: 2010
- Three year warranty



Fluke T110

Fluke T90

Recommended Accessories

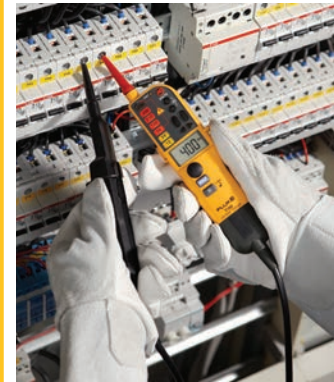


C150
Soft Case
See page 160



H15 HOLSTER
Continuity Tester
Holster
See page 162

Fluke T Series Applications



Features	T90	T110	T130	T150
Backlit LED indicator	•	•	•	•
Backlit LCD Digital Display	-	-	LCD	LCD
Continuity test - visual results	•	•	•	•
Continuity test - audible results	•	with on/off	with on/off	with on/off
Vibratory indicator under load	-	with on/off	with on/off	with on/off
Display Hold	-	-	•	•
Voltage Test	•	•	•	•
Indication of polarity	•	•	•	•
Resistance measurement	-	-	-	•
Switchable Load	-	•	•	•
Single pole test for phase detection	•	•	•	•
Rotary field indicator	-	•	•	•
Probe tip protection	•	•	•	•
Voltage display with discharged batteries	•	•	•	•
Electrical torch function	-	•	•	•
Wear indicator test lead wire	•	•	•	•

Specifications	T90	T110	T130	T150
Voltage AC/DC	12V - 690V	12V - 690V	6V - 690V	6V - 690V
Continuity	0 - 400 kΩ			
Frequency	0 - 60 Hz	0 - 400 Hz		
Phase rotation	-	100 V - 690 V		
Resistance measurement	-	-	-	Up to 1999 Ω
Response time (LED ladders)	< 0.1 s			
200 kΩ input impedance	Current draw 3,5 mA @ 690 V, Current draw 1,15 mA @ 230 V			
7k Ω input impedance (with load buttons pressed)	-	current draw 30 mA @ 230 V		
Safety rating	CAT II 690V CAT III 600V	CAT III 690V CAT IV 600V		
IP rating	IP54	IP64	IP64	IP64
Battery type	Alkaline supplied. usable with 1.2 V NiCd or NiMH rechargeable batteries			
Size (HxWxD)	100 mm x 250 mm x 125 mm			
Weight	1.3 kg			

Included Accessories

Two AA Batteries and Instruction Sheet.

Ordering Information

FLUKE-T90	Voltage/Continuity Tester
FLUKE-T110	Voltage/Continuity Tester with Switchable Load
FLUKE-T130	Voltage/Continuity Tester with LCD Switchable Load
FLUKE-T150	Voltage/Continuity Tester with LCD, OHMS, Switchable Load

Fluke 1000FLT Fluorescent Light Tester



Fluke 1000FLT



The most complete lamp tester helps save you time, reduce costs

The Fluke 1000FLT allows you to perform 5 tests with one compact tool. If your job requires keeping large numbers of fluorescent lights shining, the Fluke 1000FLT is an indispensable tool. This tester is a real time and money saver.

- Saves time and reduces costs: Perform all 5 essential lighting tests in under 30 seconds to pinpoint problems and verify operation when done
- Survives on-the-job handling: Drop-tested to survive from a two metre ladder
- Easy to use: Bright indicator light plus audible alert
- Built to last, easy to maintain: The Fluke 1000FLT's extendable test rod is all metal and very rugged. But should the need arise, this test rod is easily replaced
- Three year warranty

Save time, reduce costs.

The Fluke 1000FLT offers 5 essential lighting tests:

1. Lamp test: test bulb without removing from fixture.
2. Ballast test: easily determine if ballast is working.
3. Non-contact voltage: quickly check for voltage presence.
4. Pin continuity test: tests if filaments have continuity.
5. Ballast-type test: determine if ballast is electronic or magnetic without taking fixture apart– identify energy wasting ballasts.

Test Specifications

Lamp Test Max Output	3000 V peak-peak
Ballast Test	20 kHz
Ballast Type Discriminator	≤3 m distance
Pin Continuity Test	< 1 kΩ
NCV (VoltAlert™)	85 to 277 V AC, 45 to 67 Hz, ≤10 cm distance
Temperature	Operating -10 °C to +50 °C, Storage -40 °C to +60 °C
Relative Humidity	85 % maximum
Safety rating	IEC 61010-1, pollution degree 2

Mechanical & General Specifications

Size	21.5 cm x 3.0 cm x 6.5 cm
Weight	0.37 kg
Battery type	4 x AA alkaline IEC LR6
Battery life	40 hours
Auto Power Off	20 minutes after non-use
Low Battery Indicator	Power button light blinks when power is low (typically 85 % of capacity depleted)
Operating altitude	< 2000 m
Electromagnetic Environment	EN 61326-1: Portable
Resistance to impact	2 metre drop

Fluke 1000FLT Applications



Lamp test: Test bulb without removing from fixture



Non-contact voltage: Quickly check for voltage presence



Pin continuity test: Test if filaments have continuity

Included Accessories

Four AA Alkaline Batteries, H1000 Holster, Quick Reference Guide.

Ordering Information

FLUKE-1000FLT Fluorescent Light Tester

Fluke 2042 Cable Locator



Receiver



Transmitter



The multipurpose solutions to cable location

The Fluke 2042 is a professional general purpose cable locator. It is ideal for tracing cables in walls and underground, locating fuses/breakers on final circuits and locating interruptions and short-circuits in cables and electrical floor heating systems.

It can also be used for tracing metallic water and heating pipes. The unit is supplied as a complete kit comprising of a transmitter and receiver in a purposemade carry case. The receiver also incorporates a torch function for working in dimly lit locations.

- For all applications (live or dead cables) without additional instruments
- Set includes a transmitter and a receiver
- Proven digitally coded sender signal guarantees clear signal identification
- Transmitter with LCD-display for transmitting level, transmitting code and external voltage
- Receiver with a backlight LCD-display for level of receiving signal, code of receiving signal and live voltage indication
- Automatic or manual adjustment of receiving signal sensitivity
- Switchable acoustic receiving signal
- Auto-Power-Off
- Additional torch lamp function for working in dark environments
- Additional transmitters are available for extension or to distinguish between several signals.
- Two year warranty

Recommended Accessories

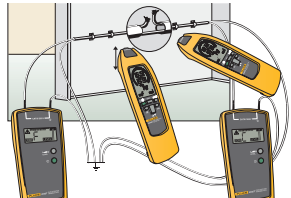


2042T Transmitter

Fluke 2042 Applications



Location of fuses/breakers and assignment to circuits



Precise location of cable interruptions with additional transmitter

Specifications	Transmitter	Receiver
Voltage Measurement Range	12V, 50V, 120V, 230V, 400V	
Frequency Range	0..60 Hz	
Output signal	125 kHz	
Voltage	Up to 400V AC/DC	
Main voltage detection		0...0.4m
Operating Temperature	0 to 40°C	0 to 40°C
Storage Temperature	-20°C to +60°C	-20°C to +60°C
Humidity (Without Condensation)	Max. 80% relative	Max. 80% relative
Operating Altitude	Up to 2000 m	Up to 2000 m
Electrical Safety	EN 61010-1	
Overvoltage Category	Cat. III 300 V	
Voltage Test	•	•
Indication of polarity	•	•
Resistance measurement		
Batteries	6 pc Batteries 1.5V	1 pc Battery 9V
Size (HxWxD)	190 mm x 85 mm x 50 mm	250 mm x 65 mm x 45mm
Weight	0.45 kg	0.36 kg

Included Accessories

TL27 Heavy Duty Test Lead Set (2), TP74 Lantern Tip Test Probe Set, AC285 Alligator Clip Set, Soft Carry-ing Case, Hard Case.

Ordering Information

- FLUKE-2042** Cable Locator (Transmitter & Receiver)
- FLUKE-2042T** Cable Locator Transmitter

Fluke 9040 and 9062 Phase Rotation Indicators

Take the guesswork out of phase/motor rotation measurements



Fluke 9040 Phase Rotation Indicator

The Fluke 9040 is effective for measuring phase rotation in all areas where three-phase supplies are used to feed motors, drives and electrical systems. The Fluke 9040 is a rotary field indicator and can provide clear indication of the 3 phase via an LCD display and the phase rotation direction to determine correct connections. It allows rapid determination of phase sequence and has a voltage (up to 700 V) and frequency range suitable for commercial and industrial applications. Test probes supplied with the instrument have a variable clamping range for safe contact, especially in industrial sockets.

- 3 phase indication
- Indication of phase rotation
- Clear LCD display
- No battery required
- Two year warranty

Fluke 9062 Motor and Phase Rotation Indicator

The unique Fluke 9062 provides rotary field and motor rotation indication with the benefits of contactless detection.

- 3 phase indication
- Indication of phase rotation
- Indication of motor rotation direction
- Contact free determination of the rotation direction of running motors
- Two year warranty

Made for commercial and industrial environments, the Fluke 9062 provides rapid indication of 3 phase rotation using test leads supplied or can be used to determine motor rotation on synchronous and asynchronous 3 phase motors. The contactless detection is ideal for use on motors where the shaft is not visible. Test probes supplied with the instrument have a variable clamping range for safe contact, especially in industrial sockets.

Specifications	9040	9062
Voltage range	40 – 700 V	Up to 400 V
Phase display	–	120 – 400 V AC
Frequency range	15 – 400 Hz	2–400 Hz
Operating time	Continuous	Continuous
Size (HxWxD)	124 mm x 61 mm x 27 mm	124 mm x 61 mm x 27 mm
Power supply	from unit under test	1 x 9V
Weight	0.20 kg	0.15 kg

Recommended Accessories



TLK290
Flexible Socket
Probe Set
See page 150



TLK291
Fused Test Probe Set
See page 150



C25
Meter Case
See page 160

Fluke 9062 Applications



Determine the presence of phase sequence of multiphase electrical supplies.



Determine the rotation of running motors by placing the instrument on the motor casing.



Check the correct rotation of motors prior to connection.

Included Accessories

Fluke 9040: Alligator Clips – Black (3), Standard Test Probes – Black (3), Flexible Test Probes – Black (3), User Manual.

Fluke 9062: Alligator Clips – Black (3), Flexible Test Probes – Black (3), Test Leads – Black (3), 9V Battery, User Manual.

Ordering Information

FLUKE-9040 Phase Rotation Indicator

FLUKE-9062 Motor and Phase Rotation Indicator

A yellow laser level is mounted on a black tripod in the foreground. In the background, a construction worker in a red hard hat and yellow safety vest is using a long measuring tape on a construction site. The site is filled with green sandbags and wooden framing, with a modern building under construction in the background.

Laser Levels

From point and line to rotary lasers, laser levels provide bright, crisp reference points and lines for quick and accurate layout of many interior or exterior jobs.

A close-up shot of a hand holding a yellow laser distance meter. A red laser line is projected from the device onto a metal surface in the background.

Laser Distance Meters

Trade your heavy tape measure for Fluke laser measuring tools, which let you simply take measurements with one hand. No matter your job, the laser distance meter will help you measure farther, with greater accuracy and in more situations, saving you time and money.

PLS Laser Levels



PLS 3G



PLS 180R



Point Laser (3R/G, 5R/G)

The professional self-leveling three-point (3R/G) and five-point (5R/G) laser level, available in red or green laser, allows for fast, accurate layout of reference points.

Combo Line Laser (6R/G)

Plumb, level, and square with one tool. This professional self-leveling combination point and cross line laser level, available in red or green laser, includes vertical and horizontal modes with lines and points combined.

Line Laser (180R/G)

Plumb, level, and square with one tool. This professional self-leveling cross line laser level, available in red or green laser, includes vertical and horizontal modes allowing for fast, accurate, level and plumb reference lines.

SLD Laser Line Detector

Laser line detector compatible with the PLS 6 and PLS 180 laser levels, for use in outdoor, or in an area with bright overhead lighting. Visual and audible indicators for ease of use. Includes mounting clamp for quick and steady positioning.

Recommended Accessories



TPOD500
Elevating Tripod



PLS RBP5 SINGLE PK
Li-Ion Battery Pack



PLS RBC5
Charging Cable



PLS C18
Laser Level Tool Box

Included Accessories

Bare Tool: Canvas Pouch
Kit: Canvas Pouch, Carry Case, Three AA batteries, Floor Stand, Wall Bracket, Reflective target, wall/ceiling bracket (180R/G Only)
System: (6R/G and 180R/G Only)
Canvas Pouch, carry case, three AA batteries, floor stand, wall bracket, reflective target, wall/ceiling bracket (180R/G Only), line detector

Ordering Information

PLS 3R Z	Red/Green
PLS 3G Z	3-point laser level bare tool
PLS 3R KIT	Red/Green
PLS 3G KIT	3-point laser level Kit
PLS 5R Z	Red/Green
PLS 5G Z	5-point laser level bare tool
PLS 5R KIT	Red/Green
PLS 5G KIT	5-point laser level Kit
PLS 6R Z	Red/Green
PLS 6G Z	Combo point laser level bare tool
PLS 6R SYS	Red/Green
PLS 6G SYS	Combo point laser level System
PLS 180R Z	Red/Green
PLS 180G Z	Combo point line laser level bare tool
PLS 180R KIT	Red/Green
PLS 180G KIT	Combo point line laser level Kit

Models	PLS 3R/G KIT	PLS 5R/G KIT	PLS 180R/G KIT
Laser function			
Laser type	3-point	5-point	Crossline
Laser colour	Red / Green	Red / Green	Red / Green
Accuracy	< 3 mm @ 10 m	< 3 mm @ 10 m	< 3 mm @ 10 m
Batteries	(3) AA alkaline	(3) AA alkaline	(3) AA alkaline
Included in box			
Laser level	3R/G Z	5R/G Z	180R/G Z
Canvas pouch	•	•	•
PLSBP5 alkaline pack	•	•	•
FS floor stand	•	•	•
PLSMLB wall bracket	•	•	•
Reflective target	•	•	•
PLSC18 carrying case	•	•	•
UB9 wall/ceiling bracket			•
Application guide			
Electrical	•	•	•
HVAC	•	•	•
Framing	•	•	•
Carpentry			•
Foundations			•
Floor and tile			•
Acoustic ceiling			•
Painting			•
Window and glass	•	•	•
Other configuration			
Tools and pouch only	3R/G Z	5R/G Z	180 R/G Z
Kit with detector			180 R/G SYS

PLS H2, HV2R and HV2G Rotary Lasers



PLS HV2G



Designed for any construction job site

These professional-grade tools offer the accuracy and durability you can expect from PLS, a Fluke Company. The PLS Rotary range is ideal for use by general contractors, electricians, plumbers and landscapers in both interior and exterior applications.

H2 Rotary Laser Level

The PLS H2 model is a horizontal only rotary laser that offers a simple one button operation.

- The H2 is a horizontal-only rotary laser. The H2 is easy-to-use and fully self-leveling, designed for interior and exterior layout projects.
- This fully automatic unit offers one-button operation and is ideal for large exterior layout applications which include concrete forms, slabs, and other horizontal leveling applications.

HV2R (Red Laser) and HV2G (Green Laser)

Offering a rugged ergonomic design and simplified controls, the PLS HV2R/G emits a laser line in the horizontal or vertical plane. The HV2R/G rotary lasers also emit a point from the top when placed in the vertical position.

- The HV2G rotary laser level emits a self-leveling horizontal laser plane and can be used in the vertical position to emit a vertical laser plane. Applications include setting foundations and footings, concrete pours, drywall terracing, contour framing and suspended ceiling installation.

Specifications	H2	HV2R	HV2G
Laser	Class II Red	Class II Red	Class II Green
Laser axis	Horizontal Only	Horizontal and Vertical	Horizontal and Vertical
Accuracy	≤ 2.2 mm @ 30m	≤ 2.2 mm @ 30m	≤ 2.2 mm @ 30m
Auto-leveling range	± 5 degrees	± 5 degrees	± 5 degrees
Manual slope range	± 5 degrees	± 5 degrees	± 5 degrees
Working range	≤ 30 m without XLD laser detector ≤ 300 m with XLD laser detector	≤ 30 m without XLD laser detector ≤ 300 m with XLD laser detector	≤ 30 m without XLD laser detector ≤ 300 m with XLD laser detector
IP Rating	IP67	IP67	IP67
Battery Life	> 60 hours	> 60 hours	> 60 hours

Recommended Accessories



PLS XLD
Laser Detector



TP0500
Elevating Tripod



PLS RBP10
NiMH Rechargeable
Battery



PLS C19
Rotary Laser Level
Carrying Case

Recommended Kits

Buy more, Save more



**PLS HV2G KIT, Manual Slope
Green Rotary Laser Kit**



**PLS HV2R SYS, Manual Slope
Red Rotary Laser System**

For more details see page 171

Included Accessories

PLS BP10 Alkaline Battery Tray, 4 x D batteries, Safety Sheet and Quick Reference Guide.

Ordering Information

PLS H2 Z	Horizontal Red Rotary Laser Bare Tool
PLS H2 SYS	Horizontal Red Rotary Laser System
PLS H2 KIT	Horizontal Red Rotary Laser Kit
PLS HV2R Z	Manual Slope R/G Rotary Laser Bare Tool
PLS HV2G Z	Manual Slope R/G Rotary Laser Bare Tool
PLS HV2R SYS	Manual Slope R/G Rotary Laser System
PLS HV2G SYS	Manual Slope R/G Rotary Laser System
PLS HV2R KIT	Manual Slope R/G Rotary Laser Kit
PLS HV2G KIT	Manual Slope R/G Rotary Laser Kit

Fluke 404E, 406E, 405, 408 and 410 Laser Distance Meters

NEW


These Laser Distance Meters have the Fluke durability and quality you expect. The simple design and easy-to-use button operation allow you to operate with one hand, minimize time spent measuring and maximize the reliability of measurements.

Key Functions:

- Quickly measure distance, calculate area / volume / pythagoras
- Auto level and height
- Built to withstand rainy or dusty conditions: 1-meter drop tested with rated IP54 (Fluke 404E / 406E), IP65 (Fluke 405 / 408 / 410),
- Electronic angle display, auxiliary level measurement
- Up to 100 sets of data storage
- The battery life up to 5000 single measurements
- Automatically power off after 3 minutes of inactivity

Fluke 405 / 408 / 410 provide additional features as:

- Universal tripod interface, easy to use
- Type-C charging port, strong endurance
- 2-inch HD display, clear viewing in full sunlight



Laser Distance Meters

	Fluke 404E	Fluke 406E	Fluke 405	Fluke 408	Fluke 410
Specifications					
Range	0.2 to 40 m	0.2 to 60 m	0.2 to 50 m	0.2 to 80 m	0.2 to 100 m
Accuracy* In favorable condition**	±(2.0mm+5x10 ⁻⁵ D)		±(2.0mm+5x10 ⁻⁵ D)		
Accuracy In unfavorable condition***	±(3.0mm+29x10 ⁻⁵ D)		±(3.0mm+29x10 ⁻⁵ D)		
Angle accuracy	±(0.3°+0.1°+0.01°A), A is up to ±45° in each quadrant				
Angel measurement method	Electronic				
Measurement unit	m / ft / in / ft+in				
Display	1.6 inch, segment alphanumeric display		2.0-inch positive display		
Measurements					
Single measurement	•	•	•	•	•
Continuous measurement	•	•	•	•	•
Area measurement	•	•	•	•	•
Volume measurement	•	•	•	•	•
Auto Level	•	•	•	•	•
Auto Height	•	•	•	•	•
Pythagoras 2-point	•	•	•	•	•
Pythagoras 3-point	•	•	•	•	•
Add / Substrate Method	•	•	•	•	•
Measurement reference	Front / Back		Front / Tripod hole / Back / Extender		
Auto-off	3 minutes after inactivity		3 minutes after inactivity		
Data Storage	30 sets		100 sets		
Time-delay measurement	-	-	•	•	•
Auto calibration	-	-	•	•	•
Side button	-	-	•	•	•
Extender	-	-	•	•	•
General					
Laser class	Class 2				
Laser type	630 to 670nm, <1mW				
Battery life	up to 5000 measurements (single measure-ment)		up to 3500 measurements (single measurement)		
Operating temperature	0 to 40				
Storage temperature	-10 to 60				
Ingress protection	IP54		IP65		
Drop test	1 m		1 m		
Size	50 mm × 115mm × 29mm		52 mm × 116mm × 28mm		
Weight	100g		110g		
Certification					
Laser certification	IEC 60825-1: Class 2, 635 nm, <1 mW CPA, CE				
Electrical certification	IEC 61010-1: Pollution Degree 2				
	EMC IEC 61326-1: Industrial Electromagnetic Environment CISPR 11: Group 1, Class A				

Included Accessories

Fluke 404E: Folding box, User manual, Vinyl carrying pouch, 2 AAA alkaline cells, Qualification certificate

Fluke 406E: Folding box, User manual, Vinyl carrying pouch, 2 AAA alkaline cells, Qualification certificate

Fluke 405: Full telescope, User manual, Vinyl carrying pouch, 2 AAA NiMH rechargeable cells, Qualification certificate, Lanyard, Type-C cable, 0.5m

Fluke 408: Full telescope, User manual, Vinyl carrying pouch, 2 AAA NiMH rechargeable cells, Qualification certificate, Lanyard, Type-C cable, 0.5m

Fluke 410: Full telescope, User manual, Vinyl carrying pouch, 2 AAA NiMH rechargeable cells, Qualification certificate, Lanyard, Type-C cable, 0.5m

Fluke 417D and 424D Laser Distance Meters



Fluke 417D



Complies with FDA 21 CFR 1040.10,11 except
for deviations pursuant to Laser Notice No. 50.

Professional grade distance measuring tools that are fast, easy to use and fit in your pocket

Measure farther, with greater accuracy, in more situations.

- Instant measurements up to 100m: measure up to 40 m (417D) and 100 m (424D)
- Measure with greater accuracy: Up to ± 1 mm, no scales to interpret or misread
- Do the work of two: Instead of holding the tape, your helper can do other jobs
- The most advanced 2 laser technology for distance measurement
- Speed up the job: Easily measure hard-to-access areas, like high ceilings, without climbing a ladder
- Keep it on the level: New inclination sensor on the Fluke 424D helps with leveling, height tracking, measuring around obstacles
- Reduce estimating errors let the meters do the math: Find area and volume. Easily add and subtract distances. Use Pythagoras calculations for height
- Improved battery life: Automatic shut-off feature
- Improved visibility with backlit screen
- Three year warranty

The Fluke 424D Laser Distance Meters additionally offers:

- Improved visibility with backlit screen
- Ability to measure up to 100 m for 424D
- Tripod mode allows you to mount to a tripod for measuring long distances
- Stake out function
- Enhanced Pythagoras calculation for determining distance indirectly from three other measurements
- Audible keypad feedback
- Storage of the last twenty measurements for quick recall of distance
- Strong environmental protection with IP54 (water spray and dust proof) sealing
- Inclination sensor for taking measurements in hard to reach areas
- Compass provides a “heading” for distance measurement
- Automated end-piece correction: when measuring from an edge or corner, a built-in sensor detects the position of this bracket and automatically changes the reference point

Key Features	424D	417D
Maximum measurement distance	100 m	40 m
Accuracy	± 1 mm	± 2 mm
Battery life (number of measurements)	5000	3000
Area measurement	Yes	Yes
Volume measurement	Yes	-
Pythagoras calculations	Full	-
Plus and minus calculations	Yes	-
Measurement storage	20 complete displays	-
Backlight	Yes	-
Minimum/Maximum	Yes	-
Audible keypad feedback	Yes	-
Tripod mount	Yes	-
Corner angle measurement	Yes	-
Stake out	Yes	-
Dust and splash proof	IP54	IP54
Compass	Yes	-
Inclination sensor	Yes	-
Display	4 line	2 line
Automated end-piece correction	Yes	-

Recommended Accessories



C1600
Gear Tool Box
See page 161



C550
Premium Tool Box
See page 161



L206
Deluxe LED Hat Light
See page 162



MC6
Fluke MeterCleaner™
Wipes
See page 163

Recommended Kits

Buy more, Save more



Fluke 417D/62MAX+ Laser Distance Meter/Infrared Thermometer Combo Kit

For more details see page 172

Included Accessories

Two AAA Batteries, User Manual on CD, Quick Reference Guide, Vinyl Carrying Pouch and Lanyard.

Ordering Information

FLUKE-417D	Laser Distance Meter, 40m
FLUKE-424D	Laser Distance Meter, 100m
FLUKE-417D 62 MAX+ KIT	Laser Distance Meter/ Infrared Thermometer Combo Kit



Infrared Thermometers

Don't get burned by a motor, or have hot and cold air blowing in your face from your HVAC system or blowers while taking measurements. You can trust in Fluke infrared thermometers to get accurate temperature readings from a safe distance.

Digital Infrared Thermometer Selection Guide

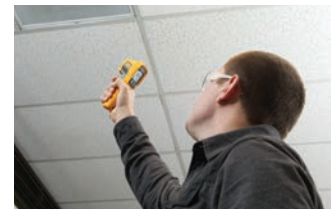
	560 Series					570 Series	
	Fluke 62 MAX	Fluke 62 MAX+	Fluke 64 MAX	Fluke 561	Fluke 566	Fluke 568/568Exx	Fluke 572-2
Temperature range	-30 to 500 °C	-30 to 650 °C	-30 to 600 °C	-40 to 550 °C	-40 to 650 °C	-40 to 800 °C	-30 to 900 °C
Distance to spot	10:1	12:1	20:1	12:1	30:1	50:1	60:1
Laser sighting	Single laser	Dual laser	Single laser	single-point laser	single-point laser	single-point laser	offset dual laser, output < 1 mW
Accuracy	1.5%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Response time	< 500 mSec	< 300 mSec	< 500 mSec	< 500 mSec	< 500 mSec	< 500 mSec	< 500 mSec
Recommended distance to spot	Up to 2 m	Up to 2 m	Up to 2 m	Up to 2.5 m	Up to 4.5 m	Up to 7.5 m	Up to 9 m
Adjustable emissivity	•	•	•	•	•	•	•
MIN/MAX readings	•	•	•	•	•	•	•
AVG readings	•	•	•	•	•	•	•
DIF readings	•	•	•	•	•	•	•
Backlit LCD	•	•	•	•	•	•	•
Audible Hi/Lo alarm	•	•	•	•	•	•	•
Visible Hi/Lo alarm	•	•	•	•	•	•	•
Includes contact probe	•	•	•	•	•	•	•
Probe input (types)				Thermocouple K	Thermocouple K	Thermocouple K	Thermocouple K
Data logging (number of measurements)			99 points		20 points	99 points	99 points
PC interface						USB	USB 2.0
FlukeView® Forms software compatible							

Recommended Applications



Plant/Facilities Maintenance

- Preventive and Predictive Maintenance
- Energy Audits
- Vehicle and Fleet Maintenance
- Programs
- Faulty Electrical/Circuit Connections Petrochemical/Hazardous Locations Motors, Pumps and Bearings



Heating/Ventilation/Air Conditioning/Refrigeration

- Leaky Ductwork
- Thermostats
- Temperature Balancing
- Steam Distribution Systems
- Compressor Lines



Safety and protection

- Fire Localisation
- Hazardous Materials
- Faulty Ballasts
- Search and Rescue
- Smoldering Embers
- Equipment Maintenance



Safety and protection

- Fire Localisation
- Hazardous Materials
- Faulty Ballasts
- Search and Rescue
- Smoldering Embers
- Equipment Maintenance

Fluke 560 and 570 Series Infrared Thermometers



Fluke 568

Fluke 561



Fluke 561, 566 and 568 Infrared and Contact Thermometers

With a straight-forward user interface and soft-key menus, the Fluke 561, 566 and 568 make even complex measurements easy. With just a few pushes of a button you can easily adjust emissivity, start data logging, or turn on and off alarms. With a rugged, easy-to-use design, the Fluke 561, 566 and 568 can stand up to tough industrial, electrical, and mechanical environments.

- Confidently measure more surfaces, with adjustable emissivity and built-in materials table
- Log and download measurements for reporting (568)
- Two levels of backlight (566, 568)
- Audible and visual alarms
- Min/Max/Dif functions
- Includes KTC bead probe and compatible with any k-type thermocouple
- Two year warranty

Specifications	561	566	568/568 Ex
Infrared temperature range	-40 °C to 535 °C	-40 °C to 650 °C	-40 °C to 800 °C
Accuracy	Greater of $\pm 1\%$ or $\pm 1\text{ °C}$		
Distance to Spot (D:S)	12:1	30:1	50:1
Sighting	Laser point		
Typical distance to target	Up to 2.5 m	Up to 4.5 m	Up to 7.5 m
Contact temperature range	-40 °C to 550 °C	-270 °C to 1372 °C	
Number of on-board memory locations	—	20	99
PC download and software	—	—	FlukeView® Forms
Material type adjustment (emissivity)	Hi/Med/Lo	Material table or 0.1 to 1.00 by 0.01	
High and low alarms	—	High and low alarms	



Fluke 572-2



Fluke 572-2 High Temperature Infrared Thermometer

The Fluke 572-2 Infrared Thermometer is the one product you can use in high temperature industrial environments all around the world. This is the best choice for when you need accurate results for high temperature readings from a long distance.

- Measure -30 °C to 900 °C
- 60:1 distance to spot ratio with dual laser sighting for fast, accurate targeting
- Last reading Hold (20 seconds)
- High and low temperature alarm
- Data storage and review (99 data sets)
- Compatible with standard mini-connector K-type thermocouples, including ones you already own
- Current Temperature plus MAX, MIN, DIF, AVG displays
- Adjustable emissivity and predefined emissivity table
- FlukeView® Forms documenting software
- Two year warranty

Specifications	572-2
Infrared temperature range	-30 °C to 900 °C
Infrared accuracy (calibration geometry with ambient temperature 23 °C \pm 2 °C)	$\geq 0\text{ °C}$: $\pm 1\text{ °C}$ or $\pm 1\%$ of the reading, whichever is greater $\geq -10\text{ °C}$ to $< 0\text{ °C}$: $\pm 2\text{ °C}$ $< -10\text{ °C}$: $\pm 3\text{ °C}$
Distance:Spot	60:1
Laser sighting	Offset dual laser, output < 1 mW
Hi/Low alarms	Audible and two-colour visual
Min/Max/Avg/Dif	Yes
Trigger lock	Yes
Data storage	99 points
K-type thermocouple input temperature range	-270 °C to 1372 °C
K-type thermocouple input accuracy (with ambient temperature 23 °C \pm 2 °C)	$< -40\text{ °C}$: $\pm (1\text{ °C} + 0.2\% / 1\text{ °C}) \geq -40\text{ °C}$: $\pm 1\%$ or 1 °C , whichever is greater

Speciality Model

Fluke 568Ex Intrinsically Safe Infrared Thermometer



- Measure -40 °C to 800 °C
- 50:1 distance to spot ratio with dual laser sighting for fast, accurate targeting
- Display resolution 0.1 °C of reading
- Adjustable emissivity and predefined emissivity table
- Safety Certification ATEX/IEEx for Class 1, Div 1 and Div 2 or Zone 1 and 2 hazardous environments

See Intrinsically Safe products on page 134

Recommended Accessories



80PK-22
SureGrip™ Immersion Temperature Probe
See page 154



80PK-27
SureGrip™ Industrial Surface Probe
See page 154



80PK-8
Type K Pipe Thermocouple Probe
See page 154



80PK-11
Type-K Flexible Cuff Thermocouple Temperature Probe
See page 154



80PK-18
Pipe Clamp Probe Kit
See page 154



C1600
Gear Tool Box
See page 161

Included Accessories

560 Series: Thermocouple K-type Velcro Pipe Probe (561 only), K-type Thermocouple Bead Probe (566 & 568 only), FlukeView® Forms Software (568 only), USB Cable (568 only), Hard Carrying Case, two AA Batteries and User Manual with Measurement Guide.

572-2: K-type Thermocouple Bead Probe, USB 2.0 Computer Interface Cable, FlukeView® Forms Documenting Software, Hard Carrying Case, Getting Started Guide and User Manual (CD).

Ordering Information

FLK-572-2	Infrared Thermometer
FLUKE-561	HVACPro Infrared Thermometer
FLUKE-566	IR Thermometer
FLUKE-568	IR Thermometer
FLUKE-568 EX	Intrinsically Safe IR Thermometer

Fluke 60 Series Infrared Thermometers



Fluke 62 MAX, 62 MAX+ and 64 MAX IR Thermometers

The Fluke 62 MAX, 62 MAX+ and new 64 MAX IR Thermometers have the precision you need to do your job accurately and will not break the budget. Designed and tested to survive a 3 metre drop, you can count on these lightweight, compact infrared thermometers to work when you need them to work—even in the harshest environments and when you're not able to be there.

- Precise laser technology for more accurate and repeatable measurements
- Temperature accuracy of up to $\geq 0^{\circ}\text{C}$: $\pm 1^{\circ}\text{C}$ or $\pm 1\%$ of reading whichever is greater with 20:1 distance to spot ratio (64 MAX)
- Flashlight (64 MAX) and large, easy-to-read backlit LCD display for easy viewing even in dark environment
- IP54 rated for extra protection against airborne contaminants
- Get your tool to work when you can't—set time and desired interval between measurements and Auto Capture will capture spot temperatures unattended (64 MAX)
- 99 data point logging (64 MAX)
- Displays the minimum, maximum or average temperature, or the difference between two measurements
- Hi and Lo alarms for rapid display of measurements outside set limits
- Dual rotating lasers to help you identify area to be measured (62 MAX+)
- Small and lightweight, fits easily into your tool box
- Three year warranty

Specifications	62 MAX	62 MAX+	64 MAX
Temperature range	-30 °C to 500 °C	-30 °C to 650 °C	-30 °C to 600 °C
Accuracy	$\pm 1.5^{\circ}\text{C}$ or $\pm 1.5\%$ of reading, whichever is greater -10 °C to 0 °C: ± 2.0 -30 °C to -10 °C: ± 3.0	$\pm 1.0^{\circ}\text{C}$ or $\pm 1.0\%$ of reading, whichever is greater -10 °C to 0 °C: ± 2.0 -30 °C to -10 °C: ± 3.0	$\pm 1.0^{\circ}\text{C}$ or $\pm 1.0\%$ of reading, whichever is greater $\pm 2.0^{\circ}\text{C}$ at -10 °C to 0 °C $\pm 3.0^{\circ}\text{C}$ at -30 °C to -10 °C
Emissivity	0.10 to 1.00		
Optical resolution	10:1 (calculated at 90 % energy)	12:1 (calculated at 90 % energy)	20 : 1 (calculated at 90% energy)
Compliance	EN/IEC 61010-1: 2001		
Laser safety	FDA and EN 60825-1 Class II		

Recommended Accessories



H6
Electrical Tester
Holster
See page 154



FLK-TI-TRIPOD
Tripod Mounting Accessory for 64 MAX
See page 157

Recommended Kits

Buy more, Save more

Fluke T6-600/62 MAX+/1AC-II Infrared Thermometer and Electrical Tester Kit

For more details see page 169

Fluke 116/62 MAX+ Technician's Combo Kit

For more details see page 168

Fluke 417D/62MAX+ Laser Distance Meter/Infrared Thermometer Combo Kit

For more details see page 172

Fluke 62MAX+/323/1AC Combo Kit

For more details see page 172

Included Accessories

Fluke 64 MAX, 62 MAX and 62 MAX+: Two AA Batteries and Instruction Sheet.

Ordering Information

FLUKE-62 MAX	Single Laser IR Thermometer, 10:1 Spot
FLUKE-62 MAX PLUS (+)	Dual Laser IR Thermometer, 12:1 Spot
FLUKE 62 MAX+ /323/1AC	IR Thermometer Clamp Meter and Voltage Detector Kit
FLUKE-64 MAX IR Thermometer	
FLUKE-T6-600/62MAX+ /1AC	T6-600 Tester, 62MAX+ & 1AC-II Combo Kit
1587KIT/62 MAX+	2-in-1 ADV Elec Kit with 62MAX+ i400 AC Current Clamp

Fluke VT06 and VT08 Visual Infrared Thermometer

NEW


Fluke VT06

Fluke VT08

Higher resolution, greatly improving temperature measurement efficiency

The 120 x 90 resolution model has more than 10000 infrared pixels, which is 12 times higher than the previous generation* and rich temperature details help you find problems faster.

Difficult to distinguish between false and real? Infrared and visible blending can help!

VT08 is equipped with both infrared and visible light cameras and blend a visual image with infrared heat map overlay in real-time to distinguish the object. In addition, you can quickly adjust the blend degree according to your habits, or switch to the Picture-in-Picture mode.

Experience of thermal imagers in the size of a spot thermometer

Portability is one of the advantages of VT06 / 08 thermal imager. It is almost comparable to the point thermometer in terms of weight and size. Great abilities with a small size, you can get a leap in temperature measurement experience from point to area.

Drop-proof, dust and water resistance, suitable for harsh industrial environments

Built with legendary Fluke ruggedness, VT06/08 features IP65 ingress protection and 2-meter drop test. It can provide stable and reliable test results even if it is exposed to the sun and rain, or it is dropped.

Applications



Standard accessories

Wrist strap for main unit
Quick reference guide
Charger + Adapter
TYPE C data cable
Data downloading card

Specifications	VT08	VT06
Thermal image and optics		
Infrared resolution	120x90	
Image mode	Thermal image / Visible image / PIP	Thermal image
Thermal sensitivity/NETD	60 mk	
Field of view (H x V)	50° x 37.5°	
Spatial resolution	7.6 mrad	
Focus system	Focus free	
Minimum focusing distance	0.5 m (19.7 in)	
General features		
Temperature range	-20 °C to 400 °C [-4 °F to 752 °F] (not specified for below -10 °C)	
Battery type	Rechargeable Li-ion battery, unremovable	
Battery operation time	≥5 hrs (VT08) ≥8 hrs (VT06) Actual battery life depends on environment and settings	
Internal storage	14 GB (>50000 images)	
Laser sighting	Yes	
Type-C interface	Yes	

Fluke 50 Series II Thermometers

Lab accuracy in a field thermometer



Fluke 54 II B

Fluke 53 II B



The Fluke 50 Series II Contact Thermometers offer fast response and laboratory accuracy in a rugged hand-held test tool.

- Laboratory accuracy: $\pm (0.05\% + 0.3\text{ }^{\circ}\text{C})$
- Large backlit dual display
- Min/Max/Avg
- Electronic offset function maximises overall accuracy
- Supports a wide range of thermocouple types
- Temperatures displayed in $^{\circ}\text{C}$, $^{\circ}\text{F}$, or Kelvin (K)
- Three year warranty

Powerful data logging capabilities

The Fluke 53 II B and 54 II B can log up to 500 points of data to internal memory.

- User-adjustable recording intervals
- Real-time clock captures the exact event time
- Recall function lets logged data be easily reviewed
- Download data to optional FlukeView® PC software



Fluke 51 II

Fluke 52 II

Specifications	51 II	52 II	53 II B	54 II B
Thermocouple types	J,K,T,E	J,K,T,E	J,K,T,E,N,R,S	J,K,T,E,N,R,S
Number of inputs	Single	Dual	Single	Dual
Time stamp	Relative Time	Relative Time	Time of Day	Time of Day
Splash/Dust resistant	•	•	•	•
Dual display with backlight	•	•	•	•
Min/Max/Avg recording	•	•	•	•
(T ₁ -T ₂) True differential	-	•	-	•
Data logging up to 500 points	-	-	•	•
IR data port for interface to PC	-	-	•	•
Compatible with FlukeView® Software	-	-	•	•
Battery life	1000 hours typical, AA			
Size (HxWxD)	173 x 86 x 38 mm			
Weight	0.4 kg			

Temperature range and accuracy

J-type Thermocouples	-210°C to 1200°C
K-type Thermocouples	-200°C to 1372°C
T-type Thermocouples	-250°C to 400°C
E-type Thermocouples	-150°C to 1000°C
N-type** Thermocouples	-200°C to 1300°C
R** and S-type** Thermocouples	0°C to 1767°C

Temperature accuracy above -100°C:

J, K, T, E, and N-type**	$\pm [0.05\% + 0.3^{\circ}\text{C}]$
R** and S-type**	$\pm [0.05\% + 0.4^{\circ}\text{C}]$

Temperature accuracy below -100°C:

J, K, E, and N-types	$\pm [0.20\% + 0.3^{\circ}\text{C}]$
T-type	$\pm [0.50\% + 0.3^{\circ}\text{C}]$

Speciality Model

Fluke FoodPro™ Food Safety Thermometer



The Fluke FoodPro Thermometer provides a complete temperature measurement and monitoring solution for foodservice professionals. Designed to enable foodservice professionals to quickly and accurately measure food product temperatures and to help detect potential food safety problems.

The Fluke FoodPro non-contact thermometer is the first line of defense against improper receiving, storage and holding temperatures. Using an infrared measurement technique, the highly accurate FoodPro quickly reads surface temperatures, allowing workers to make rapid and frequent temperature measurements – faster than contact units and without fear of cross contamination. The easy-to-see illumination light shows you the measurement area.

Included Accessories

Fluke 50 Series Thermometers: Impact Absorbing Holster, Two Bead Probe Thermocouples 80PK-1 (54 and 52 only), One Bead Probe Thermocouple, 80PK-1 (51 and 53 only).

Fluke FoodPro (FP): AA Battery and Quick Start Guide.

Ordering Information

FLUKE-51 II	Single Input Digital Thermometer
FLUKE-52 II	Dual Input Digital Thermometer
FLUKE 53 II B	Single Input Digital Thermometer w/ Data Logging
FLUKE 54 II B	Dual Input Digital Thermometer
FLUKE FP	FoodPro™ Food Safety Thermometer



Thermal Imaging

Temperature can be a sign of trouble ahead. With Fluke thermal cameras you can detect issues before they become problems. Designed for everyday use, in the toughest industrial environments, Fluke offers infrared cameras for a wide range of applications.

Fluke Infrared Camera Selection Guide

Key Features											
	PTI120 400C	TIS20+	TIS20+ MAX	TIS55+	TIS60+	TIS75+	T1480 PRO	T1X580	RSE300	RSE600	
Infrared resolution	120 x 90 (10,800 pixels)	120 x 90 (10,800 pixels)		256 x 192 (49,152 pixels)	320 x 240 (76,800 pixels)	384 x 288 (110,592 pixels)	640 x 480 (307,200 pixels)	640 x 480 (307,200 pixels)	320 x 240	640 x 480	
SuperResolution				No	Yes, in software. Captures and combines 4x the data.			Yes, in software. Captures and combines 4x the data to create a 1280 x 960 image	No		
Gas Detection	-										
Temperature range	-20 °C to 400 °C	-20 °C to 150 °C	-20 °C to 400 °C	-20 °C to 550 °C	-20 °C to 400 °C	-20 °C to 550 °C	-20 °C to +1,000 °C	-10 °C to +1,200 °C			
IFOV with standard lens (spatial resolution)	7.6 mRad, D:S 130:1			1.91 mRad	1.86 mRad, D:S 532:1	1.91 mRad	0.93 mRad, D:S 1065:1	1.85 mrad	0.93 mrad		
Field of view	50° H x 38° V			28° H x 20° V	34.1 °H x 25.6 °V	42° H x 30° V	34 °H x 24 °V	34 °H x 25.5 °V	34 °H x 25.5 °V		
Minimum focus distance	50 cm			50 cm	46 cm	50 cm	15 cm				
MultiSharp Focus				No	Yes, focused near and far, throughout the field of view			Yes, focused near and far, throughout the field of view			
LaserSharp Auto Focus	Fixed Focus			No	Fixed Focus	No	Yes, for consistently in-focus images. Every. Single. Time	No			
Laser distance meter				No			Yes, calculates distance to the target for precisely focused images and displays distance on screen	No			
Advanced manual focus	Fixed Focus			Yes	Fixed Focus	Yes	Focus is adjusted in SmartView® desktop software				
Wireless connectivity	Yes, to PC, iPhone® and iPad® (iOS 4s and later), Android™ 4.3 and up, and WIFI to LAN (where available)										
Fluke Connect app compatible	Yes*, connect your camera to your smartphone, and images taken automatically upload to the Fluke Connect app for saving and sharing										
IR-Fusion technology	AutoBlend continuous 0 % to 100 %. Adds the context of the visible details to your infrared image										
Battery Life	≥ 2 hours continuous (without WIFI)	≥ 5 hours continuous (without WIFI)	≥ 5 hours continuous (without WIFI)	≥ 3.5 hours continuous (without WIFI)	4 hours continuous use per battery pack	≥ 3.5 hours continuous (without WIFI)				-	
Warranty	Two years (standard)										-

Fluke Thermal Imaging Software

NEW

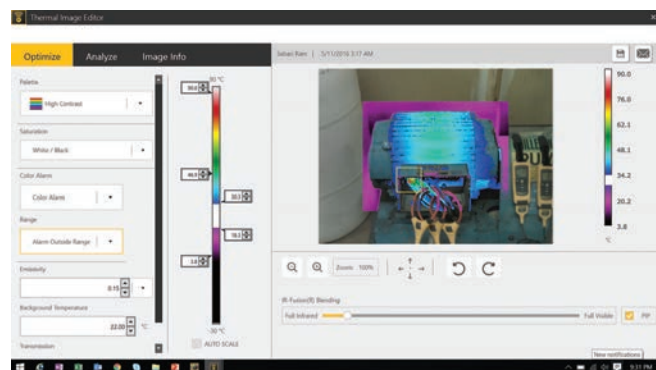

Fluke Connect® Desktop for Thermal Imaging

Get the most out of your thermography program. Create professional inspection reports in minutes while efficiently capturing full radiometric data to support preventive and predictive maintenance programs with the new Fluke Connect® Desktop software.

- Easily edit and optimise images to visualise equipment status
- Combine infrared and visible images for simpler analysis using picture-in-picture mode and image blending
- Create detailed reports in minutes and save customised report templates
- Connect a camera to your computer wirelessly with the built in Fluke Camera WiFi
- Never lose your data – automatically save all your thermal images and reports in the Fluke Connect® cloud storage, accessible anytime on PC or Mobile App
- Organise images and easily search by asset, severity, and image title
- Enhance inspection credibility by incorporating live readings of energised circuits and operational equipment from Fluke Connect® enabled test tool into your infrared image
- Share images immediately with team members with the Fluke Connect® Mobile App

Fluke Connect® Desktop has all the same features as SmartView and more, with intuitive navigation interface and the advantage of Fluke Connect cloud storage.

Download Fluke Connect® Desktop FREE from the Fluke website and the Fluke Connect® Mobile app from the mobile IOS or Android app store.



Get more out of your Thermal inspections with Fluke Connect® Wireless Modules

You can connect up to 5 Fluke Connect® Wireless modules with a Fluke Infrared Camera, whilst incorporating live readings on the infrared image. The below table highlights a list of Fluke Connect enabled tools that are compatible with Fluke Infrared Cameras.

Fluke Connect® Compatibility Guide

Fluke Connect® Tools	Fluke Connect® App	3000 FC	902 FC	376/375 /374 FC	a3000 FC a3001 FC	a3002 FC	a3003 FC a3004 FC	v3000 FC	v3001 FC	t3000 FC
Fluke Connect App – iOS and Android™	•	•	•	•	•	•	•	•	•	•
TiX580 Infrared Cameras	•	•	•	•	•	•	•	•	•	•
Ti480PRO Infrared Cameras	•	•	•	•	•	•	•	•	•	•
PTi120 400C/TiSxx Series Infrared Cameras	•	•	•	•	•	•	•	•	•	•



*Fluke Connect is only available in selected countries. Please check with your local distributor for available models.

Download the free Fluke Connect® Desktop from the Fluke website and the Fluke Connect® Mobile app from the mobile IOS or Android app store.



Fluke PTi120 400C Pocket Infrared Camera

NEW



Fluke PTi120 400C



Get the infrared troubleshooting power you need that fits in your pocket

A fully radiometric thermal imager with a 3.5" LCD touchscreen that offers IR-Fusion™ to blend a visible light image with an infrared image to easily locate problems. The PTi120 400C has built in WiFi that allows you to connect your camera to the Fluke Connect® App and share images remotely with your team. Compact and easy to use, the Fluke PTi120 400C should be your first line of defense with maintenance work.

- 120 x 90 infrared resolution (10,800 pixels)
- -20 °C to 400 °C temperature measurement range
- 3.5" (8.89 cm) LCD touchscreen display with intuitive interface for easy troubleshooting
- 1 metre drop tested
- IP54 enclosure rating
- Touchscreen IR-Fusion blends a visible light image with an infrared image, simply slide your finger across the screen to adjust
- Two year warranty

Key features	PTi120 400C
IFOV (Spatial Resolution)	7.6 mRad
Infrared Resolution	120 x 90
Field of View	50° H x 38° V
Frame Rate	9 Hz
Distance to Spot	130:1
Temperature Measurement Range (not calibrated below -10 °C)	-20 °C to 400 °C
Thermal Sensitivity	60mK
Focus system	Fixed focus, minimum focus distance 50 cm
Centre-point temperature	Yes
Spot temperature	Hot and cold spot markers
Battery	≥ 2 hours (without WiFi), can be charged via USB cable
Torch	Yes
Fluke Connect™ Instant Upload	Yes, connect your camera to your building's WiFi network, and images taken automatically upload to the Fluke Connect™ mobile App for storage and viewing on your PC.

Fluke PTi120 400C Applications



Included Accessories

Soft Case, Lanyard and USB cable.

Ordering Information

FLK-PTi120 400C 9 HZ Fluke Pocket Infrared Camera

Fluke Performance Series Infrared Cameras TiS20+, TiS20+MAX and TiS60+

NEW


Fluke TiS20+

Fluke TiS60+



Easy-to-use frontline troubleshooting

Easily see potential problems with blended IR and visual images, up to 320 x 240 resolution (TiS60+) on a large 3.5 inch LCD display. The TiS20+ and TiS60+ infrared cameras come in a one-handed pistol grip model that make onsite thermal inspections quicker and easier.

- IR Fusion™ technology intergrates digital image with IR image for context
- Measure up to 400 °C (TiS60+) to handle all applications
- Easy to use fixed focus
- One-handed image capture, review and save capability
- Digitally document critical information with your infrared image using IR-PhotoNotes™ or voice annotation (TiS60+ only)
- Make decisions in real time—wirelessly sync images from your camera, create and email reports all with your smart phone and the Fluke Connect® App
- Wirelessly connect other Fluke Connect® tools and collect other measurements types like electrical and vibration into your thermal image
- Monitor battery charge and avoid unexpected loss of power with the smart battery with LED charge indicator
- Two year warranty

Key features	TiS20+	TiS20+MAX	TiS60+
Infrared Resolution	120 x 90 (10,800 pixels)	120 x 90 (10,800 pixels)	320 x 240 (76,800 pixels)
IPOV (spatial resolution)	7.6 mRad, D:S 130:1	7.6 mRad, D:S 130:1	1.86 mRad, D:S 532:1
Field of View	50° H x 38° V	50° H x 38° V	34.1 °H x 25.6 °V
Thermal Sensitivity (NETD)**	60 mK	60 mK	45 mK
Temperature Measurement range	-20 °C to 150 °C	-20 °C to 400 °C	-20 °C to 400 °C
Focus Systems	Fixed focus	Fixed focus	Fixed focus
Image annotations	-	-	IR-PhotoNotes, Audio(voice)
IR-Fusion AutoBlend continuous 0 % to 100 %.	Yes	Yes	Yes, including Picture in Picture (PIP)
Display	3.5 inch (landscape) 320 x 240 LCD touch screen	3.5 inch (landscape) 320 x 240 LCD touch screen	3.5 inch (landscape) 320 x 240 LCD
Colour Alarms	-	-	High temperature, low temperature, isotherms (within range)
Software	Fluke Connect desktop software - full analysis and reporting software with access to the Fluke Connect system		

Recommended Accessories


FLK-TI-TRIP0D3
Tripod Mounting
Accessory
See page 165

FLK-TI-SBP3
Additional Smart
Battery
See page 165

FLK-TI-SBC3B
Smart Battery Charger
See page 165

TI-CAR CHARGER
Car Charger
See page 165

FLK-TI-BLUE00TH
Bluetooth Headset
See page 165

Applications



Included Accessories

AC Power Supply, lithium-ion smart battery, USB cable, Soft transport bag.

Fluke TiS60+ also includes:

Two-bay smart battery charger, Two lithium-ion smart batteries, 4 GB micro SD card, Rugged hard carrying case.

Ordering Information

FLK-TIS20+ MAX 9 HZ Infrared Camera

FLK-TIS20+ 9 HZ Infrared Camera

FLK-TIS60+ 30 HZ Infrared Camera

FLK-TIS60+ 9 HZ Infrared Camera

Fluke Professional Series Infrared Camera Ti480 PRO



Fluke Ti480 PRO



Get clear, accurate focus on objects near and far with MultiSharp™ focus1, or focus with laser speed and accuracy on your designated target with LaserSharp® Auto Focus. Easily navigate the menu and view images on a 3.5 inch, 640 x 480 touchscreen. Get more from your camera with an optional 2x or 4x telephoto or wide angle smart lens – no calibration required.

Capturing smaller temperature differences with increased thermal sensitivity on an intuitive touch screen.

- Get 4x the pixel data with SuperResolution, which captures multiple images and combines them to create a 1280 x 960 image
- Save time—wirelessly sync images directly from your camera to the Fluke Connect® system, and attach to an asset record or work order
- Reduce the need to take notes in the field with two helpful features:
 - IR-PhotoNotes™ annotation system captures digital images of the surrounding area to reference conditions or actual location
 - Any additional details can also be saved to the file with voice annotation
- Field of view (34 °H x 24 °V)
- View all your assets with increased accuracy using one of the four optional lenses (macro, wide-angle, 2x telephoto and 4x telephoto)
- Two year warranty

Recommended Accessories



FLK-LENS/TELE2
Telephoto infrared lens (2x magnification)
See page 63



FLK-LENS/WIDE2
Wide-angle infrared lens
See page 63



FLK-TI-VISOR3
Thermal Imager Visor
See page 165



TI-TRIPOD3
Tripod Mounting Base
Accessory
See page 165



FLK-TI-BLUETOOTH
Bluetooth Handset
See page 165



TI SBP3
Additional Smart Battery
See page 165



FLK-TI-SBC3B
Additional Smart Battery Charger
See page 165

Key Features

Ti480 PRO

Infrared resolution	640 x 480 (307,200 pixels)
SuperResolution	Yes, in software. Captures and combines 4x the data to create a 1280 x 960 image
IPOV with standard lens (spatial resolution)	0.93 mRad, D:S 1065:1
Field of view	34 °H x 24 °V
Thermal sensitivity (NETD)**	≤ 0.05 °C at 30 °C target temp (50 mK)
Temperature measurement range	-20 °C to +1,000 °C
LaserSharp™ Auto Focus and Manual Focus	Yes with MultiSharp™ Focus option
Laser distance meter	Yes, calculates distance to the target for precisely focused images and displays distance on screen
Optional lenses	Wide angle, 2x and 4x telephoto, 25 micron macro
IR-Fusion technology	Yes, adds the context of the visible details to your infrared image
Display	3.5 inch (landscape), 640 x 480 LCD Touch Screen
Frame rate	60 Hz or 9 Hz versions
Voice annotation	60 seconds maximum recording time per image; reviewable playback on camera, optional Bluetooth headset available but not required
Text annotation	Yes. Including standard shortcuts as well as user programmable options
Video recording	Standard and radiometric
Remote control operation	Remote display and control operation through Fluke Connect
Alarms	High temperature, low temperature, and isotherms (within range)
Wireless connectivity	Fluke Connect® app compatible. Wireless connectivity to PC, iPhone® and iPad® (iOS 4s and later), Android™ 4.3 and up, and WiFi to LAN
Software	Full analysis and reporting software with access to the Fluke Connect® system

Included Accessories

AC Power Supply and Battery Pack Charger, Two Rugged Lithium-Ion Smart Battery Packs, USB Cable, HDMI Video Cable, 4GB Micro SD Card, Adjustable Hand Strap.

Ordering Information

FLK-Ti480 PRO 60HZ Infrared Camera

FLK-Ti480 PRO 9HZ Infrared Camera

Fluke TiS55+ and TiS75+ Thermal Cameras

NEW


Fluke TiS75+



Start your preventive maintenance program

Take your plan for a preventive maintenance (PM) program and turn it into reality. To get started, you need to set up your image organization and inspection routines. With the TiS55+ and TiS75+, you're well on your way to implementing a successful PM program.

- Asset Tagging allows you to easily compare asset images over time.
- Scanning the QR code on each asset creates a timeline of your inspections.
- Use the time saved (25% on average spent organizing thermal images) to analyze asset images for trends, diagnosing issues and fixing problems before they become failures.

The TiS55+ and TiS75+ come with built-in personal assistants, which means you can finally ditch the clipboard and have all the information you need in the images you take, including:

- Voice annotation
 - Record up to 60 seconds per thermal image
 - Identify exactly what you see in real time
- IR-PhotoNotes
 - Take photos of asset numbers and other identifiers
 - Use as a reference when looking at the thermal image on your computer
- Asset Tagging
 - Sort your thermal images by asset
 - Scan a QR code on your asset, then start capturing thermal images
 - Connect your camera to your computer to view the images, sorted by asset

Building inspectors always look for moisture—that's why Fluke includes a dew-point calculation in the TiS75+ thermal camera. Dew point is the temperature where the air is cooled to where it is saturated with water. When this happens, moisture develops and wreaks havoc on buildings. Once dew point is calculated the camera will display the Dew Point Color Alarm. Everything the camera displays that is at the dew point temperature and below will display as a thermal image. Everything above will display as a visual light image. This allows you to see where in the image condensation is occurring, and a scale of how far objects are below the dew point. For example, if you took a glass and filled it with ice water, the dew point color alarm would show only the glass in IR and the rest of image in visual light.

TiS75+ Thermal Camera

- 384 x 288 resolution
- Measure up to 550 °C
- IS3 and AVI video recording
- Dew-point calculation in camera
- Color Alarms

TiS55+ Thermal Camera

- 256 x 192 resolution
- Measure up to 550 °C

Recommended Accessories


FLK-TI-TRIP0D3
Tripod Mounting
Accessory
See page 165

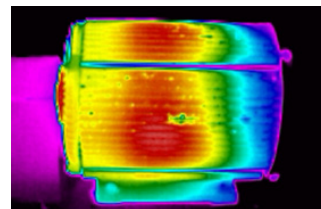
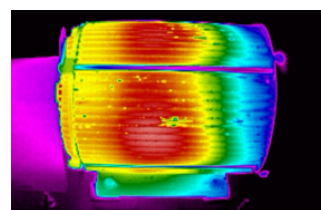
FLK-TI-SEP3
Additional Smart
Battery
See page 165

FLK-TI-SBC3B
Smart Battery Charger
See page 165

TI-CAR CHARGER
Car Charger
See page 165

FLK-TI-BLUE00TH
Bluetooth Headset
See page 165

Motor



Included Accessories

AC power supply (including universal ac adapters); two-bay smart battery charger (TiS75+ only); rugged lithium-ion smart batteries (TiS75+ includes 2 -- TiS55+ includes 1); USB cable, 4 GB micro SD card; rugged hard carrying case; soft transport bag; adjustable hand strap. Available by free download: desktop software and user manual.

Ordering Information

FLK-TIS75+	Thermal Camera
27 HZ	
FLK-TIS75+	Thermal Camera
9 HZ	
FLK-TIS55+	Thermal Camera
27 HZ	
FLK-TIS55+	Thermal Camera
9 HZ	

Fluke Expert Series Infrared Camera TiX580



Fluke TiX580



Tablet sized screen, more details, faster decisions

You need maximum flexibility with an ergonomic design that allows you to easily navigate over, under and around hard-to-reach objects. With a lens that rotates a full 240 degrees and a tablet-sized 5.7 inch touchscreen LCD, you can aim and focus from a comfortable angle and easily capture the target that was once impossible to see.

- Premium in-field viewing experience with a 5.7 inch responsive touchscreen LCD
- Integration capability with third-party R&D software such as Matlab and LabView
- See the details you need with smart lenses—2x and 4x telephoto, wide angle, and 25 micron macro—no calibration required, interchangeable between compatible cameras
- See, save and share from the field and connect to the largest selection of wireless test and measurement tools with the Fluke Connect® App
- Two year warranty

1. Compared to industrial handheld infrared cameras with 320x240 detector resolution as of September 1, 2015.
2. Up to 30 metres.
3. Compared to a 3.5 inch screen.

LaserSharp® Auto Focus

Get an in-focus image like never before with just a touch of a button. LaserSharp® Auto Focus, exclusive to Fluke, uses its built-in laser distance meter to calculate the distance to your designated target with pinpoint accuracy. On target and in-focus. Every. Single. Time.

Brilliant Image Quality

Enhanced image quality and temperature measurement accuracy - turn your 640 x 480 images (307,200 pixels) into 1280 x 960 images (1,228,800 pixels). That's 4x the resolution and pixels with SuperResolution.

Key Features	TiX580
Infrared resolution	640 x 480 (307,200 pixel) SuperResolution mode: 1280 x 960 (1,228,800 pixels)
IFOV (spatial resolution)	0.93 mRad
Field of view	34 °H x 24 °V
Distance to spot	753:1
Thermal sensitivity*	≤ 0.05 °C at 30 °C target temp (50 mK)
Temperature range	-20 °C to +1,000 °C
Optional lenses	Pre-calibrated smart optional lenses: wide angle, 2x telephoto
Wireless connectivity	Fluke Connect® app compatible. Wireless connectivity to PC, iPhone® and iPad® (iOS 4s and later), Android™ 4.3 and up, and WiFi to LAN1
IR-Fusion®	AutoBlend™ mode, continuous blending
Picture-In-Picture (PIP)	Picture-in-Picture
Software	Fluke Connect® (web, mobile and desktop)
Video recording	Standard and radiometric
Alarms	High temperature, low temperature, and isotherms (within range)

Recommended Accessories



FLK-LENS/TELE2
Telephoto infrared lens (2x magnification)
See page 63



FLK-LENS/WIDE2
Wide-angle infrared lens
See page 63



FLK-LENS/4XTELE2
Telephoto infrared lens (4x magnification)
See page 63



FLK-LENS/25MAC2
Infrared 25 Micron Macro lens
See page 63



TI-CAR-CHARGER
Car Charger
See page 157



FLK-TI-BLUETOOTH
Bluetooth Handset
See page 165



FLK-TiX580-NECK
Neck Strap

Included Accessories

AC Power Supply and Battery Pack Charger, Two Lithium-ion Smart Battery Packs, USB Cable, HDMI Video Cable, Hard Carrying Case, Adjustable Neck and Hand Strap, Bluetooth Headset (where available), Warranty Registration Card and Calibration Certificate. Flash Drive includes Product Manuals and SmartView® Software.

Ordering Information

FLK-TiX580 60HZ Infrared Camera

FLK-TiX580 9HZ Infrared Camera

Fluke Lenses

Telephoto, Wide Angle and Macro

Extend your applications with optional IR lenses, compatible with Fluke Professional and Expert Series Cameras: 2x and 4x telephoto, macro as small as 25 microns, and wide angle.

Telephoto Lenses

The difference between finding and potentially diagnosing the problem, and not seeing any discrepancy at all. Get the detail you need, even from a distance, when you view your target magnified 2 or 4 times more than a standard lens.



Standard

2x Telephoto

4x Telephoto



Wide Angle Lenses

When working in a tight space, see a larger target from a close distance. Ideal for roof and building inspection or for looking through IR Windows.



Standard lens

wide lens see both sides of the building at once from the same distance



Macro Lenses

Get an incredibly detailed image of very small objects—as small as 25 microns, smaller than the average human hair.



Standard

25 micron macro lens - see detail in very small objects

Fluke Lens Application



Ordering Information

FLK-LENS/TELE2	2x Telephoto Infrared Smart Lens
FLK-LENS/4XTELE2	4x Telephoto Infrared Smart Lens
FLK-LENS/WIDE2	Wide Angle Infrared Smart Lens
FLK-LENS/25MAC2	25 Micron Macro Infrared Smart Lens

Model number	Ti480PRO	TiX580
TI-LENS/TELE2 2x Telephoto infrared smart lens†	•	•
TI-LENS/WIDE2 Wide Angle Infrared Smart Lens†	•	•
FLK-LENS/4xTele2 4x Telephoto infrared smart lens†	•	•
FLK-LENS/25Mac2 25 Micron macro infrared smart lens†	•	•
FLK-XLens/SupWide Super wide-angle lens		
FLK-XLens/Wide Wide-angle lens		
FLK-XLens/Stan Standard lens		
FLK-XLens/Tele Telephoto lens		
FLK-XLens/SupTele Super telephoto lens		
FLK-XLens/Macro1 Close-up 0.2x		
FLK-XLens/Macro2 Close-up 0.5x; 34.3 x 25.3mm2; 32 um;		
FLK-XLens/Macro3 Close-up 0.5x		

†The lenses for TiX580 and Ti480PRO are smart lenses.

They come pre-calibrated and don't require calibration to a specific camera, so they are interchangeable between compatible cameras. Lenses for TiX1000 and TiX620 require calibration to the specific camera.

Fluke RSE300 and RSE600 Infrared Cameras



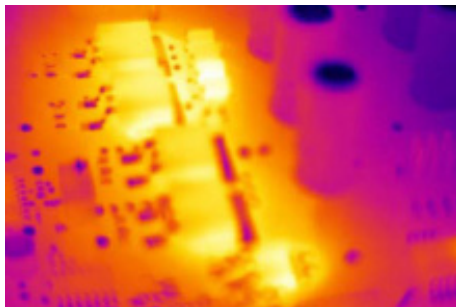
When there's more to infrared than meets the eye.

Introducing the first ever fully-radiometric, mounted Fluke infrared cameras – the RSE series. Equipped with advanced features and software plug-ins to MATLAB® and LabVIEW®, these tools are ideal for continuously streaming and analyzing infrared data.

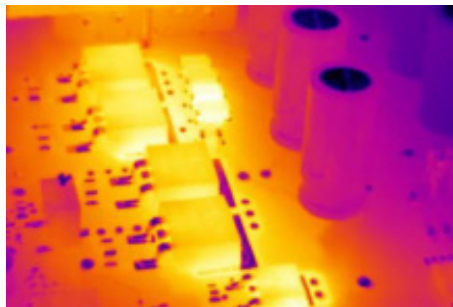
Designed for your research, science and engineering needs, enhance your testing and quality assurance procedures by mounting the RSE300 to your workstation. Continuously stream up to 60 frames of data per second directly to your computer to monitor minute temperature differences, and analyze videos frame-by-frame remotely from SmartView® desktop software. Enhance your viewing experience with optional add-on lenses to target different applications (analyzing from a distance, or getting the close-up details).

Don't just see the heat. Stream, measure and analyze it too.

With plug-ins to MATLAB® and LabVIEW®, the RSE Infrared Cameras are ideal for testing and development. Looking for a more robust software to monitor and archive process manufacturing data 24/7? We recommend the ThermoView® series by Fluke Process Instruments. See a quick comparison



Manual focus



MultiSharp Focus, available on the RSE300 and RSE600 Infrared Cameras

Key Features	RSE300	RSE600
Infrared Resolution ¹	320x240 (76,800 pixels)	640x480 (307,200 pixels)**
IFOV with standard lens (spatial resolution)	1.85 mRad	0.93 mRad
Field of view	34 °H x 25.5 °V	
Minimum focus distance	15 cm (approx. 6 in)	
Camera focus options	Focus is adjusted in SmartView® desktop software	
MultiSharp™ Focus	Yes, focused near and far, throughout the field of view	
IR-Fusion® technology	Yes, in SmartView® desktop software. Five modes of image blending (AutoBlend™ mode, Picture-in-Picture (PIP), IR/Visible alarm, Full IR, Full visible light) add the context of the visible details to your infrared image	
Interfaces for image/data transfer	Supported in camera data ports: GigE Vision	
Thermal sensitivity (NETD)	≤ 0.030 °C at 30 °C target temp (30 mK)*	≤ 0.040 °C at 30 °C target temp (40 mK)*
Filter mode (NETD improvement)	Yes	
Level and span	Smooth auto and manual scaling, in SmartView® desktop software	
Fast auto toggle between manual and auto modes	Yes, in SmartView® desktop software	
Fast auto-rescale in manual mode	Yes, in SmartView® desktop software	
Minimum span (in manual mode)	0.1 °C (0.18 °F), in SmartView® desktop software	
Minimum span (in auto mode)	<1.0 °C (<1.8 °F), in SmartView® desktop software	
Built-in digital camera (visible light)	5 megapixel industrial performance	
Frame rate	60 Hz or 9 Hz versions	
Digital zoom	Variable up to 16x in SmartView® desktop software	

*Best possible

**Option to output 320x240 infrared data through GigE Vision

¹ These products are controlled under ECCN 6A003.B.4.B and an export license is needed for certain destinations. Please see RS1 controls for licensing requirements.

Recommended Accessories



FLK-LENS/TELE2
Telephoto infrared lens (2x magnification)
See page 63



FLK-LENS/WIDE2
Wide-angle infrared lens
See page 63



FLK-LENS/4XTELE2
Telephoto infrared lens (4x magnification)
See page 63



FLK-LENS/25MAC2
Infrared 25 Micron Macro lens
See page 63



TRIPOD/ACCESSORY STAND

Included Accessories

Infrared camera with standard infrared lens; AC power supply; Ethernet cable; Antenna

Available by free download: SmartView® desktop

software and user manual
Software can be downloaded at www.fluke.com/smartviewdownload

Ordering Information

FLK-RSE300 /C 60HZ	Thermal Imager; 320x240
FLK-RSE300 /C 9HZ	Thermal Imager; 320x240
FLK-RSE600 /C 60HZ	Thermal Imager; 640x480
FLK-RSE600 /C 9HZ	Thermal Imager; 640x480

Fluke CV Series ClirVu® Infrared Windows



Compliance without compromise. Safety without sacrifice.

Increase the safety and speed of electrical thermal imaging inspections with the Fluke ClirVu® IR Windows. Reduce the risk of arc-flash and electrocution, increase the safety of your personnel and reduce the time and cost of preventive maintenance.

- Save time with a quick and easy 5 minutes or less installation
 - One technician
 - One hole with standard Greenlee® punch
 - Panel door does not need to be removed
 - Grounds instantly to metal enclosure with patent-pending AutoGround™ process
 - Maintains panel arc test ratings up to 63kA when properly installed
- Torture Tested™ to the highest arc blast test ratings
 - IEEE C37.20.7: 63 kA Arc tested at KEMA, UL50/50E/50V, UL1558, IEC60529-1: IP67, IEC 60068, NEMA 4/12, CSA C22.2 NO. 14-13:2012, and CE
- Convenience of both quick turn (CV400, CV300, CV200) or security keyed access (C401, CV301)
- Fluke IR Windows offered in three sizes 50 mm, 75 mm and 95 mm
- Work permit requirements and NFPA 70E processes are significantly reduced
- Full PPE is often not required so inspections are done faster and more comfortable
- Lifetime replacement warranty against manufacturing defects

Quick & Easy Installation in 5 minutes or less



Specifications	CV400	CV401	CV300	CV301	CV200
Size	95 mm		75 mm		50 mm
Voltage Range	Any				
NEMA Environment Type	Type 4/12 (indoor/outdoor)				
AutoGround™	Yes				
ClirVu® Optic	Yes				
Operating temperature	-40 °C to + 232 °C and + 260°C Intermittent				
Body material	EZAC & ZA-27 High Strength Zinc/ Aluminum Alloy				
Ratings and testing					
Arc-Tested (IEEE C37.20.7)	63 kA for 30 cycles @ 60Hz at KEMA				
UL 50V component recognition	Yes				
UL 50/NEMA Environmental Rating	NEMA Type 4/12				
UL 1558	Yes				
CSA C22.2 No.	Yes				
CSA Type Rating	Type 4				
IP rating	IP67 at TUV				
Lloyds Register	Up to 11 kV marine switchgear, indoor or outdoor (offshore only)				
Vibration rating	IEC60068-2-6 at TUV				
Humidity rating	IEC60068-2-3 at TUV				
Install					
Actual mounting hole diameter required	115.42 mm		89.89 mm		61.37 mm
Greenlee Punch Kit = Punch/Die	742BB = 2984AV/2983AV		739BB = 1431AV/1432AV		76BB = 441AV/442AV
Door Latch	Hand Turn	Security Key	Hand Turn	Security Key	Hand Turn
Optics					
Optic insert diameter	95 mm		75 mm		50 mm

Included Accessories

Hand Turn Door Latch (CV200, 300 & 400), Security Key Door Latch (CV201, 301 & 401) and Warranty Statement.

Fluke IR Windows are supplied complete, assembled and ready for installation.

Ordering Information

FLUKE-CV200 50 mm, Infrared Window, Hand Turn Door Latch

FLUKE-CV300 75 mm, Infrared Window, Hand Turn Door Latch

FLUKE-CV301 75 mm, Infrared Window, Security Key Door Latch

FLUKE-CV400 95 mm, Infrared Window, Hand Turn Door Latch

FLUKE-CV401 95 mm, Infrared Window, Security Key Door Latch



Industrial Imaging

Thermal Imaging, Borescopes and Industrial Diagnostics Expedite inspections and make crucial maintenance decisions with the latest advancements in technology. The Fluke range of Thermal Imaging Cameras offer the highest resolution necessary to identify areas of concern for non-invasive preventive maintenance inspections. High-definition diagnostic borescopes offer an industrial-tough solution for inspecting machinery with difficult to reach spaces. The Fluke Sonic Industrial Imagers take the effective practice of ultrasonic leak detection to a new level of efficiency and accuracy.

Fluke ii910 Precision Acoustic Imager

NEW


Fluke ii910



Finally, an easy way to detect, locate and analyze partial discharge in one tool

Tired of spending too much time detecting partial discharge? Introducing the ii910 Precision Acoustic Imager, engineered to locate partial discharge, corona discharge as well as gas and vacuum leaks. The ii910 acoustic imaging camera's groundbreaking technology is a cost efficient, safe, effective, and comfortable tool for teams who inspect and maintain power distribution and industrial high voltage equipment.

Fluke safety you can trust with performance you value

The Fluke ii910 Precision Acoustic Imager is the perfect tool for high voltage electricians, electrical test engineers, and grid maintenance teams that are constantly inspecting and maintaining power distribution and industrial high voltage equipment. The ii910 provides a safe quick and easy way to detect and locate partial discharge in order to maintain high voltage equipment and prevent catastrophic events. With the SoundSight™ technology the ii910 translates the sounds that it hears into a visual representation so that you can quickly locate problem areas. The higher frequency capability of the ii910 allows for earlier detection to facilitate early maintenance planning that is why the ii910 has a frequency range of 2-100Khz.

Key Features	ii910
Sensor	
Frequency band	2 kHz to 100 kHz
Detection range	0.5 to > 120 meters (1.6 to > 393 feet)*
Field of View	63 ° ± 5 °
Nominal frame rate	25 FPS
*Depending on ambient conditions	
Built-in Digital Camera (visible light)	
Field of View (FOV)	63 ° ± 5 °
Focus	Fixed lens
Acoustic Measurements	
Measurement Range	12.1 dB SPL to 114.6 dB SPL ±1 dB SPL 2 kHz 4.4 dB SPL to 101.2 dB SPL ±2 dB SPL 19 kHz 12.8 dB SPL to 119.2 dB SPL ±1 dB SPL 35 kHz 19.8 dB SPL to 116.1 dB SPL ±3 dB SPL 52 kHz 41.4 dB SPL to 129.0 dB SPL ±1 dB SPL 80 kHz 54.4 dB SPL to 135.5 dB SPL ±1 dB SPL 100 kHz
Auto max/min dB gain	Auto or manual, user selectable
Frequency band selection	User selectable through user-made presets or manual entry
Battery	
Batteries (field-replaceable, rechargeable)	2 x Rechargeable Li-ion, Fluke BP291
Battery life	6 hours/battery (product includes spare battery)
Battery charging time	3 hours
Battery charging system	External dual-bay charger, EDBC 290

Recommended Accessories



BP291
4500 mAh capacity
Li-ion Battery
See page 167



EBC290
External
Battery Charger
See page 170



FLK-TIX5XX-NECK
Neck Strap



CKT1000
Hard Carry Case
See page 161

Fluke ii910 Application



Included Accessories

Imager; AC power supply and battery pack charger (including universal AC adapters); two rugged lithium ion smart battery packs; USB cable; rugged, hard carrying case; two rubber array covers; adjustable hand strap and adjustable neck strap.

Ordering Information

FLUKE-II910 Precision Acoustic Imager

Fluke ii900 Sonic Leak Detection Industrial Imager



Fluke ii900



A fast, simple way to detect compressed air, steam, gas and vacuum leaks

Equipped with an array of microphones for an expanded field-of-view, the handheld Fluke ii900 Sonic Industrial Imager enables maintenance teams to quickly and accurately locate air, gas and vacuum leaks in compressed air systems; even in noisy environments

- 7" LCD Touchscreen
- Frequency band of 2kHz to 52kHz (detected 150ml/min leak at 7 bar for 10 mins)
- SoundMap™ overlay for visual leak detection
- Capture images in JPEG or PNG format with user input notes function
- Capture videos in MP4 format
- Manual frequency filtering
- Two year warranty

New SoundSight™ Technology

Specifically designed for noisy production facilities the new SoundSight™ technology is simple to learn and easy to implement. The 7" LCD touchscreen overlays a SoundMap™ on a visual image for quick leak location identification. The straightforward, intuitive interface allows technicians to isolate the sound frequency of the leak to filter out loud background noise. In a matter of hours, the team can inspect the entire plant – during peak operations. For the first time, you can quickly and easily identify the air leak repairs needed to ensure efficient operations and reduce utility bills. Images can be saved and exported for reporting purposes. Never leave air leaks unattended again.

With minimal training, the ii900 enables you to:

- Fast, simple leak location identification
- Optimise air compressors—delay the capital expense of installing additional compressors
- Ensure proper air pressure to pneumatic equipment
- Lower energy and gas costs
- Reduce leak detection time
- Improve reliability of the production line
- Make leak detection part of the typical maintenance routine
- Train the team in a matter of minutes
- Validate repairs on the spot
- Battery Life Hours

Key Features ii900	
Sensor	
# of Microphones	64 digital MEMS microphones
Frequency Band	2 kHz to 52 kHz
Sound Pressure Sensitivity	150 ml/min leak at 7 bar from 10 metres
Operational Distance Range	0.5 to 50 metres
Built-in Digital Camera (visible light)	
Field of view	65 ° ± 3 °
Focus	Fixed lens
Acoustic Measurements	
Measurement Range	29.3 dB to 119.6 dB SPL (±2 dB) at 2 kHz 21.9 dB to 112.3 dB SPL (±2 dB) at 19 kHz 36.6 dB to 126.9 dB SPL (±2 dB) at 52 kHz
Battery Life Hours	
Battery Life	76 hours (product includes spare battery)
Main unit rating	IP40 protection against particles 1mm or greater and dripping water
Sensor head rating	IP51

Recommended Accessories



BP291
4500 mAh capacity
Li-ion Battery
See page 167



EBC290
External
Battery Charger
See page 170



FLK-TIK5XX-NECK
Neck Strap



CXT1000
Hard Carry Case
See page 161

Fluke ii900 Application



Included Accessories

AC Power Supply, Battery Pack Charger, Two Rugged Lithium Ion Smart Battery Packs, USB Cable, Rugged, Hard Carrying Case, Two Rubber Array Covers, Adjustable Hand Strap and Neck Strap.

Ordering Information

FLUKE-II900 Sonic Industrial Imager

Fluke DS701 and DS703 FC High Resolution Diagnostic Scopes



Gritty, industrial, expensive equipment? Diagnose before tear-down with the durability of Fluke

Industrial inspections require a powerful diagnostic borescope designed to stand up to the dirtiest, most harsh environments. Fluke Diagnostic Scopes put high-resolution images in the palm of your hand.

- High definition probe with dual-view camera
- High Resolution
 - DS701 - 800 x 600 (480,000 pixels)
 - DS703 FC- 1200 x 720 (864,000 pixels)
- Processing speeds that render a smooth, clear, consistent image
- 7" LCD screen for easy viewing
- Macro to micro zoom function
- Adjustable lighting to capture the best image
- Up is Up® technology for an appropriate orientation, regardless of the probe location
- True 720p video
- Two year warranty

Fluke DS701 Diagnostic Scope

Rugged, industrial 800 x 600 resolution Diagnostic Scope with dual view probe. Inspection camera with 7" LCD screen for accurate diagnostics in difficult to reach spaces. Adjustable LED lighting and digital zoom for quality images. Up is Up® technology rotates the display screen to allow for consistent image display, regardless of the orientation of the probe. Intuitive user interface with easy to navigate button technology.

Fluke DS703 FC High Resolution Diagnostic Scope with Fluke Connect®

Rugged, high-definition industrial 1280 x 720 resolution Diagnostic Scope with Wi-Fi capability. 7" capacitive touch screen for accurate diagnostics in difficult to reach spaces. 720p video recording inspection camera. Up is Up® technology rotates the display screen to allow for consistent image display, regardless of the orientation of the probe.

Specifications	DS701	DS703 FC
Length	1.2 metre	
Type	Detachable, semi-ridged, waterproof, immersible to 1 metre or more in depth	
Diameter	8.5 mm, optional 3.8, 5.5 and 9 mm probes available	
Material	Elastomer coated steel	
Lighting	Adjustable LED, one front, one side	
Illumination	53 Flux	
Camera	Dual view camera, forward and side	
Resolution	800 x 600 (480,000 pixels)	1200 x 720 (864,000 pixels)
Still image format	JPG	
Video recording format	AVI	
Video output format	MPEG compression	
Digital zoom	Adjustable from 1x to 8x zoom	
Field of view	68°	
Depth of field	25 mm to infinity	
Video resolution	Standard	720p
Minimum focus distance	10 mm	
Focus type	Fixed	
Rotation	180°	
Streaming video		Via HDMI and Fluke Connect®
LCD screen		
Touch screen		Capacitive touch screen
Size	17.79 cm	
Refresh rate	30 hz	
UpisUp® technology	Real-time upright adjustment for image	
LED backlight	Adjust display brightness for optimal viewing	

*Fluke Connect is only available in selected countries.
Please check with your local distributor for available models.

Recommended Accessories



Fluke DS703 FC Application



Included Accessories

Hand Strap (DS703 FC Only), USB Cable, AC Power Supply/Battery Charger, TPAK Magnetic Hanger, Protective EVA Case.

Ordering Information

FLK-DS701 Diagnostic Scope
FLK-DS703 FC High Resolution Diagnostic Scope

Indoor Air Quality/HVAC

We rely on HVAC equipment to maintain acceptable temperature, humidity and ventilation levels for occupant health and comfort, and, now more than ever, to help regulate building health and manage increasing energy costs.



Fluke Indoor Air Quality Meter Selection Guide



Models	Fluke 971	Fluke 922	Fluke 985	Fluke CO-220
Record storage	99	99	10,000	No
Downloadable data	No	No	USB or Ethernet	No
Battery type	(4) AAA	(4) AA	Rechargeable Li-Ion 7.4 V 2600 mAh	(1) 9V
Warranty	2 years	2 years	1 year	1 year
Indoor air diagnostic applications				
Air velocity		•		
Air pressure		•		
Air flow (volume)		•		
Carbon dioxide				
Carbon monoxide				•
Temperature	•	•		
Humidity	•	•		
Dew point/wet bulb	•			
Particle concentration counting			•	
Air pressure/air velocity/air flow				
Air pressure range		± 4000 Pascals/± 16 inH2O/± 400 mmH2O/± 40 mbar/± 0.6 psi		
Air pressure accuracy		± 1 % + 1 Pascal/± 1 % + 0.01 inH2O/± 1 % + 0.1 mmH2O/± 1 % + 0.01 mbar/± 1 % + 0.0001 psi		
Air velocity range		250 to 16,000 fpm/1 to 80 m/s		
Air velocity accuracy		± 2.5 % of reading at 2000 fpm (10.00 m/s)		
Air flow (volume) range		0 to 99,999 cfm		
Air flow (volume) accuracy		Accuracy is a function of velocity and duct size		
Temperature relative humidity				
Temperature range	-20 °C to 60 °C (-4 °F to 140 °F)	0 °C to 50 °C (32 °F to 122 °F)		
Temperature accuracy	0 °C to 45 °C (± 0.5 °C)/-20 °C to 0 °C and 45 °C to 60 °C (± 1.0 °C) 32 °F to 113 °F (± 1.0 °F)/-4 °F to 32 °F and 113 °F to 140 °F (± 2.0 °F)	0 °C to 50 °C (± .01 °C) 32 °F to 122 °F (± .01 °F)		
Relative humidity range	5 % to 95 % RH	0 % to 90 % RH		
Relative humidity accuracy	10 % to 90 % RH @ 23 °C (73.4 °F) (± 2.5 % RH) < 10 %, > 90 % RH @ 23 °C (73.4 °F) (± 5.0 % RH)	0 % to 90 % RH @ 23 °C (73.4 °F) (± 2.0 % RH)		
Carbon dioxide/carbon monoxide				
Carbon dioxide range				
Carbon dioxide accuracy				
Carbon monoxide range				0 to 1000 ppm
Carbon monoxide accuracy				5 % or ± 2 PPM
Particle counting				
Flow rate			2.83 L/min (0.1 cfm)	
Particle size range			0.3 µm - 10.0 µm (6 channel)	
Count modes			Raw counts, #/m3, #/ft3, #/liter in Cumulative or Differential mode	
Counting efficiency			50 % @ 0.3 µm; 100 % for particles > 0.45 µm (per ISO 21501)	
Concentration limits			10 % at 4,000,000 particles per ft3 (per ISO 21501)	

Fluke 922 Airflow Meter/Micromanometer



Fluke 922



The Fluke 922 helps you analyse airflow easily

The Fluke 922 makes airflow measurements easy by combining three tools: differential pressure, airflow, and velocity into a single, rugged meter. The 922 was designed and built for how (and where) you do your job, with performance, ruggedness and ease of use, setting the Fluke 922 apart from the competition. The bright white display and ruggedised holster and wrist strap let you take the Fluke 922 into less than ideal environments. The colour-coded hoses help you keep track of where your readings are coming from. The simple, intuitive interface means you can measure pressure, velocity, or airflow at the push of a button.

- Powerful meter provides differential and static pressure, air velocity and flow readings
- Convenient coloured hoses help proper interpretation of pressure readings
- Easy to use without sacrificing performance
- Bright, backlit display for clear viewing
- User-defined duct shape and size for maximum airflow accuracy
- Resolution down to 0.001 in H₂O
- 99 point data storage capacity
- Min/Max/Average/Hold functions for easy data analysis
- Auto power off saves battery life
- Two year warranty

Use the Fluke 922 Micromanometer to:

- Measure pressure drops across key HVAC equipment to drive peak performance and extend equipment life
- Match ventilation to occupant loads
- Monitor indoor vs. outdoor pressure relationships and manage the building envelope
- Promote indoor comfort and quality
- Perform duct traversals for accurate airflow readings

Specifications	922
Operating Temperature	0 °C to +50 °C
Storage Temperature	-40 °C to +60 °C
Operating Relative Humidity	Non condensing (< 10 °C) 90% RH (10 °C to 30 °C) 75% RH (30 °C to 40 °C) 45% RH (40 °C to 50 °C) without Condensation
IP Rating	IP40
Operating Altitude	2000 m
Storage Altitude	12000 m
EMI, RFI, EMC	Meets requirements for EN61326-1
Vibration	MIL-PREF-28800F, Class 3
Max Pressure at Each Port	10 PSI
Data storage	99 readings
Size (HxWxD)	175 mm x 77.5 mm x 41.9 mm
Weight	0.64 kg
Battery	Four AA batteries
Battery Life	375 hours without backlight, 80 hours with backlight

	Range	Accuracy
Air pressure	± 4000 Pascals ± 16 in H ₂ O ± 400 mm H ₂ O ± 40 mbar ± 0.6 PSI	± 1 % + 1 Pascal ± 1 % + 0.01 in H ₂ O ± 1 % + 0.1 mm H ₂ O ± 1 % + 0.01 mbar ± 1 % + 0.0001 PSI
Air velocity	250 fpm to 16,000 fpm (1 to 80 m/s)	± 2.5 % of reading at 2000 fpm (10.00 m/s)
Air flow (volume)	0 to 99,999 cfm 0 to 99,999 m ³ /hr 0 to 99,999 l/s	Accuracy is a function of velocity and duct size
Temperature	0 °C to 50 °C	0.1 °C

Recommended Accessories



PT12
Pitot Tube 30.48 cm



TPAK
Magnetic Meter Hanger
See page 162



CXT170
Extreme Case
See page 161

Recommended Kits

Buy more, Save more



Fluke 922 Airflow Meter/Micromanometer Kit

For more details see page 172

Included Accessories

Fluke 922: Two Rubber Hoses, Wrist Strap, four AA Batteries 1.5V Alkaline, User Manual and Soft Carrying Case.

Fluke 922 Kit: Fluke 922 Airflow Meter, 30.48 cm Pitot Tube, ToolPak, Two Rubber Hoses, Wrist Strap, four AA Batteries, User Manual and Hard Carrying Case.

Ordering Information

FLUKE-922 Airflow Meter

FLUKE-922/KIT Airflow Meter Kit

Fluke 971 Temperature Humidity Meter



Fluke 971



Temperature and humidity are two important factors in maintaining optimal comfort levels and good indoor air quality. Quickly and conveniently take accurate humidity and temperature readings with the Fluke 971.

It is invaluable for facility maintenance and utility technicians, HVAC-service contractors, and specialists who assess indoor air quality (IAQ). Lightweight and easy to hold, it's the perfect tool for monitoring problem areas. With a rugged holster and protected sensor, the Fluke 971 is built to perform and made to last.

- New and improved digital sensor for faster response times
- Backlit dual display of humidity and temperature
- Measures dew point and wet bulb temperatures
- 99 record storage capacity
- Ergonomic design with belt clip and protective holster
- Compact and lightweight at 188 g
- Temperature range from -20 °C to 60 °C
- Relative humidity from 5 % to 95 %
- Min/Max/Avg/Hold functions
- Low battery indicator
- One year warranty

Specifications	971
Temperature range	-20 °C to 60 °C
Temperature accuracy	0 °C to 45 °C ± 0.5 °C -20 °C to 0 °C and 45 °C to 60 °C ± 1.0 °C
Resolution	0.1 °C
Response time (temperature)	500 ms
Temperature sensor type	NTC
Relative humidity range	5% to 95% R.H.
Relative humidity accuracy	10% to 90% R.H. @ 23 °C ± 2.5 % R.H. <10%, >90% R.H. @ 23 °C ± 5.0 % R.H.
Humidity sensor	Electronic capacitance polymer film sensor
Data storage	99 points
Response time (humidity)	For 90% of total range - 60 sec with 1 m/s air movement
General	
Operating temperature	Temperature: -20 °C to 60 °C Humidity: 0 °C to 60 °C
Storage temperature	-20 °C to 55 °C
Battery life	4 AAA alkaline, 200 hours
Safety	Complies with EN61326-1
Size (HxWxD)	194 mm x 60 mm x 34 mm
Weight	0.188 kg

Fluke RLD2 UV Refrigerant Leak Detector Flashlight



Leak detection made easy. The compact, easy-to-use, RLD2 UV flashlight uncovers refrigerant leaks instantly. Use the UV light to find the leakage area, then, use the laser pointer to pinpoint the exact leak location. With 100,000 hours of life, and four operating modes, this versatile leak detector is a must have for HVAC technicians.

- Six UV LEDs (395 nm wavelength) detect leak detection dyes
- Laser pointer clearly locates centre of the UV field for accuracy
- Three LED flashlight with 100,000 hour LED life
- Four operating modes: flashlight, UV light, laser light, UV/laser light combination
- Convenient detachable key chain carabiner and AAA battery included

Recommended Accessories



C550
Premium Tool Box
See page 161



C1600
Gear Tool Box
See page 161



C23
Soft Carrying Case
See page 160



LVD1A
Volt Light
See page 39

Included Accessories

Fluke 971: Four AAA Alkaline Batteries, Operation Manual.

Fluke RLD2: Chain Carabiner and Batteries.

Ordering Information

FLUKE-971 Temperature Humidity Meter

FLUKE-RLD2 Refrigerant Leak Detector

Fluke 985 Airborne Particle Counter



Fluke 985



Troubleshooting indoor air quality made easy

The Fluke 985 Particle Counter is ideal for troubleshooting and monitoring indoor air quality issues and verifying HVAC filter performance in critical locations. With its easy to read and fully configurable channel display, lightweight yet rugged form and highly accurate measurements, the Fluke 985 is the perfect tool for the maintenance, HVAC, and IAQ professional.

- **Six channels and particle size range of 0.3 µm to 10.0 µm:** Assures accurate measurements even for critical locations requiring ISO Class 5 – 9 certification
- **Ultra-lightweight and ergonomic design:** Promises easy single-hand operation in tight or awkward spaces with less operator fatigue
- **Long battery life:** Ten hours of standard-use battery life to last a full work day
- **Large 3.5 inch QVGC colour display:** Easy navigation and viewing with the intuitive icons and large font options
- **10,000 record storage:** Quick access to historical data
- **On-screen data presentation:** Data can be viewed in a traditional tabular or trend graph view at the user's preference
- **Personalised setting and configurations:** Customisable settings for the display, sample methods, and alarm settings for sample count
- **Data export options:** Download data to a PC using a USB memory stick, USB cable or Ethernet connection. No special software is required to download or view data
- **Option password control:** Confirms security when required
- **USB/Ethernet charge cradle:** Assures device is always ready to go when needed
- **One year warranty**

Specifications	985
Channels	0.3 µm, 0.5 µm, 1.0 µm, 2.0 µm, 5.0 µm, 10.0 µm
Flow rate	0.1 cfm (2.83 L/min)
Light source	775 nm to 795 nm, 90mW class 3B laser
Count modes	Raw counts, #/m3, #/ft3, #/liter in Cumulative or Differential mode
Counting efficiency	50 % @ 0.3 µm; 100 % for particles > 0.45 µm (per ISO 21501)
Zero count	1 count/5 minute (JIS B9921)
Concentration limits	10 % at 4,000,000 particles per ft3 (per ISO 21501)
Data storage	10,000 records (rotating buffer)
Alarms	Counts, low battery, sensor fail
Delay time	0 to 24 hours
Sample inlet	Isokinetic probe
Security	Administrator password control (optional)
Communication mode	USB or Ethernet
Calibration	PSL particles in air (NIST traceable)
Size (HxWxD)	272 x 99 x 53 mm
Weight	0.68 kg
Power adapter	100 V AC to 240 V AC, 12 V DC, 2.5 A
Rechargeable battery	Li-ion 7.4 V 2600 mAh; 10 hours typical use (5 hours continuous sampling) / 3.5 hours
Operating environment	10 °C to 40 °C / < 95 % non-condensing relative humidity
Storage environment	-10 °C to 50 °C / Up to 98 % non-condensing relative humidity

Speciality Model

CO-220 Carbon Monoxide Meter

Measures CO levels in industrial environments, commercial or residential buildings where accumulation of combustion gas is possible.



- Stand-alone CO meter that does not require a digital multimeter
- Large backlit LCD displays CO levels from 0 ppm to 999ppm
- Beeper triggers with increasing frequency as CO levels rise
- MAX hold function stores and displays the maximum CO level
- Automatic sensor zeroing and self-test upon startup

For more information, go to www.fluke.com/sg/co-220

CO-205 Aspirator Kit

The CO-205 flue gas sampling accessory kit contains all the components necessary to provide a clean sample for the Fluke family of gas measuring devices.

The CO-205 Accessory Kit includes:

- Stainless steel sampling tube
- Industrial-grade hand operated aspirator to draw flue sample
- Easily replaceable particulate filter
- Specially designed nose cap for connection to the Fluke CO-220



Included Accessories

Fluke 985: Cradle for charging and USB and Ethernet Communications, ENET CAT5E 7-foot Cable, USA-A to Mini-B 6-foot Cable, 12V DC Power Supply, Zero Count Inlet-Filter, Filter Adapter, Sample Inlet Protective Cap, Hard Case, Getting Started Manual and User Manual (CD).

Fluke CO-220: C50 Soft Carrying Case and Battery.

Ordering Information

FLUKE-985	Particle Counter
FLUKE-CO-220	Carbon Monoxide Meter
FLUKE-CO-205	Aspirator Kit

Fluke 925 Vane Anemometer



Fluke 925



Easy-to-use and economical anemometer

The Fluke 925 is an economical and durable vane anemometer designed to measure wind speed, air flow and wind temperature conveniently. With a separate air flow sensor and display, the Fluke 925 provides the user the flexibility to measure air flow in a variety of locations. Vane anemometers are well suited to measure air flow in residential and commercial buildings as part of regular maintenance checks.

- Ability to measure wind speed in metres per second
- Data capture using one button and the ability to average multiple readings
- Min and Max alarm setting to alert the user when limits have been met
- Durable over mold housing to protect the unit from drops
- 1m extension of sensor from display to ensure air flow is captured in hard to reach locations
- Two year warranty

Wind Speed	Range	Resolution	Accuracy
m/s	0.40 to 25.00 m/s	0.01 m/s	±2 % of full scale
Air Flow Measurement	Range	Resolution	Accuracy
CMS (cubic metre/second)	0.01 to 99.99 m3/s	0.01	0 to 9.999 m2
Wind Temperature	Range	Resolution	Accuracy
Wind temperature	0 °C to 50 °C	0.1 °C	±0.8 °C
Product Specification			
Display	Dual-screen 4 digit (9999 points) LCD screen		
Measurement unit	Wind speed: ft/m; m/s Air flow: CMS (m3/s) and CFM (ft3/m) (cubic foot/minute) Wind temperature: °C		
Data holding	Lock the displayed readings		
Average reading storage	Single point (2 hours at most) or multiple points (8 readings at most)		
Auto power-off	Enter the sleep mode after 20 minutes (can be disabled) to save power		
Battery life	100 hours		
Weight	363 g, including the battery and sensor		
Dimensions (HxWxD)	181 × 71 × 38 mm		
Sensor head diameter	70 mm		

Fluke 930 Non-Contact & 931 Dual-Purpose Tachometers



Fluke 931



Where equipment needs quick troubleshooting to diagnose problems, the Fluke 930 or 931 is the right tool for the job. The Fluke 930 is equivalent to a Fluke 931 with the ability to measure via stroboscope in non-contact mode only. With the ability for contact measurement and non-contact combined, the Fluke 931 provides greater flexibility for the professional technician.

- 6-digit backlit display for easy data visualisation
- Signal detection reminder minimises false readings
- Maximum/Minimum/Average value and final readings
- Easy switching of the contact and non-contact measurement modes (Fluke 931 only)
- Different speed measuring heads to adapt to different measurement occasions (Fluke 931 only)
- One year warranty

Rotation speed	
Range	Optical (non-contact) measurement: 1 to 99999 revolutions/minute Contact measurement: 1 to 19999 revolutions/minute (Fluke 931 only)
Precision	±0.02 % RD+1
Sensing distance	(optical) 500 mm
Specifications	
Battery life	About 40 hours
Operating Temp	0 °C to 50 °C

Fluke 925 Applications

- Clean rooms or other locations with installed filter systems
- Environmental Health and Safety personnel, construction research institutions
- HVAC system supplies, installers or maintenance technicians
- Pharmaceutical, food and beverage, electronic manufacturing, building fire protection



Fluke 930/931 Applications

- Heavy manufacturing environments, e.g. automotive, textile, pulp and paper, metalwork
- Water purification plants
- Machining and chemical manufacturing plants
- HVAC compressors for industrial systems



Included Accessories

Fluke 925: Instruction Guide.

Fluke 930 and 931: 0.1 m Wheel, Conical Speed Measuring Head, Inner Cone Speed Measuring Head, Lengthening Rod, 10 Reflective Stripes and Instruction Guide.

Ordering Information

FLUKE-925	Vane Anemometer
FLUKE-930	Non-Contact Tachometer
FLUKE-931	Contact and Non-Contact Dual-Purpose Tachometer

Fluke 941 Luminometer



The Fluke 941 is a handheld luminometer than can measure visible light sent from a variety of light sources, to include fluorescent, metal halide, high pressure sodium, or incandescent lamps. With an extension cord to the light meter and separate display the Fluke 941 provides a handheld tool to accurately measure light in multiple environments. The Fluke 941 is a portable tool that measures light up to 20,000 fc of lux with an accuracy of .01 fc/lux.

- Measure in lux or footcandles, with one button to switch between display options
- Measuring range up to 20,000 lux or foot candles
- Data hold to freeze reading on the digital display
- Min/max ability to show high and low readings
- Auto power off to save battery life
- Includes protective sensor cap
- One year warranty

Fluke 941 Applications

- Room illumination assessment for environmental health and safety reviews
- Light source quality and troubleshooting



Measurement Parameter

Range	20, 200, 2000, 20000, 200000 Lux 20, 200, 2000, 20000FC (Footcandle)
Precision	±3 % (at 2854 °K — calibrated by the common incandescent lamp) ±6 % other visible light sources Cosine error 30° ±2 % 60° ±6 % 80° ±25 % Cosine angle corrected according to the grade A general specifications of JIS C 1609:1993 and CNS 5119 A

Specifications

Sampling Rate:	2.5 times/second for the digital display
Display:	3.5 digit 1999-point LCD screen
Sensor:	Silicon photoelectric diode and optical filter

Fluke 945 Sound Level Meter

- Sound testing for education environments
- Heavy and light industry sound testing
- Healthcare environment testing
- Safety testing



Fluke 945 Sound Level Meter



The Fluke 945 Sound Level Meter has been designed to meet the measurement requirements of safety Engineers, Health, Industrial safety officers and quality control in a wide variety of industrial environments.

It offers two types of measurements: A weighting and C weighting. The A weighting is for general noise sound level and the C weighting is for measuring sound level of acoustic material control in various environments. The Fluke 945 conforms to the IEC651 Type 2, ANSI S1.4 Type 2, and JISC1502 requirements for sound level meters.

- Data storage
- Max/Min
- Frequency weighting ranges: A, C
- Auto power off
- Auto ranging
- One year warranty

Included Accessories

9 V Battery, User Manual.

Ordering Information

FLUKE-941	Luminometer
FLUKE-945	Sound Level Meter

Measurement Parameter	Range	Resolution	Accuracy
Measurement of Environment Noise (A weighted)	30 to 130 dB	0.1 dB	±1.5 dB (ref 94dB@1KHZ)
Measurement of mechanical noise (C weighted)	35 to 130 dB	0.1 dB	±1.5 dB (ref 94dB@1KHZ)
Specifications			
Display	0.1 dB steps on 4 digit LCD screen		
Frequency response	From 31.5 Hz to 8 kHz		
Max/Min recording with memory logging	Up to 14,000 records		

Insulation Testers

Whether you work on motors, generators, cables, or switch gear, the Fluke digital insulation resistance tester range provide noise-free, reliable results. With advanced performance, the insulation tester line is designed to be safe, simple to use and gimmick-free. A perfect solution for insulation testing troubleshooting, commissioning, and preventative maintenance applications.



Insulation Tester Selection Guide

Insulation Test Functionality		1503	1507	1577	1587 FC	1587T	1535	1537	1550C	1555
Test Voltages		500V, 1000V	50V, 100V, 250V, 500V, 1000V	500V, 1000V	50V, 100V, 250V, 500V, 1000V	50V, 100V	250V, 500V, 1000V, 2500V	250V, 500V, 1000V, 2500V, 5000V	250V, 500V, 1000V, 2500V, 5000V	250V, 500V, 1000V, 2500V, 5000V, 10000V
Insulation Resistance Test Range		0.1MΩ - 2GΩ	0.01MΩ - 10GΩ	0.1MΩ - 600MΩ	0.01 MΩ - 2GΩ	0.01MΩ - 100MΩ	200KΩ - 500 GΩ	200KΩ - 1TΩ	200KΩ - 1TΩ	200KΩ - 2TΩ
Polarisation Index/Dielectric Absorption Ratio										
Auto Discharge										
Time Ramp test (Breakdown)										
Pass/Fail Comparison										
Estimated Number of Insulation resistance Tests		1000	1000	1000	1000	1000				
Voltage > 30V Warning										
Memory										
Remote Test Probe										
Lo Ohms										
Display		Digital LCD	Digital LCD	Digital LCD	Digital LCD	Digital LCD	LCD / Analogue Bar Graph	LCD / Analogue Bar Graph	Digital LCD / Analogue Bar Graph	Digital LCD / Analogue Bar Graph
Continuity		(200mA)	(200mA)							
Multimeter Functionality										
AC/DC Volts										
Current										
Resistance										
Temperature (contact)										
Temperature Compensation										
Lo-Pass Filter										
Capacitance										
Diode Test										
Frequency										
MIN/MAX										
Fluke Connect® enabled										
Other										
Hold/Lock										
Backlight										
Software										
Warranty (in years)		1	1	3	3	3	1	3	3	3
Battery		4 AA (NEDA 15A or IEC LR6)	4 AA (NEDA 15A or IEC LR6)	4 AA (NEDA 15A or IEC LR6)	4 AA (NEDA 15A or IEC LR6)	4 AA (NEDA 15A or IEC LR6)	8x AA (IEC LR6)	8x AA (IEC LR6)	Rechargeable	Rechargeable

+ With Fluke IR FC Connector.

Fluke 1535 and 1537 2500V Insulation Resistance Meter (Digital High-Voltage Megohmmeter)



Fluke 1535

Fluke 1537

Fluke 1535 features:

- Up to 500 GΩ insulation resistance measurement range
- Fast-measurement design, faster & stable resistance reading, higher efficiency
- Automatic calculation of polarization index (PI) and dielectric absorption ratio (DAR)
- Low power design meets the requirements of high-intensity work: up to 1300 times of 2500 V measurement, and up to 6500 times of 250 V measurements*
- High-safety design with dangerous voltage alarm function, and complies with CAT IV 600V standard and China power industry specifications DLT845
- The new high-reliability design, all specifications are met even under the environment of 50 °C temperature and 80% RH; all probes and corresponding ports are tested for 30,000 mating test

Fluke 1537 adds the following features based-on the above features:

- AC/DC voltage and resistance measurement
- Short-circuit current >5 mA, faster and more accurate
- Fine-tunable test voltage: 250 V to 2500 V, 100 V step/li>
- Step mode with linear increment test voltage (100 V/s), breakdown voltage indication
- Automatic calculation of dielectric discharge rate (DD), find insulation problems that are not easily detectable in multilayer insulation
- User-defined label, timing test, measurement results storage
- Download data with provided PC software
- 3 years warranty

Specifications									Fluke 1535 & 1537 Insulation resistance meters																	
Range			< 200kΩ			200 kΩ to 500kΩ			0.50 MΩ to 5.00 MΩ			5.0 MΩ to 50.0 MΩ			50 MΩ to 500 MΩ			0.5 GΩ to 5.00 GΩ			5.0 GΩ to 50.0 GΩ			50 GΩ to 500 GΩ		
Resolution			Not specified			1 kΩ			10 kΩ			100 kΩ			1 MΩ			10 MΩ			500 MΩ			5 GΩ		
Accuracy			Not specified			5 %			5 %			5 %			5 %			5 %			5 to 20%			20%		
Leakage current measurement																										
Range			1 nA to mA																							
Accuracy			±(0% + 2 nA)																							
Capacitance measurement																										
Range			0.01 μ F to 2.00 μF																							
Accuracy			±(15 % rdg + 0.03 μF)																							
Test voltage for insulation resistance																										
Range			250 V to 2500 V																							
Accuracy			±(3 % + 3 V)																							
Timer																										
Range			0 to 99 min																							
Resolution			Setting: 1 min Alert: 1 s																							
Warning for energized circuit																										
Warning range			>30 V																							
* Shortage current			1535 > 2 mA											1537 > 5 mA												

ACV/DCV/resistance measurement (1537 only)			
VAC			
Range	0 V to 600.0 V		
Resolution	0.1 V		
Accuracy, ±(% rdg + digit)	±(2 % + 10) (45 Hz to 500 Hz)		
VDC			
Range	0 V to 600.0 V		
Resolution	0.1 V		
Accuracy, ±(% rdg + digit)	±(2 % + 10)		
Resistance			
Range	0 Ω to 600.0 Ω	600 Ω to 6000 Ω	6.00 Ω to 60.00 kΩ
Resolution	0.1 Ω	1 Ω	10 Ω
Accuracy, ±(% rdg + digit)	±(2 % + 10)		

Model Comparison	Fluke 1535	Fluke 1537
Basic insulation features		
Insulation test voltage (preset): 250V, 500V, 1000V, 2500V	•	•
Insulation test voltage trim	-	•
Step mode (100 V/s)	-	•
Insulation test: 200 kΩ to 500 GΩ	•	•
Shortage current	2 mA	5 mA
Auto-discharge of capacitive voltage	•	•
Advanced analysis of insulation performance		
Polarity index (PI)	•	•
Dielectric absorption ratio (DAR)	•	•
Dielectric discharge (DD)	-	•
Breakdown voltage indicator	-	•
Comparison of insulation test results	-	•
Timed test	-	•
Data Interface		
User definable tags	-	•
Measurement results storage	-	•
PC software and Mini USB interface	•	•
Automatically turns off after 10 minutes of inactivity	•	•
Multimeter		
AC voltage	-	•
DC voltage	-	•
Resistance	-	•
Continuity	-	•
Warranty		
General Specifications		
Display	73.5 x 104 mm	
Battery	8 AA alkaline cells, IEC LR6	
Dimensions (H x W x L)	184 x 211 x 93 mm	
Weight	1.3 kg	
Temperature - Operating temperature	-10 °C to +50 °C	
Temperature - Storage temperature	-20 °C to +60 °C	
Operating humidity	Non-condensing (<10 °C) ≤80 % HR (10 °C to 30 °C) ≤50 % HR (30 °C to 50 °C)	
Altitude - Operating altitude	2000 m	
Altitude - Storage altitude	12,000 m	
Overvoltage category	CAT IV 600 V	
Safety - General	IEC 61010-1, pollution degree 2 IEC 61010-2-033: CAT IV 600 V IEC 61557-1	
Safety - Insulation resistance measurement	IEC 61557-2	
Safety - Effectiveness of protective measures	IEC 61557-16	
Safety - IP Rating	IEC 60529: IP40	
Electromagnetic compatibility (EMC)	IEC 61326-1: Electromagnetic environment for portable equipment IEC 61326-2-2 CISPR 11: Group 1, Class A	



Included Accessories

FLUKE 1535 2500V Insulation Tester: Test lead set with alligator clips (red, black, green), Test probes (red, black), Soft carrying case

FLUKE 1537 2500V Advanced Insulation Tester: Test lead set with alligator clips (red, black, green), Test probes (red, black), Soft carrying case, USB Cable, Software CD

Fluke 1587 FC and 1577 Insulation Multimeters



Fluke 1587 FC

Fluke 1577



Two powerful tools in one

The Fluke 1587 FC and 1577 Insulation Multimeters combine a digital 1 kV insulation tester with a

full-featured, true-RMS digital multimeter in a single compact, handheld unit, which provides maximum versatility for both troubleshooting and preventive maintenance.

- Insulation test (1587 FC: 0.01 MΩ to 2 GΩ) (1577: 0.1 MΩ to 600 MΩ)
- Insulation test voltages (1587 FC: 50 V, 100 V, 250 V, 500 V, 1000 V), (1577: 500 V, 1000 V) for many applications
- Live circuit detection prevents insulation test if voltage > 30 V is detected for added user protection
- Auto-discharge of capacitive voltage for added user protection
- Filter for motor drive measurements (1587 FC only)
- AC/DC voltage, DC millivolts, AC/DC milliamps, resistance (Ω), and continuity
- Capacitance, diode test, temperature, Min/Max, and frequency (Hz) (1587 FC only)
- Auto power off to save battery power
- Large display with backlight and large digits
- Included accessories: Remote probe, test leads and probes, alligator clips, (Type K thermocouple, 1587 FC only)
- Accepts optional Fluke TPAK magnetic hanging system to free your hands for other work
- Rugged, utility hard case allows you to bring everything you need for the job
- Three year warranty

The Fluke 1587 FC Insulation Multimeter adds four powerful diagnostic functions through the Fluke Connect® Measurements app:

- PI/DAR timed ratio tests with TrendIt™ graphs identifies moisture and contaminated insulation problems faster
- Memory storage through Fluke Connect eliminates writing down results, reduces errors and saves data for historical tracking over time
- Temperature Compensation through app for establishing accurate baselines and relevant historical comparisons

Specifications	1587 FC	1577
Insulation test voltages 50 V, 100 V, 250 V, 500 V, 1000 V	•	—
Insulation test voltages 500 V, 1000 V	—	•
Insulation resistance	0.01 MΩ to 2.0 GΩ	0.1 MΩ to 600 MΩ
Auto-discharge of capacitive voltage	•	•
Insulation test smoothing reading	•	—
Frequency	•	—
Capacitance	•	—
Diode test	•	—
Temperature	•	—
Min/Max	•	—
Low-pass filter (for work on VSDs)	•	—
AC/DC voltage	•	•
DC millivolts	•	•
AC/DC milliamps	•	•
Resistance	0.1 Ω to 50 MΩ	0.1 Ω to 50 MΩ
Continuity	•	•
Remote probe, test leads, alligator clips	•	•
Type K thermocouple	•	—
Rugged, utility hard case	•	•
Auto power off	•	•

*Fluke Connect is only available in selected countries. Please check with your local distributor for available models.

Recommended Accessories



TPAK
Magnetic
Meter Hanger
See page 154



I400
AC Current Clamp
See page 156



C100
Universal Carrying
Case



TL27
Heavy Duty
Test Leads
See page 149

Recommended Kits

Buy more, Save more



Fluke 1587/i400 Current Clamp FC Kit



Fluke 1587 FC Advanced Electrical Troubleshooting Kit



Fluke 1587 FC/MDT Advanced Motor and Drive Troubleshooting Kit

For more details see page 169

Included Accessories

Remote Probe, Test Leads, Alligator Clips, K-type Thermocouple (1587 FC only), Hard Case, User Documentation.

Ordering Information

FLUKE-1577	Insulation Multimeter
FLUKE-1587 T	Insulation Multimeter for Telecommunications
FLUKE-1587 FC	Insulation Multimeter with Fluke Connect
FLUKE-1587/MDT FC KIT	FC 2-in-1 Adv Motor & Drive Kit w/9040, i400
FLUKE-1587/I400 FC KIT	FC 2-in-1 Insulation Multimeter with i400
1587KIT/62MAX+FC	FC 2-in-1 Adv Elec Kit w/62MAX+ i400

Fluke 1507 and 1503 Insulation Resistance Testers



Fluke 1507

Fluke 1503



These lightweight, affordable insulation testers are perfect for troubleshooting, commissioning and preventive maintenance applications.

- Automatic calculation of polarisation index and dielectric absorption ratio (1507 only)
- Multiple test voltages: 50 V, 100 V, 250 V, 500 V, 1000 V (1507 only)
- Remote test probe for rapid testing
- Insulation test range 0.01 MΩ to 10 GΩ (1507), 0.1 MΩ to 2000 MΩ (1503)
- Compare (Pass/Fail) function for repetitive tests (1507 only)
- Live circuit detection prevents insulation test if voltage > 30 V is detected
- Auto-discharge of capacitive voltage
- AC/DC voltage: 0.1 V to 600 V
- Lo ohms/Earth-bond continuity (200 mA) for checking connections and motor windings
- Resistance: 0.01 Ω to 20.00 Ω
- One year warranty

Recommended Accessories



TPAK
Magnetic
Meter Hanger
See page 162



TL225
Stray Voltage Adapter
Test Lead Kit
See page 152



TL27
Heavy Duty
Test Leads
See page 149



TLK289
Industrial
Test Lead Set
See page 152



C116
Soft Carrying Case
See page 160



C101
Hard Case
See page 161

Fluke 1507/1503 Applications



Insulation test at a distribution panel



Wiring test in a small distribution box – all in one spot

Features	1503	1507
User selectable test voltages for many applications	•	•
Additional test voltages 50V, 100V, 250V		•
Special remote control probe for easy and safe measurements	•	•
Auto-discharge of capacitive voltage for added user protection	•	•
Live circuit detection prevents insulation test if voltage > 30 V is detected for added user protection	•	•
Save both time and money with Automatic calculation of Polarisation Index and Dielectric Absorption Ratio		•
Auto Power off to save batteries	•	•
Large display with backlight	•	•
Continuity function (200 mA)	•	•
Compare function (pass/fail) for fast repetitive tests		•

Insulation	1503	1507
Insulation test range	0.1 MΩ to 2000 MΩ	0.01 MΩ to 10 GΩ
Test voltages	500 V, 1000 V	50 V, 100 V, 250 V, 500 V, 1000 V
Test voltage accuracy	+ 20 %, - 0 %	+ 20 %, - 0 %
Insulation test current	1 mA nominal	1 mA nominal
AC/DC Voltage measurement	600 V (0.1 V resolution)	600 V (0.1 V resolution)
Resistance measurement range	0.01 Ω to 20 kΩ	0.01 Ω to 20 kΩ
Auto discharge	Discharge time < 0.5 second for C = 1 μF or less	Discharge time < 0.5 second for C = 1 μF or less
Maximum capacitive load	Up to 1 μF	Up to 1 μF
Open circuit test voltage	> 4 V, < 8 V	> 4 V, < 8 V
Short circuit current	> 200 mA	> 200 mA

General	
Battery life	Meter: 1000 hours Insulation Test: > 1000 tests
Size (HxWxD)	203 mm x 100 mm x 50 mm
Weight	0.55 kg

Included Accessories

TL224 Test Leads, TP74 Test Probes, Clips PN 1958654 (red) and PN 1958646 (black), Holster, Remote Probe and User Manual.

Ordering Information

FLUKE-1507 Insulation Tester

FLUKE-1503 Insulation Tester

Fluke 1555 and 1550C Insulation Resistance Testers



Fluke 1550C



Powerful troubleshooting and predictive maintenance tools

The Fluke 1555 and redesigned Fluke 1550C Insulation Resistance Testers offer digital insulation testing up to 10 kV, making them ideal for testing a wide range of high voltage equipment including switchgear, motors, generators and cables.

- Capacitance and leakage current measurement
- Ramp function for breakdown testing
- Warning function alerts the user that line voltage is present and gives a voltage reading up to 600 V AC or DC for increased user safety
- Measurements can be stored in up to 99 memory locations, and each location is assigned a unique, defined label for easy recall
- Automatic calculation of Dielectric Absorption (DAR) and Polarisation Index (PI) with no additional setup
- Three year warranty

*Fluke Connect is only available in selected countries. Please check with your local distributor for available models.

The tester's accuracy is specified for one year after calibration at operating temperatures of 0 °C to 35 °C. For operating temperatures outside the range (-20 °C to 0 °C and 35 °C to 50 °C), add ± .25 % per °C, except on the 20 % bands add ± 1 % per °C.

Insulation resistance measurement		
Test voltage (DC)	Range	Accuracy (± reading)
250 V	< 250 kΩ	unspecified
	250 kΩ to 5 GΩ	5 %
	5 GΩ to 50 GΩ	20 %
	> 50 GΩ	unspecified
500 V	< 500 kΩ	unspecified
	500 kΩ to 10 GΩ	5 %
	10 GΩ to 100 GΩ	20 %
	> 100 GΩ	unspecified
1000 V	< 1 MΩ	unspecified
	1 MΩ to 20 GΩ	5 %
	20 GΩ to 200 GΩ	20 %
	> 200 GΩ	unspecified
2500 V	< 2.5 MΩ	unspecified
	2.5 MΩ to 50 GΩ	5 %
	50 GΩ to 500 GΩ	20 %
	> 500 GΩ	unspecified
5000 V	< 5 MΩ	unspecified
	5 MΩ to 100 GΩ	5 %
	100 GΩ to 1 TΩ	20 %
	> 1 TΩ	unspecified
10000 V (1555 only)	< 10 MΩ	unspecified
	10 MΩ to 200 GΩ	5 %
	200 GΩ to 2 TΩ	20 %
	> 2 TΩ	unspecified

Functions	Range	Accuracy (± reading)
Leakage current	1 nA to 2 mA	± (5 % + 2 nA)
Capacitance measurement	0.01 µF to 15.00 µF	± (15 % rdg + 0.03 µF)
Live circuit warning	30 V to 600 V AC/DC, 50/60 Hz	± (15 % + 2 V)

Combine the ir3000 FC connector and Fluke Connect, to perform advanced insulation testing for preventive and PdM tasks through:

- PI (polarity index) and DAR (dielectric absorption ratio) tests with TrendIt™ graphs to identify problems faster*
- Wireless transfer of test results from the tool to Fluke Connect eliminates error-prone paperwork and saves your technician's time
- Temperature Compensation through Fluke Connect App helps establish accurate baselines and relevant historical comparisons*

* Not all functions will be available at time of purchase.

Recommended Accessories Fluke 1550C



TLK1550-RTL
Integral Test Lead
and 10 kV Clamp



FVP-BASIC
FlukeView® Forms
Software
See page 173



IR189USB
USB-IR Cable
See page 163



CXT1555
Pelican
Carrying Case



IR3000 FC
Fluke Connect® ir3000
Connector
See page 11/163

Recommended Kits

Buy more, Save more

Fluke 1550C 5 kV Insulation Tester Kit

Fluke 1550C FC 5kV Insulation Tester Kit with IR 3000FC

Fluke 1555 10 kV Insulation Tester Kit

Fluke 1555 10kV Insulation Tester Kit with IR 3000FC

For more details see page 169

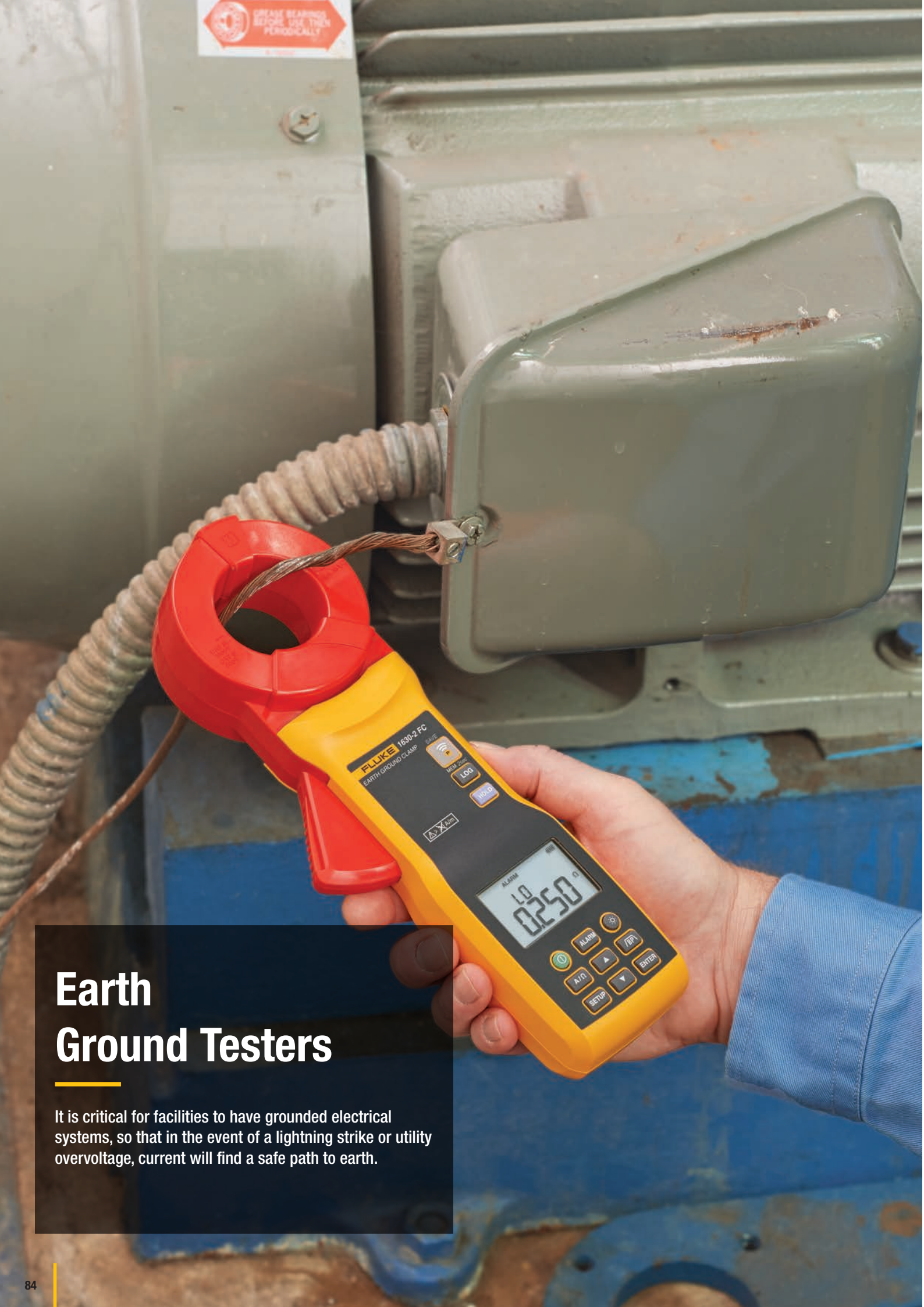
Included Accessories

Test Cables with Alligator Clips (red, black, green), Infrared Adapter with Interface Cable, FlukeView® Forms Basic CD, AC Power Cord, Soft Carrying Case, User Manual, Quick Reference Card, Software License Agreement, Registration Card, FlukeView Forms Installation Guide, USB-IR Cable Installation Guide, IP67 Hard Case (Kit only), Certificate of Calibration (Kit only), Ruggedised Alligator Clips (Kit and 1555 only), IR3000 FC Connector (FC models only).

Ordering Information

FLUKE-1550C	5kV Insulation Tester
FLUKE-1550C FC	5kV Insulation Tester with IR 3000FC
FLUKE-1555	10kV Insulation Tester
FLUKE-1555 FC	10kV Insulation Tester with IR 3000FC
FLUKE-1550C KIT	5kV Insulation Tester Kit
FLUKE-1550C FC KIT	5kV Insulation Tester Kit with IR 3000FC
FLUKE-1555 KIT	10kV Insulation Tester Kit
FLUKE-1555 FC KIT	10kV Insulation Tester Kit with IR 3000FC





Earth Ground Testers

It is critical for facilities to have grounded electrical systems, so that in the event of a lightning strike or utility overvoltage, current will find a safe path to earth.

Fluke 162X-2 Series Geo Earth Ground Testers



Fluke 1625-2



Fluke 1623-2



The Fluke 1623-2 and 1625-2 Earth Ground Testers offer data storage and download capabilities via USB port, have a large display and world class accessories that will simplify and speed up testing time.

These unique earth ground testers that can perform all four types of earth ground measurement:

- 3- and 4-Pole Fall-of-Potential (using stakes)
- 4-Pole Soil Resistivity testing (using stakes)
- Selective testing (using 1 clamp and stakes)
- Stakeless testing (using 2 clamps only)
- IP56 rated for outdoor use
- Professional carrying case
- USB data storage and transfer
- Two year warranty

In addition, the Fluke 1625-2 offers these advanced features:

- Automatic Frequency Control (AFC) - identifies existing interference and chooses a measurement frequency to minimise its effect, providing more accurate earth ground value
- R* measurement - calculates earth ground impedance at 55 Hz to more accurately reflect the earth ground resistance that a fault-to- earth ground would see
- Adjustable limits - for quicker testing

Earth ground resistance and soil resistivity should be measured when:

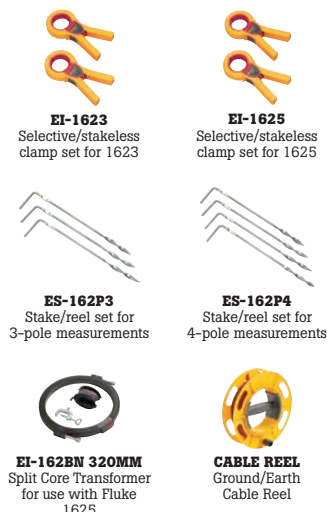
- Designing earth ground systems
- Installing new ground system and electrical equipment
- Periodically testing ground and lightning protection systems
- Installing large electrical equipment such as transformers, switchgears, machines, etc.

Features	1623-2	1625-2
One-button measurement concept	•	•
3- and 4-pole Fall of Potential, earth resistance loop testing	•	•
4-Pole soil resistivity testing	•	•
2-Pole resistance measurement AC		•
2-and 4-pole resistance measurement DC		•
Selective testing, no disconnection of ground conductor (1 clamp)	•	•
Stakeless testing, quick ground loop testing (2 clamps)	•	•
Measuring frequency 128 Hz	•	
Earth impedance measurement at 55 Hz		•
Automatic frequency control (AFC) (94 – 128 Hz)		•
Measuring voltage switchable 20/48V		•
Programmable limits, settings		•
Continuity with buzzer		•
Dust/water resistance	IP56	IP56
Safety rating	CAT II 300 V	CAT II 300 V

Specifications	1623-2	1625-2
Resistance ranges	0 to 20 kΩ	0 to 300 kΩ
Operating error	± 10%	± 5%
Test voltage	48 V	20 / 48 V
Short circuit current	> 50mA	250 mA
Weight	1.1 kg (including batteries)	1.1 kg (including batteries)
Size (WxHxD)	250 x 133 x 187 mm	
Battery type	6 x AA alkaline cells	

These products are for unpowered installations measuring grounding connections.

Recommended Accessories



Recommended Kits

Buy more, Save more



Fluke 1623-2 GEO Earth Ground Tester Kit



Fluke 1625-2 GEO Earth Ground Tester Kit

For more details see page 169

Included Accessories

Fluke 1623-2: Protective Holster, 2 Test Leads, 2 Alligator Clips, User Manual.

Fluke 1623-2 Kit: Same as above plus Stake/Reel, Set 4 Pole and Selective/Stakeless Clamp Set.

Fluke 1625-2: Protective Holster, 2 Test Leads, 2 Alligator Clips, User Manual.

Fluke 1625-2 Kit: Same as above plus Stake/Reel, Set 4 Pole and Selective/Stakeless Clamp Set.

Ordering Information

FLUKE-1623-2 Basic GEO Earth Ground Tester

FLUKE-1623-2 KIT Basic GEO Earth Ground Tester Kit

FLUKE-1625-2 Advanced GEO Earth Ground Tester

FLUKE-1625-2 KIT Advanced GEO Earth Ground Tester

Fluke 1630-2 FC Earth Ground Clamp Meter



Fluke 1630-2 FC



Stakeless earth ground loop and AC leakage current clamp for fast, safe indoor/outdoor earth ground resistance and AC leakage current tests.

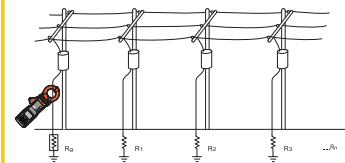
Heavy-duty clamp jaw stays in alignment and in calibration even in every day, on-the-job industrial environments. Test the grounding components of equipment in hard-to-reach spaces, including areas that are indoors or fully paved and do not permit driving auxiliary test stakes. Stay on line—identify ground loop resistance without the need to disconnect then reconnect the earth electrode from the system.

Stakeless measurement

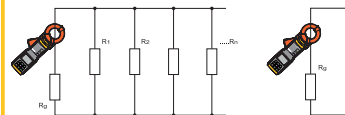
The 1630-2 FC clamp measures earth ground loop resistances for multi-grounded systems using the dual-clamp jaw. This test technique eliminates the dangerous and time-consuming activity of disconnecting parallel grounds, as well as the process of finding suitable locations for auxiliary test stakes. You can also perform ground tests in places that were previously difficult: inside build-ings, on power pylons or anywhere you don't have access to soil to place auxiliary test stakes. With this test method, a two-process measurement is made around the earth ground wire or bus bar using the specially-designed jaw of the 1630-2 FC clamp. Auxiliary test stakes are not used at all. A known voltage is induced by the source in the clamp, and the current is measured by the sensor in the clamp. The tester automatically determines the earth loop resistance for this section of the earthing system.

One year warranty.

Ground Resistance Measurement Principle



Equivalent Circuit Diagram



Included Accessories

Hard Case, Loop Resistance Standard, four AA Batteries, Safety Information Guide and Quick Reference Guide.

Ordering Information

FLUKE-1630-2 Earth Ground
FC Loop and
Leakage Clamp

*Fluke Connect is only available in selected countries. Please check with your local distributor for available models.

Electrical specifications

Maximum voltage to earth ground		1000 V		
Battery type		4 x 1.5 V AA alkaline IEC/EN LR6		
Battery life		More than 15 hours		
Frequency range		40 Hz to 1 kHz		
Ingress protection		IEC/EN 60529: IP30 with jaw closed		
LCD	Digital reading	9999 counts		
	Refresh rate	4/s		
Reference temperature		23 °C ±5 °C		
Display Reading Specification with Loop Resistance Standard		Input (Ω)	Minimum	Maximum
		0.474	0.417	0.531
		0.5	0.443	0.558
		10	9.55	10.45
		100	96	104.0
Data logging capacity		Minimum of 32,760 measurements		
Safety	General	IEC/EN 61010-1: Pollution Degree 2 IEC/EN 61557-1		
	Measurement	IEC/EN 61010-2-032: CAT IV 600 V / CAT III 1000 V		
Current clamp for leakage current measurements		IEC/EN 61557-13: Class 2, ≤30 A/m		
Resistance to Earth		IEC/EN 61557-5		
Effectiveness of the protective measures		IEC/EN 61557-16: cutoff frequency 20 kHz (-3 dB)		

General specifications

Conductor size	40 mm approximately
Dimensions (L x W x H)	283 mm x 105 mm x 48 mm
Weight	880 g



Installation Testers

Safety and performance are two of the most critical requirements for any electrical system. Good quality insulation, a properly working grounding system and active protection assure the safety of people, electrical systems and buildings, and protect them against electrocution, fire and other equipment damage.

Fluke 1660 Series Multifunction Installation Testers



Fluke 1664 FC



Fluke 1663



Fluke 1662



The Fluke 1660 Series Multifunction Installation Testers verify the safety of electrical installations in domestic, commercial and industrial applications. They can ensure that fixed wiring is safe and correctly installed to meet the requirements of IEC 60364 and all relevant local standards.

Three year warranty.

Fluke 1664 FC – The complete tester for advanced users

The Fluke 1664 FC is the only installation tester that protects connected appliances from damage during insulation tests, and allows you to share your test results wirelessly by smartphone with coworkers or customers. Fluke's patented Insulation PreTest stops you from performing tests with appliances that are connected to the system during test. This helps eliminate accidental damage and keeps your customers happy.

In addition, the Fluke 1664 FC offers you the power of Fluke Connect. Now you can send test results straight from your Fluke 1664 FC to your smartphone, and transmit those results to other members of your team.

Fluke 1663 - The ideal tester for professional troubleshooters

This instrument is ideal for professional users' high-end functionality, advanced measurement capability, yet it is still easy to use.

Fluke 1662 - A solid, basic installation tester

The Fluke 1662 gives you Fluke reliability, simple operation and all the testing power you need for basic installation testing.

Measurement function	1664 FC	1663	1662
Insulation PreTest safety function	•	-	-
Insulation at L-N, N-PE inputs	•	-	-
Auto Test sequence	•	-	-
Loop and line resistance-mΩ resolution	•	-	-
Continuity at L-N, N-PE inputs	•	•	-
Test smooth dc sensitive RCDs (Type B/B+)	•	•	-
Earth resistance	•	•	-
Wiring polarity checker, detects broken PE and N wires	•	•	•
Insulation resistance	•	•	•
Continuity and resistance	•	•	•
Measure motor windings with continuity test (@ 10 mA)	•	•	•
Loop and line resistance	•	•	•
Prospective earth fault current (PEFC/IK)	•	•	•
Prospective short-circuit current (PSC/IK)	•	•	•
RCD trip time	•	•	•
RCD trip current (ramp test)	•	•	•
Measures trip time and current for RCD type A and AC in one test	•	•	•
Automatic RCD test sequence	•	•	•
Phase sequence test	•	•	•
Other features			
Fluke Connect® compatibility	•	-	-
ShareLive™ calling	•	-	-
On/Off switchable auto-start for RCD and Loop test	•	•	•
Self-test	•	•	•
Memory, interface			
Z Max memory	•	•	-
Memory	•	•	•
IR-USB and BLE interface (when used with optional FVF software)	IR-USB/BLE	IR-USB	IR-USB

*Fluke Connect is only available in selected countries. Please check with your local distributor for available models.

Recommended Accessories



TLK290
Flexible Socket
Probe Set
See page 150



FLK-166X-MTC-AU
Test Cable Assembly
Mains Test Lead



TP165X
Remote Control Probe
See page 148



ES165X
Earth Spike Test Kit
(Fluke 1663 and
1664 FC)



FVF-SC2
Fluke ViewForms®
Software (Fluke 1662)
See page 173



ZERO ADAPTER
Null Adapter

Complete Package with Fluke FVF-SC2 Software



To address the increasing demands for reporting and documentation, we've added FlukeView Forms Software to the Fluke 1663 and 1664 FC Testers.

Included Accessories

Six AA (IEC LR6) Batteries, C1600 Hard Carrying Case, Zero Adapter, Heavy Duty Mains Cord, STD Standard Test Lead Set, Padded Carrying and Waist Strap, Quick Reference Guide, TP165X Remote Control Probe and Lead Set, User's Manual on CD-ROM.

Ordering Information

FLUKE-1664FC SCH	Multifunction Installation Tester with Auto Test, Insulation PreTest, Fluke Connect® compatibility with FlukeView Forms Software
FLUKE-1663 SCH	Multifunction Installation Tester with FlukeView Forms Software
FLUKE-1662 SCH	Multifunction Installation Tester

Fluke 6200-2 and 6500-2 Portable Appliance Testers



Fluke 6200-2



Fluke 6500-2



Perform more tests each day

The Fluke 6200-2 and 6500-2 Portable Appliance Testers (PAT) have redesigned auto-test capabilities to help you increase the number of portable appliance tests completed each day. It is designed to enable you to work faster without compromising safety – yours or your customer's.

Two year warranty.

The Fluke 6200-2 Portable Appliance Tester offers:

- Dedicated key for each test for 'one-touch' testing
- Pre-set pass/fail levels to save time
- Large display for easy reading
- Single mains socket for appliance connection
- Separate IEC socket for easy mains/extension lead testing
- Detachable test leads for quick field replacement
- Integral carrying handle

The Fluke 6500-2 Portable Appliance Tester delivers all of this capability, plus:

- Integral QWERTY keyboard for rapid data entry
- Additional Compact Flash memory card capability for back-up data storage and USB port for transfer to PC
- Large backlit graphics display
- Pre-set, auto-test sequences for user convenience
- Integral site, location and description codes for faster data processing
- Memory review facility for more on-site control

Measurement functions	6200-2	6500-2
LN Mains Volts	•	•
Outside Limits Indicators	•	•
Null out facility for earth bond lead	•	•
Protective Earth Resistance PE (200mA)	•	•
Protective Earth Resistance PE (25 A)	•	•
Insulation 500V DC	•	•
Insulation 250V DC	-	•
Protective Earth Conductor Current	•	•
Touch Current	•	•
RCD Test	-	•
Substitute leakage current	•	•
Appliance Power kVA	•	•
Appliance Load Current	•	•
Seven Segment Custom LCD	•	-
Colour dot matrix display	-	•
Back Light	•	•
USB Flash drive port	•	•
USB Port-Printing/downloading	-	•
External printer output	•	•
Front Panel QWERTY Key pad	-	•
IEC Lead Test	•	•
Auto-testing	-	•
Pass / Fail Level Programmable Indicators	-	•
Data Storage	-	•
Limited Data Storage	-	•
Polarity Checks	•	•
Graphical Help Menu Online	-	•
Programme Mode	-	•
Real time clock	-	•

Recommended Accessories



SP-SCAN-6000
Barcode Scanner
(6500-2 only)



DMS COMPL
Data Management
Software
See page 165



DMS COMPL PROF
Data Management
Software (Professional
Version)
See page 165



C1600
Rugged, molded
plastic case
See page 161

Fluke DMS Software



Fluke DMS Complete Software for Fluke Portable Appliance Testers

Fluke DMS (Data Management Software) is the official software package for data recording and administration of test results for portable appliance testing. It is compatible with the Fluke 6500-2 Portable Appliance Tester.

Fluke DMS has been designed to manage all of your portable appliance test records. When used together with a Fluke Portable Appliance Tester, the software will automatically accept downloaded test results and these can be used to produce comprehensive professional looking reports and documentation.

* Fluke DMS Software sold separately

Included Accessories

Test Lead, Test Probe, Crocodile Clip, Mains Cord, USB Stick and Cable (6500-2 only), Hard Carrying Case, Quick Reference Guide and User Manual on CD.

Ordering Information

FLUKE-6200-2 UK Portable Appliance Tester

FLUKE-6500-2 UK Portable Appliance Tester



Power Quality

Whether you're in an industrial plant, manufacturing facility or a utility, Fluke Power Quality and energy management tools are designed to assist in capturing the power quality and energy data needed to maintain the best performance and reliability. These tools make it possible to identify your power quality and energy efficiency issues with easy and effective recording and analysis.

Power Quality Tools Selection Guide

Basic measurements		Application use	Single-Phase		Three-Phase									
			VR1710	1732/34	1736/38	1742	1746	1748	1760	1773	1775	1777	Norma 800X	
Energy studies														
Measure V, I, kW, Cos/DPF, kWhr	Get detailed power and energy consumption profiles during energy audits and pinpoint savings opportunities		•	•	•	•	•	•	•	•	•	•	•	
Measure MIN/MAX and AVG values		•	•	•	•	•	•	•	•	•	•	•	•	
Waste energy monetisation										•				
Basic harmonics study														
THD measurement (V & I)	Discover the source of distortion in your installation, so that you can filter those loads or move them to separate circuits	•	•	•	•	•	•	•	•	•	•	•	•	
Harmonics 1 to 50 for V & I		• (V only)	•	•	•	•	•	•	•	•	•	•	•	
Advanced harmonics study														
Full harmonic spectrum	If distorting loads are causing problems in your installation, you need comprehensive data to identify the source and create a solution			•			•	•	•	•	•	•	•	
Power harmonics									•	•	•	•	•	
Basic industrial PQ troubleshooting														
Oscilloscope function	When troubleshooting in the field, graphical data enables you to trace the source of the problem at hand			•					•	•	•	•	•	
Voltage dips and swells		•	•	•	•	•	•	•	•	•	•	•	•	
Advanced industrial PQ troubleshooting														
Comprehensive logging capability	Complex installations often require a deeper dive into measurement data. Multiple loads may be interacting randomly to cause a single problem			•			•	•	•	•	•	•	•	
Transient capture		•	•					•	•	•	•	•	•	
High speed Transient Capture														
Flicker		•			•	•	•	•	•	•	•	•	•	
Motor analysis														
Speed	Perform dynamic motor analysis by plotting of motor de-rating factor against load according to NEMA/IEC guidelines on direct on-line electric motors												•	
Torque													•	
Mechanical power													•	
Features														
Inrush	Flicker		•			•	•	•	•	•	•	•		
Flicker					•									
Transients	Mains signaling													
Event waveform capture						•	•	•	•	•	•	•		
Power inverter efficiency				•									•	

Fluke VR1710 Single Phase Voltage Quality Recorder



Fluke VR1710

Easy-to-use solution for detecting and recording voltage quality problems

The Fluke VR1710 is a single-phase, plug-in voltage quality recorder that provides fast and easy recording of voltage trends, dropouts, harmonics and general power quality including dips and surges to help maintenance and facilities management personnel easily pinpoint the root cause of voltage problems. Voltage quality parameters including RMS average, transients, flicker, and harmonics up to the 32nd are recorded using a user-selected average period from 1 second to 20 minutes.

- Fast and easy recording of voltage trends, dropouts and power quality: Easily pinpoint the root cause of single phase voltage problems
- Extremely easy to use: Plugs directly into the mains power socket and capture data
- Quickly see what happened and when: Min, Max, and Average RMS values (1/4 cycle) with time stamp, transient display (> 100 μ s) with time stamp
- Easily identify problems: Power quality or equipment related Flicker recording to EN 61000-4-15, individual harmonic and THD values with trends
- Includes PowerLog software: For quick download, analysis and automatic reporting
- Save time: Generate power quality reports automatically with pre-set templates
- One year warranty

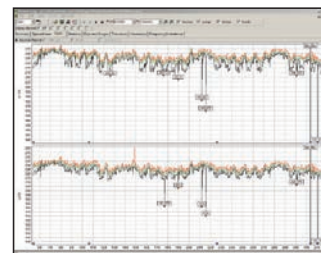
Applications

Voltage recording	Monitors and records supply voltage; measures RMS average, minimum and maximum values, and checks whether the socket outlet is providing voltage within tolerance.
Distortion measurement	Measure frequency and harmonics; check whether the distorting loads (UPS systems, drives, etc.) are affecting your other equipment.
Flicker measurement	Quantify the affects of switching loads on lighting systems.
Voltage transients	Capture those intermittent, momentary events that may be affecting your equipment; the full waveform is captured with date, timestamp, and duration.

Specifications

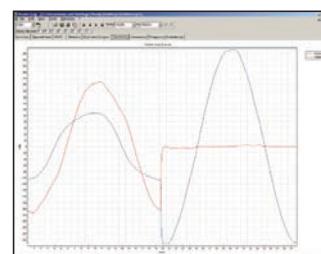
Operating voltage	70 V to 300 V
Min/Max/Avg RMS value	Resolution 0.125 V
Number of events	175,000
Dips/Interruptions	Yes
Time resolution	5 ms
Voltage resolution)	0.125 V
Over-voltages	Yes
Frequency	Yes
Harmonics measurement	EN 61000-4-7 (up to 32nd)
Flicker measurement	EN 61000-4-15
Number of recording channels	1 Phase to Neutral, 2 Phase/Neutral to Ground
Recording time	1 day to 339 days depending on average time from 1 second to 20 minutes
Transients	Yes
Frequency range	50 Hz \pm 1 Hz and 60 Hz \pm 1 Hz
Safety category rating	CAT II 300 V

Powerlog Software



PowerLog Setup – Simple set up of internal clock, logging periods, and intervals with default values for quick results.

PowerLog View – Data presentation showing RMS voltage and harmonic trends, actual transients, summary information and statistics in accordance with EN50160.



Actual transient display (> 100 μ s) with time stamp – Quickly identify issues with included graphical software.



Includes PowerLog software

Included Accessories

USB Cable, PowerLog Software CD, Power Cord Adapter.

Ordering Information

FLK-VR1710 Voltage Quality Recorder

Fluke 1732 and 1734 Three-Phase Electrical Energy Loggers



Fluke 1734



Energy logging is now within your reach—discover where you're wasting energy, optimise your facility's energy use and reduce your bill

The Fluke 1732 and 1734 Three-Phase Electrical Energy Loggers introduce a new simplicity to discovering sources of electrical energy waste. Discover when and where energy in your facility is being consumed; from the service entrance to individual circuits. Access and share data remotely with your team via the Fluke Connect® app so you can maintain safer working distances and make critical decisions in real-time, reducing the need for protective equipment, site visits and check-ins.

Profiling energy usage across your facility helps you identify opportunities for energy savings, and provides you with the data you need to act on them. The new Energy Analyse software package allows you to compare multiple data points over time to build a complete picture of energy usage, which is the first step to reduce the cost of your energy bill.

- **Key measurements:** Automatically capture and log voltage, current, power, power factor, energy and associated values
- **Fluke Connect® compatible:** View data locally on the instrument, via Fluke Connect mobile app and desktop software or through your facilities' WiFi infrastructure
- **Convenient instrument powering:** Power instrument directly from the measured circuit
- **Highest safety rating in the industry:** 600 V CAT IV/1000 V CAT III rated for use at the service entrance and downstream
- **Measure all three phases:** With included 3 flexible current probes
- **Fully integrated logging:** Connect other Fluke Connect devices to the Fluke 1734 to simultaneously log up to two other measurement parameters, virtually any parameter available on a Fluke Connect wireless digital multimeter or module
- **Energy Analyse Plus application software:** Download and analyse every detail of energy consumption with our automated reporting
- One year warranty

Specifications

Accuracy

Parameter	Range	Max resolution	Intrinsic accuracy at reference conditions (% of reading + % of full scale)
Voltage	1000 V	0.1 V	± (0.2 % + 0.01 %)
Current	i17xx-flex 1500 12"	150 A 1 A	± (1 % + 0.02 %) ± (1 % + 0.02 %)
	i17xx-flex 3000 24"	300 A 10 A	± (1 % + 0.03 %) ± (1 % + 0.03 %)
	i17xx-flex 6000 36"	600 A 10 A	± (1.5 % + 0.03 %) ± (1.5 % + 0.03 %)
	i40s-EL clamp	4 A 10 mA	± (0.7 % + 0.02 %) ± (0.7 % + 0.02 %)
Frequency	42.5 Hz to 69 Hz	0.01 Hz	± (0.1 %)
Aux input	± 10 V DC	0.1 mV	± (0.2 % + 0.02 %)
Voltage min/max	1000 V	0.1 V	± (1 % + 0.1 %)
Current min/max	defined by accessory	defined by accessory	± (5 % + 0.2 %)
THD on voltage	1000 %	0.1 %	± 0.5
THD on current	1000 %	0.1 %	± 0.5
Voltage harmonics 2nd ... 50th	1000 V	0.1 V	≥ 10 V: ± 5 % of reading < 10 V: ± 0.5V
Current harmonics 2nd ... 50th	defined by accessory	defined by accessory	≥ 3 % of current range: ± 5 % of reading < 3 % of current range: ± 0.15 % of range
Unbalance	100 %	0.1 %	± 0.2

Recommended Accessories



117XX-FLEX 1500
1500A 12 inch iFlex® Current Clamps (Purchase as individual, 3pk or 4pk)
See page 167



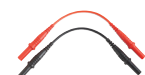
117XX-FLEX 3000
3000A 24 inch iFlex® Current Clamps (Purchase as individual, 3pk or 4pk)
See page 167



117XX-FLEX 6000
6000A 36 inch iFlex® Current Clamps (Purchase as individual, 3pk or 4pk)
See page 167



I40S-EL/3PK
40A Clamp-on Current Transformer 3 pack (Purchase as individual or 3pk)
See page 167



FLUKE-17XX-TL 0.1M
Test Lead Set, 1000V CAT III, Non-stackable connectors; 0.1M; Red/Blk
See page 167



FLUKE-17XX-TL 1.5M
Test Lead Set, 1000V CAT III, Non-stackable connectors; 1.5M; Red/Blk
See page 167



173X-HANGER KIT
Hanging strap Kit
See page 167



MP1-MAGNET PROBE1
Magnet Probes for 4mm banana, Set of 4
See page 167



1732/UPGRADE
Upgrade Kit for 1732 to 1734
See page 168



C17XX
Soft case
See page 168

Included Accessories

Power Supply, Voltage Test Leads, 4 x Alligator Clips, 3 x 12 in 1,500A Flexible Current Probe, Soft Case, Energy Analyse Plus Software, Line Cords, Colour Coding Set and Documentation on USB Flash Drive, Magnetic Hanging Strap (1734) and Magnetic Voltage Probes (1734).

Ordering Information

FLUKE 1732/B Energy Logger, Basic Version (excl. current probes)

FLUKE 1732/INTL Energy Logger, International Version (incl. current probes)

FLUKE 1734/B Energy Logger, Basic Version with Fluke Connect (excl. current probes)

FLUKE 1734/INTL Energy Logger, International Version with Fluke Connect (incl. current probes)

Fluke 1736 and 1738 Three-Phase Power Loggers



Fluke 1736



Fluke 1738



More visibility, reduced uncertainty

The Fluke 1736 and 1738 Three-Phase Power Loggers built with Fluke Connect® mobile app and desktop software compatibility give you the data you need to make critical power quality and energy decisions in real-time. The ideal test tools for conducting energy studies and basic power quality logging, the 1736 and 1738 automatically capture and log over 500 power quality parameters so you have more visibility into the data you need to optimise system reliability and savings.

- **Measure all three phases and neutral** with included 4 flexible current probes.
- **Comprehensive logging:** More than 20 separate logging sessions can be stored on the instruments. In fact, all measured values are automatically logged so you never lose measurement trends.
- **Capture dips, swells, and inrush currents:** Includes event waveform snapshot and high resolution RMS profile, along with date, timestamp and severity to help pinpoint potential root causes of power quality issues
- **Optimised user interface:** Capture the right data every time with quick, guided, graphical setup and reduce uncertainty about your connections with the intelligent verification function.
- **Complete “in-the-field” setup through the front panel or Fluke Connect App:** No need to return to the workshop for download and setup or to take a computer to the electrical panel.
- **Energy Analyse Plus application software:** Download and analyse every detail of energy consumption and power quality state of health with our automated reporting.
- One year warranty

	Three-Phase Energy Loggers		Three-Phase Energy Loggers	
	1732 Energy Logger	1734 Energy Logger	1736 Power Logger	1738 Advanced Power Logger
Load studies	•	•	•	•
Energy assessments	•	•	•	•
Neutral Current Measurement (four current channels)	-	-	•	•
Harmonics measurements	-	-	•	•
Voltage event capture	-	-	•	•
Advanced analysis: Waveform and Inrush event capture PQ Health (EN51060)	-	-	Upgrade package*	•
Fully integrated logging with Fluke Connect®	Upgrade package*	•	Upgrade package*	•
WiFi	Optional	•	•	•
Wi-Fi / Bluetooth	Optional	•	Optional	•
Magnetic probe set	Optional	•	Optional	•
Magnetic hanger	Optional	•	Optional	•
Connection via WiFi router	Requires FREE software license available upon product registration.		Requires FREE software license available upon product registration.	

Recommended Accessories



117XX-FLEX 1500
1500A 12 inch iFlex® Current Clamps (Purchase as individual, 3pk or 4pk)
See page 167



117XX-FLEX 3000
3000A 24 inch iFlex® Current Clamps (Purchase as individual, 3pk or 4pk)
See page 167



117XX-FLEX 6000
6000A 36 inch iFlex® Current Clamps (Purchase as individual, 3pk or 4pk)
See page 167



140S-EL/3PK
40A Clamp-on Current Transformer 3 pack (Purchase as individual, 3pk or 4pk)
See page 167



17XX-TL 0.1M
Test Lead Set, 1000V CAT III, Non-stackable connectors; 0.1M; Red/Blk
See page 167



17XX-TL 1.5M
Test Lead Set, 1000V CAT III, Non-stackable connectors; 1.5M; Red/Blk
See page 167



173X AUX
Input adapter
See page 160



MP1-MAGNET PROBE1
Magnet Probes for 4mm banana, Set of 4
See page 167



1732/UPGRADE
Upgrade Kit for 1732 to 1734
See page 168



C17XX
Soft case
See page 168

Included Accessories

Power Supply, Voltage Test Leads, 4 x Alligator Clips, 4 x 12 in 1500A Flexible Current Probe, Soft Case, Energy Analyse Plus Software, WiFi Adapter, Line Cords, Colour Coding Set and Documentation on USB Flash Drive, Magnetic Hanging Strap (1738) and 4 x Magnetic Voltage Probes (1738).

Ordering Information

FLUKE 1736/B Power Logger, Basic Version (excl. current probes)

FLUKE 1736/INTL Power Logger, International Version (incl. current probes)

FLUKE 1738/B Power Logger, Advanced Version (excl. current probes)

FLUKE 1738/INTL Power Logger, International Advanced Version (incl. current probes)

Fluke 1742, 1746 and 1748 Three-Phase Power Quality Loggers



Fluke 1746



Troubleshoot, quantify energy usage and perform quality of service surveys easier than ever

The Fluke 1742, 1746 and 1748 Three-Phase Power Quality Loggers give you fast, easy access to the data you need to make critical power quality and energy decisions in real-time, and with the included Energy Analyse Plus software package you can easily create detailed reports.

Fully compliant with international power quality standards such as IEC 61000-4-30 Class A including local compliance to AS/NZ 61000.4.30 Class A and capable of simultaneously logging up to 500 parameters while also capturing events, the Fluke 1740 Series helps uncover intermittent and hard-to-find power quality issues more easily than ever. Energy Analyse Plus software quickly assesses the quality of power at the service entrance, substation, or at the load, according to national and international standards.

- "In-workshop" or "in-the-field" setup and download through PC application software using USB memory stick, Wi-Fi download, wired ethernet connection or via USB cable
- One-touch reporting: Create standardised reports or export data in PQDIF or NeQual compatible format for use with third party software
- Capture dips, swells and interruptions
- Measures harmonics and interharmonics for voltage and current, also includes unbalance, flicker and rapid voltage changes
- Two year warranty (battery not included)

Measure all power quality and power parameters	1742 Power Quality Logger	1746 Power Quality Logger	1748 Power Quality Logger
Functions			
Energy	•	•	•
Basic Power Quality	Optional	•	•
Advanced Power Quality	Optional	Optional	•

Selection Guide	1742 Power Quality Logger	1746 Power Quality Logger	1748 Power Quality Logger
Functions			
Voltage, current, power, power factor, frequency	•	•	•
Energy forward/reverse	•	•	•
Peak Demand	•	•	•
THD	•	•	•
Voltage and current harmonics (to 50th)	-	•	•
Flicker	•	•	•
Unbalance	-	•	•
Rapid voltage change events	-	•	•
Interharmonics (to 50th)	-	•	•
Dips, swells, interruption and transient events tables	-	•	•
Mains signaling	-	•	•
Inrush current	-	•	•
Transients (low frequency)/Waveform deviation events	-	-	•
Recording			
Trend	•	•	•
Waveform snapshots	-	-	•
RMS profile	-	-	•
Communication			
Ethernet	•	•	•
USB (mini B)	•	•	•
WiFi download Instrument to device	•	•	•
Wifi download via WiFi hub (requires registration)	Opt.	Opt.	Opt.

Recommended Accessories



117XX-FLEX 1500
1500A 12 inch iFlex®
Current Clamps (Purchase as individual, 3pk or 4pk)
See page 167



117XX-FLEX 3000
3000A 24 inch iFlex®
Current Clamps (Purchase as individual, 3pk or 4pk)
See page 167



117XX-FLEX 6000
6000A 36 inch iFlex®
Current Clamps (Purchase as individual, 3pk or 4pk)
See page 167



140S-EL/3PK
40A Clamp-on Current Transformer 3 pack (Purchase as individual, 3pk or 4pk)
See page 167



IP65 VOLT CONN
IP65 Rated Voltage Connector
See page 167



MP1-3R/1B
Magnet Probe 1 (3 x Red, 1 x Black)
See page 167



3PHVL-1730-5M
Cable Assembly, Voltage Test Lead 3-Phase+N 5m
See page 167



17XX AUX
Auxiliary Input Adapter
See page 168



174X-HANGER
174X Hanger Kit
See page 167



1742-6/8 UPGRADE
Upgrade Kit 1742 to 1746/1748 & 1746 to 1748
See page 168

Included Accessories

4 x Flexible Current Probes, USB Stick, USB Cable, 3PHVL-1730 3-Phase + Neutral Voltage Test Lead, Test Lead Set Red/Black 0.18m, Test Lead Set Red/Black 1.5m, 4 x Alligator Clips, 173x/174x Soft Case, Cable Marker Kit, MP1-3R/1B-Magnet Probe 1 Set (3 Red, 1 Black) and Hanger Kit (1748).

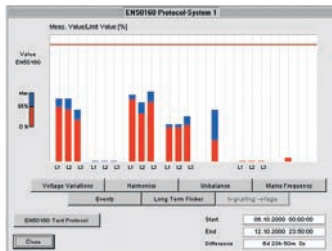
Ordering Information

FLUKE-1742/15/INTL	Three-Phase Power Quality Logger
FLUKE-1742/30/INTL	Three-Phase Power Quality Logger
FLUKE-1746/15/INTL	Three-Phase Power Quality Logger
FLUKE-1746/30/INTL	Three-Phase Power Quality Logger
FLUKE-1748/15/INTL	Three-Phase Power Quality Logger
FLUKE-1748/30/INTL	Three-Phase Power Quality Logger

Fluke 1760 Three-Phase Power Quality Recorder



Fluke 1760



The included PQ Analyse software provides a detailed overview of several power quality parameters.

Class-A compliance for the most demanding power quality tests

The Fluke 1760 Three-Phase Power Quality Recorder is fully compliant to IEC 61000-4-30 Class-A, for advanced power quality analysis and consistent compliance testing. Designed for analysis of utility and industrial power distribution systems, in medium and low-voltage networks, the Fluke 1760 provides the flexibility to customise thresholds, algorithms, and measurement selections. It has 8 input channels (4 currents/4 voltages or 8 voltages), and captures the most comprehensive details on user selectable parameters.

- **Fully Class-A compliant:** Conduct tests according to the stringent international IEC 61000-4-30 Class-A standard
- **GPS time synchronisation:** Correlate data with events or datasets from other instruments with precision
- **Flexible and fully configurable thresholds and scale factors:** Allows user to pinpoint specific issues by defining the detailed criteria for detection and recording of disturbances.
- **10 MHz, 6000 Vpk waveform capture:** Get a detailed picture of even the shortest event
- **2 GB data memory:** Enables detailed, simultaneous recording of numerous power parameters for long periods of time
- **Comprehensive software (included):** Provides trend diagrams for root cause analysis, statistical summaries, report writing and real-time data monitoring in the online mode
- **Plug and play:** Allows quick setup with automatic sensor detection; sensors are instrument powered, eliminating the need for batteries
- Two year warranty

Specifications	1760 Basic	1760TR Basic	1760 INTL	1760TR INTL
Power quality statistics according to EN50160	•	•	•	•
Voltage event list (dips, swells and interruptions)	•	•	•	•
Continuous recording of:				
Voltage	•	•	•	•
Current	•	•	•	•
Power P, Q, S	•	•	•	•
Power factor	•	•	•	•
kWh	•	•	•	•
Flicker	•	•	•	•
Unbalance	•	•	•	•
Frequency	•	•	•	•
Voltage and current harmonics to the 50th/Interharmonics	•	•	•	•
THD	•	•	•	•
Mains signaling	•	•	•	•
Triggered recordings	•	•	•	•
Online mode (Oscilloscope, transients and events)	•	•	•	•
Fast transient analysis up to 10 MHz	-	•	-	•
4, 600V voltage probes	-	-	•	•
4 dual-range flexible current probes (1000 A / 200 A AC)	-	-	•	•
GPS time sync receiver	-	-	•	•
Memory	2 GB Flash memory			

Recommended Accessories



TPS FLEX 18-TF-II
Flexible Current Probe
See page 168



TPS CLAMP 10A/1A
Clip-on Current Transformer
See page 168



TPS FLEX 24-TF-II
Flexible Current Probe
See page 168



TPS CLAMP 20A/2A
Clip-on Current Transformer
See page 168



TPS FLEX 36-TF-II
Flexible Current Probe
(Range: 30A to 3000A / 60A to 6000A)
See page 168



TPS CLAMP 50A / 5A
Clip-on Current Transformer
See page 168



TPS VOLTPROBE 10V
10V Voltage Probe
(Range: 10V to 600V)
See page 168



TPS VOLTPROBE 1KV
1000V Voltage Probes
(Range: 10V to 1700V)
See page 168



CS1750/1760
Soft Case for 1750 & 1760
See page 168

Included Accessories

4 x TPS Flex 24-TF-II Flexible Current Probes, 4 x TPS VoltProbe 600V, 2GB Internal Flash Memory, ST1760 Standard Ethernet Cable, RS232 Interface Cable and RS232-USB Adapter, CS1760 Crossover Ethernet Cable, 1 Mains Cable, PC Software on CD, WC17XX Colour Localisation Set, GPS-time Sync (1760TR only), CS 1750/1760 Carrying Bag, Hardware and Software Manual.

Basic Models: Excl. Current Clamps, TPS Flex 24-TF-II.

Ordering Information

FLUKE-1760TR INTL	High Speed Transient Power Quality Recorder Topas and Kit
FLUKE-1760TR BASIC	High Speed Transient Power Quality Recorder Topas
FLUKE-1760 INTL	Power Quality Recorder Topas and Kit
FLUKE-1760 BASIC	Power Quality Recorder Topas

Fluke 1770 Series Three-Phase Power Quality Analyzers



Fluke 1777



Automatic measurements. More flexibility. Better power quality troubleshooting.

Fluke 1770 Series Three-Phase Power Quality Analyzers eliminate the complexities of power quality logging, troubleshooting, and analysis. Engineered to be the faster, easier way to perform power quality studies, the 1770 Series offers automatic measurements, a straightforward user interface and setup, best-in-class specifications, and a simplified reporting platform. The instrument can also be powered directly from the measurement circuit, eliminating the need to find a power outlet or use a lengthy extension cord.

With the 1770 Series you'll never miss a critical power quality event—from fast transients up to 8 kV, harmonics up to 30 kHz, dips and swells, as well as the voltage, current, and power measurements that enable you to characterize your electrical system.

- **Automatically measure power and power quality parameters:** Critical power quality data is captured as soon as you begin a session, without extensive setup or selections
- **Intuitive user interface:** The streamlined user interface makes it easy to navigate between measurement parameters like V/A/Hz, power, dips and swells, harmonics, or power quality health at the push of a button
- **High-speed voltage transient capture:** Capture damaging high-speed transients so you can mitigate their effects before equipment fails
- **Analysis and reporting:** Comes standard with Fluke Energy Analyze Plus software giving you the ability to create custom-sized reports, or leverage built-in one-click reporting to industry standards like EN 50160, IEEE 519 and GOST 33073

Recommended Accessories



117XX-FLEX 1500
1500A 12 inch iFlex®
Current Clamps (Purchase as individual, 3pk or 4pk)
See page 167



117XX-FLEX 3000
3000A 24 inch iFlex®
Current Clamps (Purchase as individual, 3pk or 4pk)
See page 167



117XX-FLEX 6000
6000A 36 inch iFlex®
Current Clamps (Purchase as individual, 3pk or 4pk)
See page 167



140S-EL/3PK
40A Clamp-on Current Transformer 3 pack (Purchase as individual or 3pk)
See page 167



1400S-EL
AC Current Clamp



MP1-3R/1B
Magnet Probe 1 (3 x Red, 1 x Black)
See page 167



801-2010S-EL
2000A AC/DC Current Clamp

Applications	1773	1775	1777
Energy surveys and load testing	•	•	•
Harmonic surveys	•	•	•
Nuisance circuit breaker tripping		•	•
Power utility power quality surveys		•	•
Discovery of equipment failures caused by transients		•	•
Capture high speed transients up to 20MHz			•

Key features		1770 Series Three-Phase Power Quality Analyzers
Voltage inputs		
Number of inputs	4 inputs, 3 phases and neutral referenced to PE (5 connectors)	
Measurement category	1000 V CAT III / 600 V CAT IV	
Maximum input voltage	1000 V rms / 1000 V dc (1700 Vpk)	
Nominal voltage range	Wye and single phase: variable (50 V – 1000 V) Delta: Variable (100 V – 1000 V) IEC 61000-4-30 Class A compliance for the nominal voltages (V _{din}) 100 V – 690 V	
Input impedance	10 MΩ between P-P and P-N, 5 MΩ between P-PE and N-PE	
Bandwidth	DC to 30 kHz for PQ measurements, excluding transients	
Resolution	24-bit synchronous sampling	
Sampling frequency	80 kS/s at 50/60 Hz	
Scaling	1:1, variable for use of potential transformers	
Voltage transients		
Measurement range	±8 kV	
Sampling rate	1775: 1 MS/s 1777: 1 MS/s, 20 MS/s	
Bandwidth	DC to 1 MHz	
Trigger	Adjustable trigger level. Triggers on high-frequency components > 1.5 kHz	
Resolution	14-bit synchronous sampling	

Current inputs	
Number of inputs	4 inputs 3 phases and Neutral, range selected automatically to attached sensor
Range - AC	1 A to 1500 A with i17XX-FLEX1500 12 1 A to 1500 A with i17XX-FLEX1500 24 3 A to 3000 A with i17XX-FLEX3000 24 6 A to 6000 A with i17XX-FLEX6000 36 40 mA to 40 A with clamp i40s-EL 4 A to 400 A with clamp i400s-EL
Range - DC	20 A to 2000 A with 80i-2010-EL clamp
Bandwidth	DC to 30 kHz
Resolution	24-bit synchronous sampling
Sampling frequency	80 kS/s at 50/60 Hz
Scaling	1:1, variable
Input voltage	Clamp: 50 mV / 500 mV rms; CF 2.8 Rogowski Coil: 15 mV / 150 mV rms at 50 Hz, 18 mV / 180 mV rms at 60 Hz; CF 4 all at nominal probe range
Input impedance	11 kΩ
Aux inputs	
Wired connection with 17XX-AUX adapter	
Number of inputs	2
Input range	Direct: 0 V dc to ± 10 V dc 0 V to 1000 V dc
Input impedance	Direct: 2.92 MΩ
Scale factor	Format: mx + b (gain and offset) user configurable
Displayed units	User configurable (up to 8 characters, for example °C, psi, or m/s)
Data acquisition voltage and current	
Input mains frequency	DC, 50/60 Hz 15 % (42.5 Hz ... 57.5 Hz, 51 Hz ... 69 Hz)
Topologies	1-φ, 1-φ IT, Split phase, 3-φ delta, 3-φ wye IT, 3-φ Aron/Blondel (2 element delta), 3-φ delta open leg, 3-φ high leg delta
Data storage	Fluke 1773/1775: 8 GB internal (expandable with microSD card) Fluke 1777: 32 GB microSD card (installed)
Memory size	Typical 10 logging sessions of 8 weeks with 1-minute intervals and 100 events. The number of possible logging sessions and logging period depends on user requirements
Real time accuracy	Internal: 3 ppm (0.26 s per day, 8 s per month) NTP (internet time): Depending on internet latency, typical < 0.1 s absolute to UTC GPS: < 1 ms absolute to UTC
Trend interval	
Measured parameter	See operator manual
Trend interval	User selectable: 1 sec, 3 sec, 5 sec, 10 sec, 30 sec, 1 min, 5 min, 10 min, 15 min, 30 min
Averaging interval min/max values	Voltage, Current: ½ cycle RMS (20 ms at 50 Hz, 16.7 ms at 60 Hz) Aux, Power: 200 ms
Total harmonic distortion	THD for voltage and current is calculated on 50 harmonics
Power quality measurements	
Measured parameter	See operator manual
Harmonics	h0 ... h50 % fund and RMS for voltage, current and power Phase angles for voltage and current up to h11
Interharmonics	ih0 ... ih50 % fund and RMS for voltage and current
Supraharmonics	2–9 kHz with 200 Hz bins 9–30 kHz with 2 kHz bins RMS for voltage and current
Harmonics measurement method	Grouped, sub-grouped and single harmonic bins according to IEC 61000-4-7. Method selected automatically based on configured PQ standard or user configurable.
Total harmonic distortion	Calculated on up to 50 harmonics (depends on selected PQ standard)
Mains signaling	2 frequencies in the range from 110 Hz to 3000 Hz
Events - Voltage	Dip, swell, interruption, rapid voltage change, mains signaling, waveshape deviation, transients
Events - Current	Inrush current
Triggered recordings	Half cycle RMS of voltage and current for 10 s Waveform of voltage and current for 10/12 cycles Mains signaling: 200 ms RMS of mains signaling voltage up to 120 s Transients: Waveform of voltage (Fluke 1777: 1 MS/s or 20 MS/s, 500,000 pts, Fluke 1775: 1 MS/s, 25,000 pts)
Standard compliance	
Power	IEEE 1459
Harmonics	IEC 61000-4-7: Class 1 IEEE 519 (short time and very short time harmonics)
Flicker	IEC 61000-4-15 Class F1
Power quality	IEC 61000-4-30 Class A, IEC 62586 PQI-A-PI
Power quality compliance	EN 50160 + GOST + NEQUAL + NETCODE + FOL

Interfaces	
Ethernet	1 Gbit/s 1000BASE-T
USB type A	USB 2.0 high speed for USB flash drives to transfer measurement data, firmware updates and license installation. Max. supply current: 500 mA
USB-C	USB 2.0 high speed for data download to PC and calibration (requires USB type A to USB-C or USB-C to USB-C cable) Auxiliary power supply for the Analyzer (requires USB C power adapter PD 2.0 or higher with 9 V 1.8 A support) USB 3.0 super-speed for USB-C flash drives to transfer measurement data, firmware updates and license installation. Max. supply current: 900 mA
WiFi/BLE module ¹	802.11 ac 2.4 GHz / 5 GHz, support for concurrent access point and client mode Bluetooth 5.0/BLE Antenna: Internal and external ²
LTE/4G module ³	LTE-A Cat 12 Worldwide LTE-A and UMTS/HSPA+ coverage Antenna: External ²
GPS	MCX connector to attach a GNSS antenna for GPS/GLONASS ²

¹ Not in 177X/BASIC versions

² Requires 5m extension cable, Fluke p/n 5263915

³ Availability and supported providers vary by country. Check with your local Fluke representative.

Ordering information ¹							
Quantity	Model	FLUKE-1773	FLUKE-1773/ BASIC	FLUKE-1775	FLUKE-1775/ BASIC	FLUKE-1777	FLUKE-1777/ BASIC
1	FLUKE-1773, POWER QUALITY ANALYZER	•	•				
1	FLUKE-1775, POWER QUALITY ANALYZER			•	•		
1	FLUKE-1777, POWER QUALITY ANALYZER					•	•
4	i17XX-FLEX1500 24, FLUKE-17XX IFLEX 1500 A 24 IN, 2.0 M	•		•		•	
1	FLUKE-17XX, FLAT CABLE, VOLTAGE TEST LEAD 3-PHASE+N	•	•	•	•	•	•
4	AC285, BLACK ALLIGATOR CLIP	•	•	•	•	•	•
1	AC285, GREEN ALLIGATOR CLIP	•	•	•	•	•	•
1	BLACK 1 M USB-C CABLE	•	•	•	•	•	•
1	LINE CORD	•	•	•	•	•	•
1	FLK-17XX 0.18 M TEST LEAD SET, NONSTACK/STACK	•	•	•	•	•	•
1	GREEN TEST LEAD	•	•	•	•	•	•
1	MP1-3R/1B, MAGNET PROBE 1, 3 RED / 1 BLACK MAGNET PROBES FOR 4 MM BANANA			•		•	
1	FLUKE-174X-HANGER KIT			•		•	
1	FLUKE-177X-4204 WIFI/BLE MODULE			•		•	
1	CABLE MARKER SET (FOR VOLTAGE AND CURRENT)	•	•	•	•	•	•
1	FLUKE-174X-MA-C8 WALL OUTLET ADAPTER	•	•	•	•	•	•
1	STATEMENT OF CALIBRATION PRACTICES	•	•	•	•	•	•
1	BLACK SOFT CASE			•	•		
1	FLUKE-1777 HARDCASE					•	•

¹ Standard units include i17XX-FLEX1500 24" current probes and a WiFi/BLE adapter. /BASIC models do not include current probes or WiFi/BLE adapters.

Accessories	Description
i17XX-FLEX1.5KIP	FLUKE-17XX IP65 flexible current probe 1.5 KA 24 IN / 60 CM
i17XX-FLEX3KIP	FLUKE-17XX IP65 flexible current probe 3 KA 24 IN / 60 CM
i17XX-FLEX6KIP	FLUKE-17XX IP65 flexible current probe 6 KA 36 IN / 90 CM
I40S-EL3X	FLUKE-17XX I40S-EL clamp-on current transformer
FLUKE-I400S-EL	17XX 400 A current clamp
80i-2010s-EL	2000 A AC/DC current clamp
MP1-3R/1B	Magnet probe 1, 3 red / 1 black magnet probes for 4 mm banana
FTP17XXPQ	Fused test probe set, 3 red/1 black
FLUKE MA-C8	Wall outlet adapter, FLUKE-174X
i17XX-FLEX5M-EXT	FLUKE-17XX IFLEX extension cable 5 M
FLUKE-177X WIFI/BLE module	WiFi/BLE module
BP1770	Battery pack (50 °C ambient)
FLUKE-17XX AUX	Auxiliary input adapter, 17XX
Black soft case	Soft case
FLUKE-1777 hardcase	IP67 rated hard case with wheels
FLUKE-PQ400	FLUKE-PQ400 POWER QUALITY WINDOW

Fluke Norma 6000 Series Portable Power Analysers



Fluke Norma 6003



Fluke Norma 6004



The Fluke Norma 6000 Series Portable Wideband Precision Power Analysers gives you more freedom than ever before to make high accuracy power measurements wherever you need. Designed for portability the lightweight, battery powered Fluke 6000 Series eliminates the need to carry large analysers into the field, allowing you to make measurements directly at the load in nearly any environment. By measuring directly at the load, you can discover how the equipment operates under real-world conditions, with real-world variables, not just at a test bench or in the lab.

- Measure three phase power and DC output power at the same time (available in 3 or 4 channel), with voltage and current inputs on each channel
- Make mechanical torque and speed measurements using the included inputs and outputs of the Fluke 6003+ and 6004+
- 0.1% accuracy, 500kHz bandwidth, 200ks/s sample rate so you can rely on the power conversion system measurements you take no matter what distortion may be present
- Take precision power measurements almost anywhere – highly portable, battery powered analyser weighing only 3.5kg and 9.3cm depth with up to 10 hours of battery life
- View critical data in the field on the main display meter, waveform, harmonics up to the 100th, vector and trend
- Ensure high common-mode rejection and allow flexible configurations according to measurement requirements using the electrically isolated channels
- User adjustable measurement rate from 100ms to 1s with continuous logging via 32GB of onboard storage
- Easy in-field set up using the large 5.7" front LCD screen or a remote PC connection (USB or RS485),
- Online measuring, data download and analysis with included PC software (Fluke Power Analyser Software)
- Three year warranty

	Norma 6003	Norma 6003+	Norma 6004	Norma 6004+
Number of channels for voltage / current	3/3	3/3	4/4	4/4
Motor speed / torque measurement	-	Yes	-	Yes
Basic accuracy	0.1%			
Channel-to-channel isolation	Yes			
Main Function	Meter, Scope, Harmonic, Phasor, Trend			
Measuring Parameters *Available in N6003+ and N6004+ only	RMS, DC Component, AC Component, Rectified Mean, Peak Value, Peak-Peak, Crest Factor, Form Factor, Fundamental Component, Fundamental Content, Harmonic Distortion, Harmonic Content, Harmonic Factor for voltages and currents, Active Power, Reactive Power, Apparent Power, Power Factor, Phase Shift, Efficiency, Impedance, Electric Energy, Charge/Discharge capacity (Ah), Frequency, Motor Speed*, Torque*, Mechanical Power*, Mechanical Energy*			
IP and CAT rating	IP50, CAT III 1000V, CAT IV 600V			
Colour screen	5.7", backlight, 4:3			
Lithium battery	10.8 V/5000 mAh, 54 Wh			
Communication Interface	USB/RS485			
PC Software	Fluke Power Analyser software			
Storage Capacity	32GB			

Recommended Accessories



801-2010S
2000A AC/DC
Current Clamp
See page 168



801-2010S/3PK
2,000A AC/DC
Current Clamp 3 pack
See page 168



BP291
Additional Battery
See page 167



Included Accessories

Battery BP291, Power Supply Adapter (18V DC, CAT IV 600V Adapter), Power Line Cord, Mains Adapter Set, Test Lead Set, USB (mini B) Cable, RS-485/Synchrony Adapter (3.81 mm, black, 3 pin), Speed / Torque Adapter (3.81 mm, black, 6 pin), USB Flash Drive for PC SW and User Manual, Soft Case.

3-Channel Models:

Test leads, 1.5 m, 3 x red, 3 x black, 6 x blue, Alligator clips, 3 x Red, 3 x Black, 6 x Blue

4-Channel Models:

Test Leads, 1.5 m, 4 x Red, 4 x Black, 8 x Blue, Alligator Clips, 4 x Red, 4 x Black, 8 x Blue

Ordering Information

NORMA 6003 3 Channel Portable Power Analyser

NORMA 6003+ 3 Channel Portable Power Analyser with Speed/Torque Inputs

NORMA 6004 4 Channel Portable Power Analyser

NORMA 6004+ 4 Channel Portable Power Analyser with Speed/Torque Inputs

Fluke PQ400 Electrical Measurement Window



Fluke PQ400

Compliance without compromise. Safety without sacrifice.

The Fluke PQ400 Electrical Measurement Window enables the connection of three phase measurement equipment to energized panels, without the need to open the panel door, or wear supplemental personal protective equipment (PPE).

The Fluke PQ400 gives you access to the critical power quality and energy data you need, all while decreasing testing time and helping you to maintain safety.

- Reduce the risk of arc-flash and electrocution, while increasing the safety of your personnel
- Decrease maintenance costs and reduce downtime by making critical power quality and energy measurements without opening the panel door, enabling logging and monitoring at any time—without disrupting operations
- Reduce work permit requirements and processes by reducing the hazards associated with taking measurements on open panels, saving time and effort
- Increase measurement efficiency and reduce the need for arc-flash PPE1, saving time, increasing efficiency and increasing operator comfort

General specifications

Maximum voltage between any voltage terminal and earth ground	1000 V
Maximum voltage between any current terminal and earth ground	30 V
Safety	
General	IEC 61010-1: pollution degree 2
Measurement	IEC 61010-2-030: CAT IV 600 V / CAT III 1000 V
Dimensions	
Outside	148 mm x 187 mm x 23 mm (W x H x D) (148 mm x 370 mm x 19 mm with cover opened)
Inside	140 mm x 158 mm x Di (W x H x D) Di = 58 – thickness of panel door in mm
Supported electrical enclosures	
Enclosure	UL 50/NEMA environmental type 1 (Type 12 when PQ400 cover is closed)
Panel thickness	Max. 3.5 mm (10 gauge)
Environment	
Operating/storage temperature	-25 °C to 60 °C (-13 °F to 140 °F)
Humidity	10 % to 90 % in dependency of temperature according to IEC 60721-3-3 Class 3K6 (modified): -25 °C to 35 °C: 10 % to 90 %, 50 °C: max. 35 %, 60 °C: max. 23 %
Altitude	
Operating	2,000 m (up to 4000 m derate to CAT II 1000 V, CAT III 600 V, CAT IV 300 V)
Storage	12,000 m
Ingress protection	
Rating	IEC 60529: IP67 with cover closed, IP50 with cover opened and all connectors attached
Vibration	IEC 60068-2-6 , MIL-PRF28800F: Random vibration class 2
Weight	2.1 kg (4.6 lb)

Recommended Accessories



173X
Power Loggers
See page 86-87



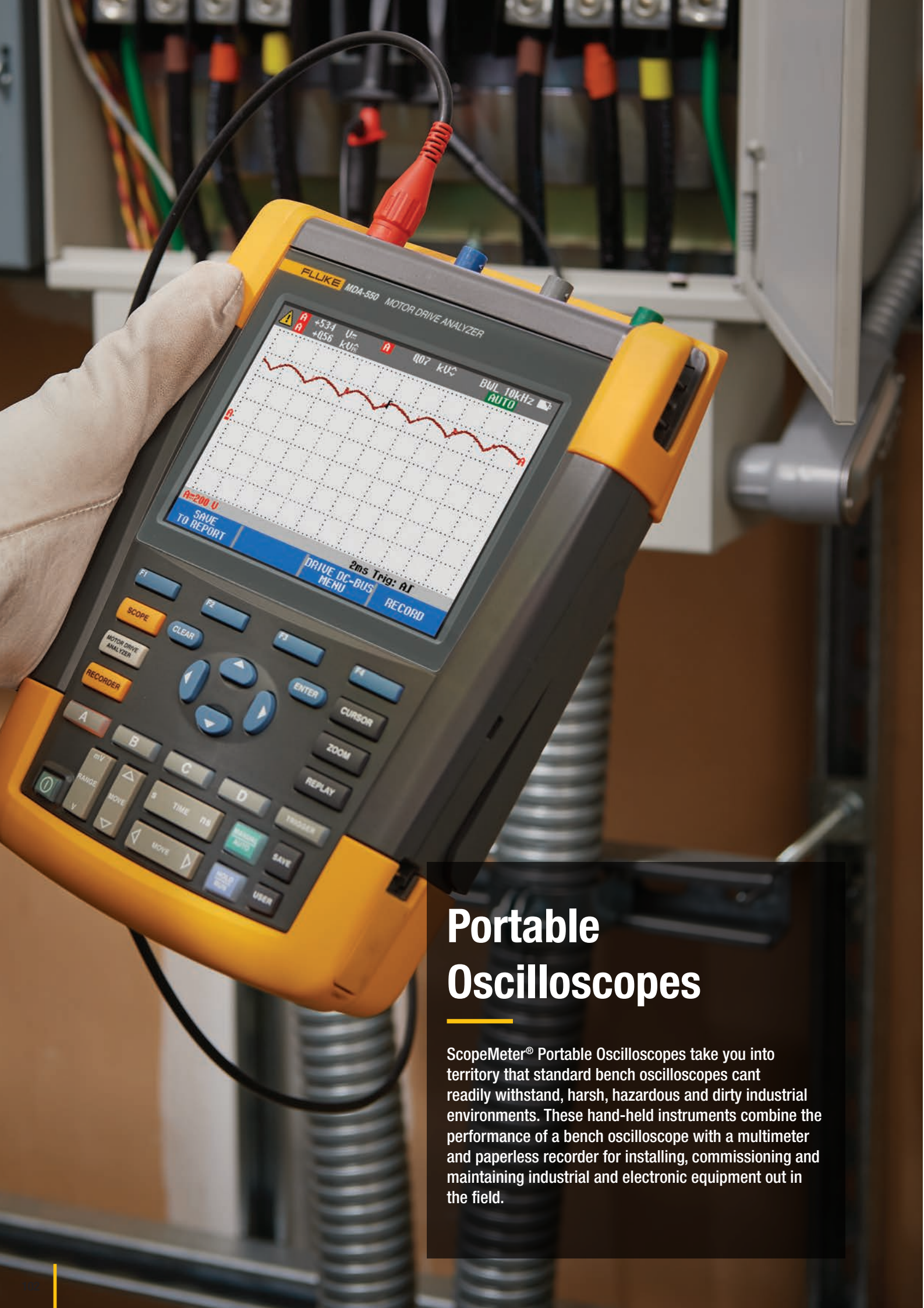
174X
Three-Phase Power
Quality Loggers
See page 88

Ordering Information

FLUKE-PQ400	Power Quality Window*
FLUKE-PQ400/B	Power Quality Basic**
I17XX-FLEX2M-M2M4P	male-male cable 2m for connection of Fluke-17xx iFlex® current probes (4pcs).
I17XX-FLEX2M-M2M1P	male-male cable 2m for connection of Fluke-17xx iFlex® current probes, (1pcs).
I17XX-BNC-M2M	Fluke-17xx 4pin male to BNC male cable 2m (1pcs)
I17XX-BNC-M2F	Fluke-17xx 4pin male to BNC female cable 0.1m (1pcs)
FLUKE-PQ-MARKER	cable marker set 3P+N+PE

* Fluke PQ400 contents: PQ400 enclosure, 4 x male-male cable 2m for connection of Fluke-17xx iFlex® current probes, cablemarker set 3P+N+PE, cable ties and instruction sheet.

** Basic version does not include cables, cable ties or markers.



Portable Oscilloscopes

ScopeMeter® Portable Oscilloscopes take you into territory that standard bench oscilloscopes can't readily withstand, harsh, hazardous and dirty industrial environments. These hand-held instruments combine the performance of a bench oscilloscope with a multimeter and paperless recorder for installing, commissioning and maintaining industrial and electronic equipment out in the field.

Fluke ScopeMeter® Test Tool Selection Guide

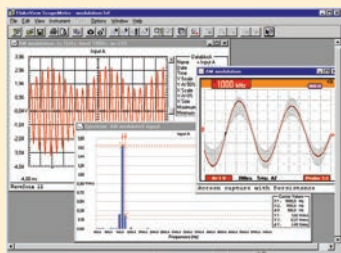


Models	120B Series			190 Series III								MDA-550 Series III
	123B	124B	125B	190-062	190-102	190-202	190-104	190-204	190-502	190-504	MDA-550	
Bandwidth	20 MHz	40 MHz	40 MHz	60 MHz	100 MHz	200 MHz	100 MHz	200 MHz	500 MHz	500 MHz	500 MHz	
Input channels												
2 scope/DMM channels	•	•	•									
2 scope channels + 1 DMM				•	•	•			•			
4 channels							•	•		•	•	
Isolated inputs				•	•	•	•	•	•	•	•	
Triggering												
Connect-and-View™	•	•	•	•	•	•	•	•	•	•	•	
IntellaSet™ Technology	•	•	•									
Advanced triggering				•	•	•	•	•	•	•	•	
Advanced measurement function												
Cursors		•	•	•	•	•	•	•	•	•	•	
TrendPlot™	•	•	•	•	•	•	•	•	•	•	•	
ScopeRecord™	•	•	•	•	•	•	•	•	•	•	•	
100 screen replay				•	•	•	•	•	•	•	•	
Industrial Bus Health			•									
Harmonics			•								•	
FFT				•	•	•	•	•	•	•	•	
Power measurements			•	•	•	•	•	•	•	•	•	
Waveform mathematics			•	•	•	•	•	•	•	•	•	
Guided motor-drive analysis												
Motor drive input (V, I, Unbalance)											•	
Motor drive input harmonics (2-150)											•	
Motor drive dc bus											•	
Motor drive output PWM (V, I, dV/dt, overshoot)											•	
Motor drive input PWM (V, I, dV/dt, overshoot)											•	
Motor shaft voltage discharges											•	
EN61010-1 safety												
CAT III 1000 V				•	•	•	•	•	•	•	•	
CAT IV 600 V	•	•	•	•	•	•	•	•	•	•	•	
Power												
Li-ion	•	•	•	•	•	•	•	•	•	•	•	
Battery (hours)	7	7	7	4 (opt 8)	4 (opt 8)	4 (opt 8)	7	7	7	7	7	
General specifications												
Size (H x W x D)	259 mm x 132 mm x 55 mm			270 mm x 190 mm x 70 mm (10.5 in x 7.5 in x 2.8 in)							265 mm x 192 mm x 70 mm (10.5 in x 7.6 in x 2.8 in)	
Weight	1.4 kg (3.2 lb)			2.1 kg (4.6 lb)			2.2 kg (4.8 lb)					
Fluke Connect™												
Fluke Connect app	•	•	•									

FlukeView™ 2 ScopeMeter software for documenting, archiving and analysis

Get more out of your ScopeMeter Test Tool with FlukeView 2 ScopeMeter Software for Windows.

- Documentation—transfer waveforms, screens and data to your PC for printing or importing data into a report
- Add text to ScopeMeter Test Tool settings—give operators guidance when recalling settings
- Archive—create a library of waveforms for easy reference, or waveform comparison
- Analysis—use cursors or export data to another analysis program



*Fluke Connect is only available in selected countries. Please check with your local distributor for available models.

Fluke ScopeMeter® Portable Oscilloscopes 190 Series III

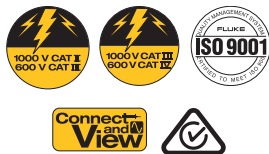


Fluke 190-504



Fluke 190-204

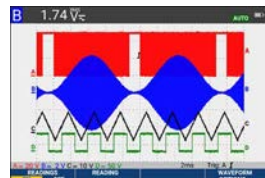
Fluke 190-202



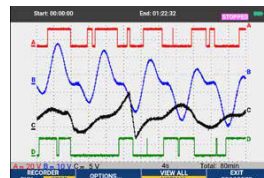
Fluke 190 Series II ScopeMeter Portable Oscilloscopes are high-performance scopes built for harsh industrial environments. Introducing the first high-performance portable oscilloscopes with 2 or 4 independently insulated input channels, an IP51 dust- and drip water proof rating and a CAT III 1000 V/CAT IV 600 V safety rating.

Choose from 500 MHz, 200 MHz, 100 MHz or 60 MHz bandwidth models. Now plant maintenance engineers can take a 2- or 4-channel scope into the harsh world of industrial electronics.

- Up to four independent floating isolated inputs, up to 1000V
- Up to 5 GS/s real time sampling (depending on model and channels used)
- Large, bright color display is easy to view in nearly any environment
- Easy to store and view historical data and transfer to a PC via USB or Wifi
- Deep memory: 10,000 points per trace waveform capture
- CAT III 1000 V/CAT IV 600 V safety rated instrument for industrial environments
- Up to eight hours of battery operation using BP291
- Isolated USB host port for direct data storage to a USB memory device;
- Security slot: lock down oscilloscope with Kensington lock while unattended
- IP51 rating, dust- and drip-proof
- Connect-and-View™ triggering for intelligent, automatic triggering on fast, slow and even complex signals
- Automatic capture and REPLAY of 100 screens
- ScopeRecord™ Roll mode gives 30,000 points per input channel for low frequency signal analysis
- Three year warranty



Connect and View captures even the most complex signals without requiring additional setup



Trend multiple measurements capturing signal intermittent events, signal drift or fluctuations

Specifications	190-062 -III	190-102 -III	190-202 -III	190-502 -III	190-104 -III	190-204 -III	190-504 -III
Bandwidth (MHz)	60	100	200	500	100	200	500
Scope Inputs	2	2	2	2	4	4	4
Dedicated DMM	1	1	1	1	-	-	-
Dual Input Trendplot™	•	•	•	•	-	-	-
Four Input Trendplot™	-	-	-	-	•	•	•
ScopeRecord Mode	•	•	•	•	•	•	•
Automatic Capture & Replay Mode	•	•	•	•	•	•	•
Cursors	•	•	•	•	•	•	•
Zoom	•	•	•	•	•	•	•
Bus Health Test Mode	-	-	-	-	-	-	-
Advanced Power Measurements	•	•	•	•	•	•	•
EN61010-1 CAT III Safety Rating	1000 V	1000 V	1000 V	1000 V	1000 V	1000 V	1000 V
EN61010-1 CAT IV Safety Rating	600 V	600 V	600 V	600 V	600 V	600 V	600 V
Battery	4 hr Li-ion (8 hr Opt)	4 hr Li-ion (8 hr Opt)	7 hr Li-ion	7 hr Li-ion	7 hr Li-ion	7 hr Li-ion	7 hr Li-ion
Optical RS-232	-	-	-	-	-	-	-
Isolated USB	•	•	•	•	•	•	•
Isolated USB Memory	•	•	•	•	•	•	•

Recommended Accessories

Accessories for the Fluke 190-II Portable Oscilloscopes are available in the Accessories Section on Pages 161 - 162.

Included Accessories

Fluke 190 4-Channel Models:

Four Voltage probes - (1 red, 1 grey, 1 blue, 1 green), Double Capacity BP291 Li-ion Battery, BC190 Battery Charger, Hanging Strap, Adjustable Hand Strap, FlukeView®-2 demo package, and USB Interface Cable for PC connectivity.

Fluke 190 2-Channel Models:

Two voltage probes - (1 red, 1 blue), Single Capacity BP290 Li-ion Battery, TL175 Test Leads (1 red, 1 black).

Fluke /S (SCC-290 Kit) Models:

FlukeView ScopeMeter Software and C290 Hard Carrying Case.

SCC293 FlukeView-2 ScopeMeter Software package (full version) with CXT293 Carrying Case and WiFi dongle

Ordering Information

FLUKE-190-504-III-S	Colour ScopeMeter 500MHz, 4 Channel with SCC-290 Kit
FLUKE-190-504-III	Colour ScopeMeter 500MHz, 4 Channel
FLUKE-190-502-III-S	Colour ScopeMeter 500MHz, 2 Channel with SCC-290 Kit
FLUKE-190-502-III	Colour ScopeMeter 500MHz, 2 Channel
FLUKE-190-204-III-S	Colour ScopeMeter 200MHz, 4 Channel with SCC-290 Kit
FLUKE-190-204-III	Colour ScopeMeter 200MHz, 4 Channel
FLUKE-190-202-III-S	Colour ScopeMeter 200MHz, 2 Channel with SCC-290 Kit
FLUKE-190-202-III	Colour ScopeMeter 200MHz, 2 Channel
FLUKE-190-104-III-S	Colour ScopeMeter 100MHz, 4 Channel with SCC-290 Kit
FLUKE-190-104-III	Colour ScopeMeter 100MHz, 4 Channel
FLUKE-190-102-III-S	Colour ScopeMeter 100MHz, 2 Channel with SCC-290 Kit
FLUKE-190-102-III	Colour ScopeMeter 100MHz, 2 Channel
FLUKE-190-062-III-S	Colour ScopeMeter 60MHz, 2 Channel with SCC-290 Kit
FLUKE-190-062-III	Colour ScopeMeter 60MHz, 2 Channel

Fluke 120B Series Industrial ScopeMeter® Hand-Held Oscilloscopes



Fluke 125B



Simplified testing, more insight and faster electro-mechanical troubleshooting

The compact ScopeMeter® 120B Series, is the rugged oscilloscope solution for industrial electrical and electro-mechanical equipment troubleshooting and maintenance applications. It's a truly integrated test tool, with oscilloscope, multimeter and high-speed recorder in one easy-to-use instrument. The ScopeMeter 120B Series also integrates with Fluke Connect® mobile app and FlukeView® for ScopeMeter software to enable further collaboration, data analysis and archiving of critical test information.

The 120B Series Industrial ScopeMeter Test Tools include innovative functions designed to help technicians troubleshoot faster and get the answers they need to keep their systems up and running. Colour Display Waveforms with Connect and View™ trigger and setup technology and automatically view related numerical measurements using Fluke IntellaSet™ technology, all without making manual measurement adjustments.

- Dual-input digital oscilloscope and multimeter
- 40 MHz or 20 MHz oscilloscope bandwidth
- Two 5,000-count true-RMS digital multimeters
- Connect-and-View™ trigger simplicity for hands-off operation
- IntellaSet™ technology automatically and intelligently adjusts numerical readout based on the measured signal
- Dual-input waveform and meter reading recorder for trending data over extended periods
- With Recorder Event Detect capabilities and expandable micro SD memory, recording sessions can be done for up to 14 days
- The ScopeMeter 125B Bus Health Test analyses the electrical signals on the Industrial Network Bus and gives a clear "Good", "Weak" or "Bad" indication mark for each of the relevant parameters used in CAN-bus, Profibus, Foundation Field, RS2-232 and more.
- Three year warranty

Specifications	123B	124B	125B
Full function dual input scope and meter	•	•	•
Oscilloscope bandwidth MHz	20	40	40
Meter and Scope Recorder	•	•	•
Scope cursor measurements	-	•	•
Power and harmonics measurements	-	-	•
Bus health	-	-	•
10:1 Voltage Probe	-	•	•
i400S AC Current Clamp	-	-	•

*Fluke Connect is only available in selected countries. Please check with your local distributor for available models.

Recommended Accessories



Included Accessories

Fluke 120B: Li-Ion Battery Pack, Charger/Power Adapter, 10:1 Voltage Probe (124B, 125B), i400S AC Current Clamp (125B), 2 Shielded Test Leads with Ground Leads, Black Test Lead, Red and Blue Hook Clips, Banana to BNC Adapter, USB Angled Adapter and WiFi USB Adapter.

Fluke 120B/S: Also include Soft Carry Case, FlukeView™ for Windows® Software, Magnetic Hanger and Screen Protector.

Ordering Information

FLUKE-125B/UN/S	Industrial 40MHz ScopeMeter Kit
FLUKE-125B/UN	Industrial 40MHz ScopeMeter Kit
FLUKE-124B/UN/S	Industrial 40MHz ScopeMeter Kit
FLUKE-124B/UN	Industrial 40MHz ScopeMeter Kit
FLUKE-123B/UN/S	Industrial 20MHz ScopeMeter Kit
FLUKE-123B/UN	Industrial 20MHz ScopeMeter Kit

Fluke MDA-550-III Motor Drive Analysers



Fluke MDA-550-III



Simplify complex motor-drive troubleshooting

The Fluke MDA-510 and MDA-550 Motor Drive Analysers simplify the troubleshooting process for variable frequency drives. On screen step-by-step guided measurements to show you where to make voltage and current connections, while preset measurement profiles ensure you will capture all the data you need for each critical motor-drive section, from the input to the output, the dc bus and the motor itself.

- Measure key motor-drive parameters including voltage, current, DC Bus voltage level and AC ripple, voltage and current unbalance and harmonics (MDA-550), voltage modulation, and motor shaft voltage discharges (MDA-550)
- Perform extended harmonics measurements to identify the effects of low and high order harmonics on your electrical power system
- Conduct guided measurements for motor-drive input, DC bus, drive output, motor input and shaft measurements (MDA-550) with graphical step-by-step voltage and current connection diagrams
- Preset measurement profiles collect data based on the chosen test procedure and reduce the need for complex configuration
- Capture additional parameters with full 500 MHz oscilloscope, meter and recording capability
- Three year warranty

Key Features

Motor Drive Input	Test Points
Phase - Phase	V-A-Hz
Phase - Ground	V pk, Vmax, Vmin, V pk-to-pk, Crest factor
Voltage Unbalance	V ac+dc unbalance, V pk-to-pk
Current Unbalance	A ac+dc unbalance, A pk-to-pk
Motor Drive DC Bus	
DC	V dc, V pk-to-pk, V pk max
Ripple	V ac, V pk-to-pk, Hz
Motor Drive Output	
Voltage and Current (filtered)	V-A-Hz, V pwm, V/Hz
Voltage Unbalance	Vpwm unbalance, V pk-to-pk
Current Unbalance	A ac+dc unbalance, A pk-to-pk
Voltage Modulation	Phase-phase, Phase-ground, Phase-DC+, Phase-DC- : V pwm, V pk-to-pk, Hz, V/Hz, Delta V, Delta V/s, Risetime peak, Overshoot
Motor Input	
Voltage and Current (filtered)	V-A-Hz, V pwm, V pk, A ac+dc, A pk, V/Hz, Crest factor
Voltage Unbalance	V pwm unbalance, V pk-to-pk
Current Unbalance	A ac+dc unbalance, A pk-to-pk
Voltage Modulation	Phase-phase, Phase-ground: V pwm, V pk-to-pk, Hz, V/Hz, Delta V, Delta V/s, Risetime peak, Overshoot
MDA 550 only	
Motor Shaft	Shaft voltage events: V pk-to-pk, Delta V, Rise/fall time, Delta V/s, Events/s
Motor Drive Input Output and Motor Input	Voltage and Current Harmonics: V and A fundamental, Hz fundamental, %THD, %THD/TDD

Recommended Accessories



SVS-500
Shaft Voltage Measurement Kit



SB-500
Shaft Voltage Brush Set



BP291
4500 mAh capacity
Li-ion Battery
See page 167

Included Accessories

BP 291 Battery Pack, BC190 Charger Adapter, VPS 100:1 High Voltage Probes with Alligator Clips, VPS410-II-R 10:1 500MHz Voltage Probe, 400s AC Current Clamp, C437 Roller Case, WiFi dongle including FlukeView™ 2 software.

MDA-550 also includes: SVS-500 Shaft Voltage Set (3x Brush, Probe Holder, Two-piece Extension Rod and Magnetic Base).

Ordering Information

FLUKE-MDA-550-III Motor Drive Analyser, 4 Channel, 500 MHz with Motor Shaft and Harmonics



Process Calibration Tools

Fluke offer the most complete line of bench and field calibration equipment for the process industries. The products include accurate and dependable bench instruments as well as handheld, rugged tools designed to carry into the field.

Whether for bench or field-use, these instruments and tools are multi-functional and easy to use, as well as being rugged, reliable, accurate and dependable.

Maintenance Manager

Focus: Maintaining plant uptime and maintenance efficiency

What issues do you face?

- Ensuring continuous uptime
- Maintaining good ROI for equipment
- Compliance
- Process improvement
- Increase efficiency

Fluke solutions:

- Temperature
- ↑ Pressure
- ◆ Standards
- ▲ Process tools

Quality Manager

Focus: Maintaining and documenting product quality

What issues do you face?

- Complying with quality regulations
- Maintaining documentation of processes

Fluke solutions:

- Temperature
- ↑ Pressure
- ◆ Standards
- ▲ Process tools
- Software

Field Calibration Technician

Focus: Calibrating and verifying measurement devices

What issues do you face?

- Making accurate measurements
- Documenting procedures
- Increasing throughput

Fluke solutions:

- Temperature
- ↑ Pressure
- ◆ Standards
- ▲ Process tools
- Software
- ◆ Field Metrology Wells

Instrumentation Technician

Focus: Maintaining and verifying instrumentation throughout the plant

What issues do you face?

- Monitor and maintain sensors and transmissions
- Accurate measurements

Fluke solutions:

- Temperature
- ↑ Pressure
- ◆ Standards
- ▲ Process tools
- Software
- ◆ Field Metrology Wells

Handheld Pressure Calibrators



700PTP



719 PRO



729



729 PRO

mA Loop Calibrator



773

Precision Multimeter



8846A

Pressure Gauge



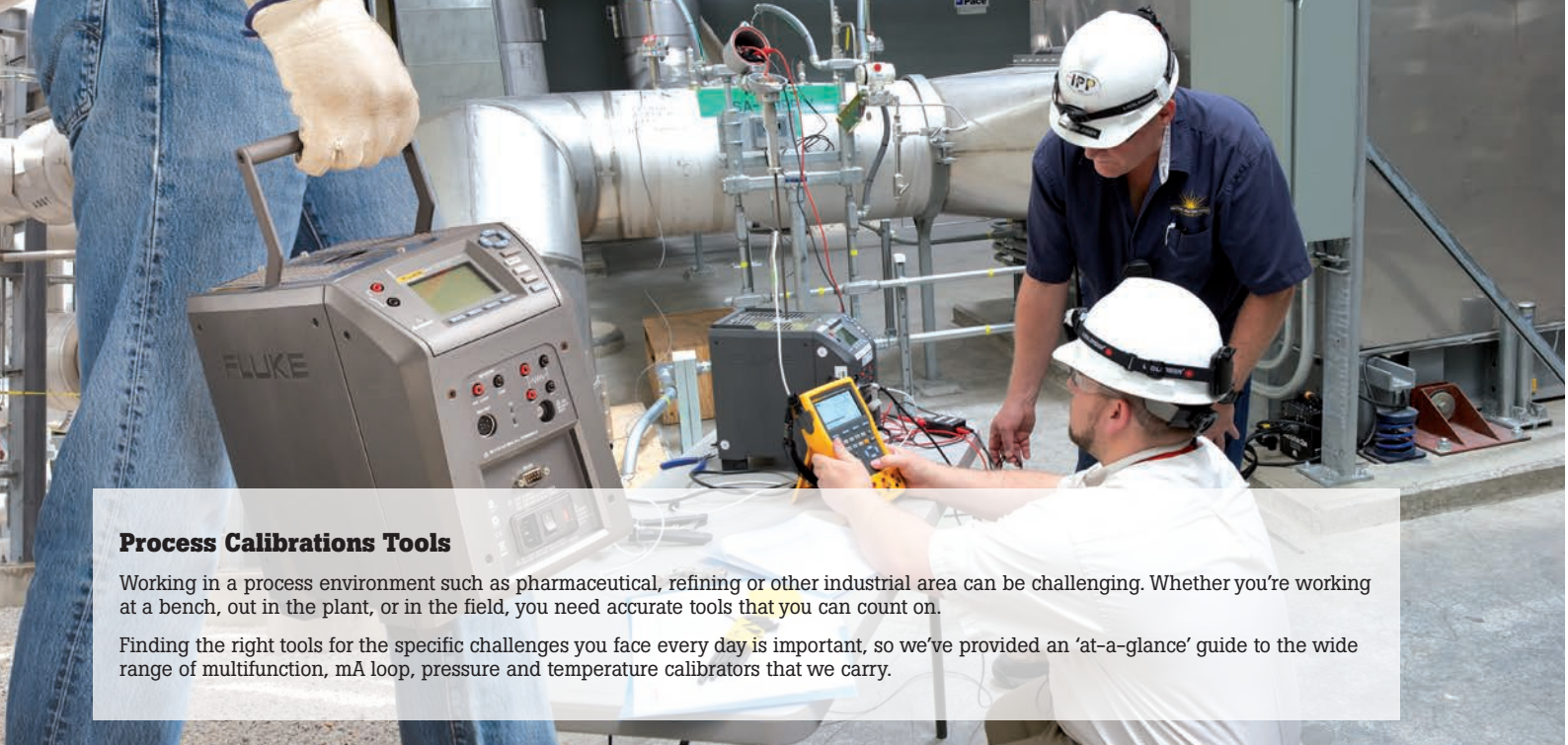
700G



Process Calibration Solutions

* Diagram is not intended to be an exact representation. Diagram components are not to scale and are for illustration purposes only.

Temperature Readouts and Probes	Process Calibrators				Software Solutions
 <p>1524 PROBES</p>	 <p>707</p>	 <p>725</p>	 <p>754</p>	 <p>789</p>	 <p>DPC/TRACK 2</p>



Process Calibrations Tools

Working in a process environment such as pharmaceutical, refining or other industrial area can be challenging. Whether you're working at a bench, out in the plant, or in the field, you need accurate tools that you can count on.

Finding the right tools for the specific challenges you face every day is important, so we've provided an 'at-a-glance' guide to the wide range of multifunction, mA loop, pressure and temperature calibrators that we carry.



mA Loop Calibration

Loop calibrators are essential tools for working with 4–20mA current loops. Fluke loop calibrators provides mA sourcing, simulation and measurement, readouts in both mA and % of span, 24 V loop supply, simple operation and accuracy you can count on.

Fluke offers the widest variety of mA calibration and test tools in the industry to address virtually all types of mA loop testing.

See pages 105 to 108



Electrical & Multifunction Calibration

Fluke Multifunction Calibration Tools are designed to calibrate almost anything. These calibration tools source and measure almost all process parameters, and documenting versions even document the results.

Fluke offers a broad range of field and bench calibrators to source, simulate and measure pressure, temperature and electrical signals to help you verify and adjust your test equipment of almost any process instrument.

See pages 109 to 111



Temperature Calibration

Fluke Temperature Calibrators simulate process sensors for testing temperature instrumentation. Specifically designed for the field, these lightweight compact tools are EMI tolerant, dust and splash resistant and offer an easy to use single push button interface. When paired with a temperature sensor they can take high accuracy temperature measurements to verify process temperatures and ensure the highest product quality and safety.

Fluke offer a variety of different bench and field temperature calibrators designed for your unique calibration and testing requirements.

See pages 112 to 117



Pressure Calibration

Instrumentation is found in virtually every process plant. Periodic calibration of these instruments is required to keep plants operating efficiently and safely. Fluke offers a wide range of pressure calibration tools with precision pressure measurement from 15psi/1 bar to 10,000 psi/690 bar boasting 0.025% full-scale accuracy to help you quickly and reliably calibrate your pressure instruments.

Everything from simple test gauges to calibrators with built in electric test pumps. Easy to use, rugged and reliable construction and an industry best 3-year warranty.

See pages 118 to 128

Process Tools Selection Guide

Pick the right process tool for you

Measure	Documenting Process Calibrators		Multifunction Process Calibrators		Temperature Calibrators				Pressure Calibrators				Automatic Pressure Calibrator				Loop Calibrators				Process-Meters	
	754 / 753	725 / 725Ex	726	724	714B	712B	730G	718 / 718Ex	717	719	719Pro	721	729	715	705	701 / 701Ex	709 / 709H	771	772 / 773	789 ⁵ / 787B		
Voltage DC	300 V	30 V	30 V	30 V	75 mV						30 V	30 V	30 V	10 V	28 V	28 V	30 V		- / 30 V	1000 V		
Voltage AC (True RMS)	300 V																			1000 V		
Resistance	10 kΩ	3200 Ω	4000 Ω	3200 Ω		4000 Ω														40 MΩ		
Current DC	110 mA	24 mA	24 mA	24 mA	24 mA	24 mA	24 mA	24 mA	24 mA	24 mA	24 mA	24 mA	24 mA	24 mA	24 mA	24 mA	24 mA	100 mA	100 mA	30 mA, 1 A		
Current AC																				•		
Frequency	50 kHz	10 kHz	15 kHz																	20 kHz		
Pressure	• ¹	• ¹	• ¹				-0.85 bar to 700 bar (10 ranges)	-0.85 bar to 20 bar (4 ranges) up to 700 bar ²	-0.85 bar to 700 bar (10 ranges)	-0.85 bar to 7 bar (2 ranges) up to 700 bar ²	-0.8 to 20 bar (3 ranges) up to 700 bar ²	input 1: -0.97 bar to 2.48 bar input 2: -0.83 bar to 345 bar ³	-0.83 bar to 20.69 bar (3 ranges)									
Temperature						-					-50 to 150°C ⁴	-50 to 150°C ⁴	-50 to 150°C ⁴									
Temperature: RTD types	8	7	8	7	7	13																
Temperature: TC types	13	12	12	12	17																	
Source/Simulate																						
Voltage DC	15 V	10 V	20 V	10 V	75 mV		•						30 V	10 V					- / 10 V			
Resistance	10 kΩ	3200 Ω	4000 Ω	3200 Ω		4000 Ω																
mA DC/% scale	22 mA	24 mA	24 mA							•	•		24 mA	24 mA	24 mA	24 mA	•		24 mA	24 mA		
mA source: auto step, auto ramp	•	•	•										•	•	•	•	•	•	•	•		
Frequency	50 kHz	10 kHz	15 kHz																			
Temperature: RTD types	8	7	8	7		13																
Temperature: TC types	13	10	10	10	17																	
Record																						
Min/Max	•						•	•	•	•	•	•	•							•		
Hold							•	•	•	•								•	•	•		
As Found/ As Left results	•												•									
Log data	•												•				- /					
Upload data to PC	•						•						•				- /			•		
Remote operation		•/-	•										•									
Features																						
Loop supply	26 V	24 V/12 V	24 V	24 V			24 V	24 V/-		24 V	24 V	24 V	24 V	24 V	24 V	24 V	24 V		24 V	24 V/-		
Hart communication	•/-						•						•				- /					
Integrated hand pressure pump								•														
Electric Pump										•	•	•	•									
Intrinsically safe (ATEX)		725Ex						718 Ex								707 Ex						
NIST traceable certification	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		
Warranty in years	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3		

¹ Fluke 750 Pressure Modules Required
² Ranges for the internal sensor
³ Ranges depending on version
⁴ By using optional 720 RTD Probe accessory
⁵ Fluke 788 & 787B are Fluke Connect™ compatible with Fluke i3000 FC Connector (sold separately)

Fluke 771, 772 and 773 mA Process Clamp Meters



Don't break the loop on 4–20 mA signal measurements and save time with the Fluke 771, 772 and 773 Milliamp Process Clamp Meters.

Three year warranty, (one year provided on mA clamp assembly and cable).

Use the Fluke 772 and 773 to:

- Source 4–20 mA signals for testing control system I/O or I/Ps
- Simulate 4–20 mA signals for testing control system I/O
- Measure 4–20 mA signals with in-circuit measurement
- Power a transmitter with the 24 V loop power supply
- Automatically ramp and step change the 4–20 mA output for remote testing

Use the Fluke 773 to:

- Measure DC voltage to verify 24 V power supplies or voltage I/O signals
- Source DC voltage to test voltage input devices
- Scaled mA output signal enables a logging DMM (289) to record 4–20 mA signal without breaking the loop
- mA in/out: simultaneously source a mA signal while measuring a mA signal with the clamp

Recommended Accessories



TL220
SureGrip™ Industrial
Test Lead Set
See page 152



C550
Premium Tool Box
See page 161

Fluke 771, 772 and 773 mA Process Clamp Meters pay for themselves



- The more you use them the more money you save
- Measuring 4–20 mA signals (five) times without operator intervention can pay for the 771
- Saving a trip back to shop to get a loop calibrator can pay for the price difference of the 772
- Saving a trip back to the shop for a voltage test source can pay for the price difference of the 773

	mA measure w/jaw	mA measure In circuit	mA source	mA sim	Loop power 24 V	DCV source 0–10 V	DCV measure 0–30 V	Scaled mA output to mA input	mA in/out
771	•	—	—	—	—	—	—	—	—
772	•	•	•	•	•	—	—	—	—
773	•	•	•	•	•	•	•	•	•

Specifications	Function	Resolution and range	Accuracy	Notes
771, 772, 773	mA measurement	0 to 20.99 mA 21.0 mA to 100.0 mA	0.2 % + 5 counts 1 % + 5 counts	Measured by clamp —
772 and 773	mA measurement	0 to 24.00 mA	0.2 % + 2 counts	Measured in series with test jacks
772 and 773	mA source	0 to 24.00 mA	0.2 % + 2 counts	Maximum mA drive: 24 mA into 1,000 ohms
772 and 773	mA simulate	0 to 24.00 mA	0.2 % + 2 counts	Maximum voltage 50 V DC
773	Voltage source	0 to 10.00 V DC	0.2 % + 2 counts	2 mA maximum drive current
773	Voltage measure	0 to 30.00 V DC	0.2 % + 2 counts	—

	771	772	773
Battery	Two 1.5 V, Alkaline, IEC LR6	Four 1.5 V, Alkaline, IEC LR6	
Working hours	40 hours typical	12 hours @ 12 mA source into 500 ohms	
Size (HxWxL)	59 mm x 38 mm x 212 mm	43.7 mm x 70 mm x 246.2 mm	
Weight	260 g	410 g	
Operating temperature		–10 °C to 50 °C	
IP rating		IP 40	

Included Accessories

Fluke 771: Soft Carrying Case, User Manual.

Fluke 772/773: Four AA Alkaline Batteries (installed), Soft Carrying Case, TL75 Test Leads, AC 72 Detachable Clip, TL940 Mini-hook Test Leads, Instruction Sheet, Hanging Tool with Hook and Loop Strap.

Ordering Information

FLUKE-771	Milliamp Process Clamp Meter
FLUKE-772	Milliamp Process Clamp Meter
FLUKE-773	Milliamp Process Clamp Meter

Fluke 787B and 789 ProcessMeter™



Fluke 789

Fluke 787B



Double the troubleshooting power so you can do more, while carrying a lot less

The Fluke 787B and 789 ProcessMeter™ double troubleshooting capabilities by combining the power of a safety rated digital multimeter and mA loop calibrator into a single, compact test tool. Whether you only need to source and simulate mA, or need a 24V loop power supply, Fluke has a ProcessMeter™ test tool designed specifically to meet your needs.

Fluke 787B and 789 key features

- 20 mA DC current source/measure/simulate
- Simultaneous mA and % of scale readout
- DMM designed to meet 1000 volt IEC 61010 CAT III and 600 V CAT IV standards
- Fluke Connect® compatibility for wireless data logging (with IR3000FC module)
- Precision 1000 V, 440 mA true-RMS digital multimeter
- Frequency measurement to 20 kHz
- Min/Max/Average/Hold/Relative modes
- Diode test and continuity beeper
- Manual step (100 %, 25 %, Coarse, Fine) plus Auto Step and Auto Ramp
- Externally accessible battery for easy battery changes
- Three year warranty

Fluke 789 additional features

- 24 V loop power supply
- HART mode setting with loop power (adds 250 ohm resistor)

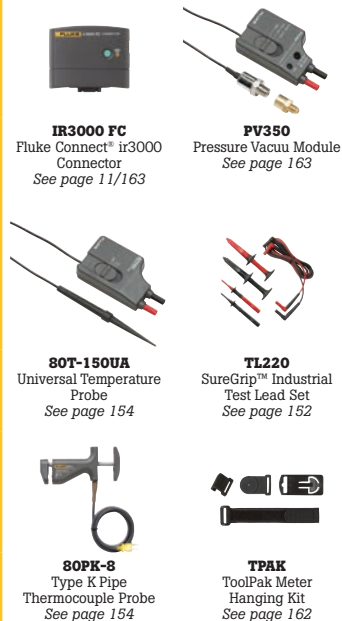
Measurement Function	Range and Resolution	Best Accuracy (% of reading + LSD)
V DC	400.0 mV, 4.000 V, 40.00 V, 400.0 V, 1000 V	0.1 % + 1
V AC (True-rms)	400.0 mV, 4.000 V, 40.00 V, 400.0 V, 1000 V	0.7 % + 2
mA DC	30.000 mA	.05 % + 2
A DC	1.000 A (0.440 A continuous)	0.2 % + 2
A AC	1.000 A (0.440 A continuous)	1 % + 2
Resistance	400.0 Ohms, 4.000 k, 40.00 k, 400.0 k, 4.0 M, 40 M	0.2 % + 1
Frequency (0.5 Hz to 20 kHz)	199.99 Hz, 1999.9 Hz, 19.999 kHz	.005 % + 1
Diode Rest	2.000 V (shows diode voltage drop)	2 % + 1
Continuity	Beeps for resistance < approx. 100 ohms	

Output Function	Range and resolution	Drive capability	Accuracy
DC Current Output (Internal Battery Operation)	0.000 to 20.000 mA or 4.000 to 20.000 mA, (selectable at power-up) Over-range to 24.000 mA	24 V compliance or, 1,200 ohms, @ 20 mA	.05 %
DC Current Simulate (Ext. 15 V to 48 V loop supply)	0.000 to 20.000 mA or 4.000 to 20.000 mA, (selectable at power-up) Over-range to 24.000 mA	1000 ohms, @ 20 mA	.05 %
24 V Loop Supply*	Minimum 24 V	250 ohms @ 20 mA	> 24 V
Current Adjustment Modes	Manual: Coarse, Fine, 25 % and 100 % step Automatic: Slow Ramp, Fast Ramp, 25 % step		

*24 V Loop Supply available on 789 ProcessMeter™ only.

*Fluke Connect is only available in selected countries. Please check with your local distributor for available models.

Recommended Accessories



Recommended Kits

Buy more, Save more



Fluke Connect® 789 ProcessMeter™ and Temperature Kit

For more details see page 172

Included Accessories

TL71 Test Lead Set, AC72 Alligator Clips, four AA Alkaline Batteries (installed), User Manual and Quick Reference Guide.

Ordering Information

FLUKE-787B	ProcessMeter™
FLUKE-789	ProcessMeter™
FLUKE-789/T3000FC	Fluke Connect 789 ProcessMeter™ & Temperature Kit
FLUKE-IR3000 FC	Fluke Connect Infrared Connector
FVF-SC2	FlukeView Forms Software (incl. Interface Cable)

Fluke 715, 707, 707Ex and 705 Loop Calibrators

Complete family of Volt/mA calibrators



Fluke 715

Fluke 705



Fluke 707

Fluke 715 Volt/mA Calibrator

- Source voltage to 200 mV or 20 V
- Measure loop current (0 to 20 mA, 4-20 mA) signals with 0.01 % accuracy and 1 μ A resolution
- Measure voltage output process signals from PLCs, transmitters
- Source or simulate 4-20 mA loop current
- 24 V loop supply with simultaneous current measurement
- Ramp and Step Ramp output functions
- Three year warranty

Fluke 707 and 705

- Innovative output adjustment dial on 707 provides 1 μ A and 100 μ A resolution and one-hand operation
- Large display and simple interface for ease of use
- Simultaneous mA and % readout for quick, easy interpretation of readings
- mA accuracy of 0.015 % on the Fluke 707 and 0.02 % on the 705
- HART™ mode on 707 connects 250 ohm resistor in series with 24 V loop for compatibility with HART communicators
- Push button 25 % steps for fast, easy linearity checks
- "Span Check" for fast confirmation of zero and span
- Selectable slow and fast linear step ramp provide ramping outputs for valve slewing, remote testing and loop functional tests
- 24 V internal loop supply, so you can power and read a transmitter at the same time without carrying a DMM
- 0 to 20 mA or 4-20 mA default start up modes
- Three year warranty

Speciality Model

Fluke 707Ex Intrinsically Safe Loop Calibrator

The fast one-handed tool for mA loop checks in Ex zones.



The 707Ex is an intrinsically safe loop calibrator for use in explosion endangered areas. The Fluke 707Ex is certified in accordance with the ATEX directive (Ex II 2 G Ex ia IIC T4) in Zones 1 and 2.

- Simultaneous mA and % readout for quick, easy, interpretation of readings.

See page 138 for more information.

Recommended Accessories



TL28A
Heavy Duty Test Lead Set
See page 164



TL220
SureGrip™ Industrial Test Lead Set
See page 152



C550
Premium Tool Box
See page 161



PV350
Pressure Vacuu Module
See page 163

	705/707	715
Range	0 V to 28 V	0 mV to 200 mV / 0 V to 25 V
Resolution	1 mV	10 μ V / 1 mV
Accuracy	705: 0.025 % Rdg + 1 LSD 707, 707Ex: 0.015 % Rdg + 2 LSD	0.01 % Rdg + 2 LSD
Range	0 mA to 24 mA	0 mA to 24 mA
Resolution	0.001 mA	0.001 mA
Accuracy	705: 0.02 % Rdg + 2 LSD 707, 707Ex: 0.015 % Rdg + 2 LSD	0.01 % + 2 LSD
Range	0 mA to 20 mA or 4 mA to 20 mA	0 mA to 20 mA or 4 mA to 20 mA
Accuracy	705: 0.025 % Rdg + 2 LSD 707, 707Ex: 0.015 % Rdg + 2 LSD	0.01 % Rdg + 2 LSD
Drive capability	705: 1000 Ω @ 24 mA 707: 1200 Ω @ 24 mA 707Ex: 700 Ω @ 20 mA	1000 Ω @ 24 mA
Loop power while measuring mA	24 V	
Voltage sourcing	0 mV to 200 mV or 0 V to 20 V	
Display current and % of span	Yes	mA or %
Auto step, auto ramp	Yes	
Span Check	Yes	
Battery life	18 hours typical, at 12 mA	

Included Accessories

Fluke 705/707: C10 Yellow Holster, Test Leads, AC175 Alligator Clips, Single 9V Alkaline Battery, Instruction Sheet.

Fluke 707Ex: Red Ex-holster, Test Leads, AC175 Alligator Clips, Single 9V Alkaline Battery, Instruction Sheet.

Fluke 715: Yellow Holster (H80M excl. TPAK), Test Leads and AC175 Alligator Clips, Single 9V Alkaline Battery, Instruction Sheet.

Ordering Information

FLUKE-705 Loop Calibrator

FLUKE-707 Loop Calibrator

FLUKE-707EX Intrinsically Safe Loop Calibrator

FLUKE-715 Volt/mA Calibrator

Fluke 709, 709H and 710 Precision Loop Calibrators



Fluke 710



Fluke 709H



HART is a registered trade mark of the HART Communications Foundation.

The Fluke 709 and 709H mA loop calibrators and 710 Valve Tester are designed to save time and produce high-quality results. These calibrators are built around a user friendly interface with a Quick-Set rotary encoder knob. This tool reduces the time it takes to measure, or source, current and power up a loop. The protective holster easily fits into a technician's hand and the large backlit display is easy to read, even in dark, cramped worked areas.

- Best-in-class accuracy at 0.01 % reading
- HART Communication (709H, 710) communicate with and test HART smart instruments
- Compact rugged design
- Intuitive user interface with quick-set knob for fast setup, easy to use
- 24 V DC loop power with mA measure mode
- Resolution of 1 μ A on mA ranges
- Built in selectable 250 Ω resistor for HART communications
- Simple two wire connection for all measurements
- Valve test (source and simulate defined mA values with % keys)
- Upload logged mA measurements and HART device data using the 709H with optional 709H/TRACK software
- Three year warranty

HART Communication

The Fluke 709H offers a built-in HART modem for communication capability to perform the following commands:

- Read message, tag, descriptor and calibration date
- Read sensor PV information and PV output information
- Read long tag
- Write PV ranges (upper and lower)
- Enter/exit fixed current mode and set zero offset
- Trim DAC zero (mA output 4 mA) and trim DAC gain (mA output 20 mA)

The Fluke 710 has key valve-testing functions include preconfigured valve signature test, speed test, step test, manual test and bump/partial stroke test. The instrument comes with ValveTrack™ desktop software where you can upload valve test results, logged measurements and HART device configurations captured in the field.

Key Features	709	709H	710
mA measure (range and accuracy)	0-24 mA @ 0.01%	0-24 mA @ 0.01 %	0-24 mA @ 0.01 %
mA source/simulate	0-24 mA @ 0.01%	0-24 mA @ 0.01 %	0-24 mA @ 0.01%
DCV measure	0-30 V @ .01 %	0-30 V @ .01 %	0-30 V @ .01 %
DCV source			
24 V loop power	•	•	•
Auto step/ramp	•	•	•
Documenting and log data		Option	•
HART communication		•	•
Intrinsically safe			
Valve testing	Analog	Analog	Analog/HART
Non-contact clamp			

Recommended Accessories



Included Accessories

709: AC175 Alligator Clip Set, TL75 Test Leads, Soft Case, six AAA Batteries (installed), Product Manual (CD), Quick Reference Guide, Safety Information.

709H: 754-8016 Alligator Clip Set, 75X-8014 Stackable Lead Set, TP220-4201 Test Probes, AC280-5001 SureGrip Hook Clips, Soft Case, six AAA Batteries (installed), Product Manual (CD), Quick Reference Guide, Safety Information.

710: Stackable test lead set, Extended tooth alligator clip set, TP220 test probes, AC280 SureGrip™ hook clips, Lemo to USB cable ValveTrack™ software (free download), Softcase, Six AAA batteries (installed).

Ordering Information

FLUKE-709	Precision Loop Calibrator
FLUKE-709H	Precision Loop Calibrator with HART
FLUKE-709H/ TRACK	HART Data-Logging Communications Software
FLUKE-710	Valve Tester

Fluke 750 Series Documenting Process Calibrators



Fluke 753

Fluke 754



Whether you're calibrating instruments, troubleshooting a problem or running routine maintenance, Fluke's 753 and 754 Series Process Calibrators can help you get the job done faster. They do so many different tasks, so quickly and so well and they are the only process calibrators you need to carry.

- Measure volts, mA, RTDs, thermocouples, frequency, and ohms to test sensors, transmitters etc
- Source/simulate volts, mA, thermocouples, RTDs, frequency, ohms, and pressure to calibrate transmitters
- Power transmitters during test using loop supply with simultaneous mA measurement
- Measure/source pressure using any of Fluke's 50 Pressure Modules
- Measure and source simultaneously with one compact, rugged, reliable tool
- Create and run automated as-found/as-left procedures to satisfy quality programs or regulations and record and document results.
- Advanced features like autostep, custom units, user entered values during test, one-point and two-point switch testing, square root DP flow testing, programmable measurement delay and more
- Control the temperature of selected Hart Scientific Dry Blocks
- Handle fast pulsed RTD transmitters and PLCs in RTD source mode with 1 ms response time
- Three year warranty

Fluke 753: A complete Documenting Calibrator

The Fluke 753 is a complete multifunction documenting calibrator and includes a PC interface that lets you load procedures, lists and instructions created with software—or unload data for printing, archiving, and analysis. The 753 can hold a full week of calibrations and procedures.

Fluke 754: Get HART-ability™

The Fluke 754 offers all of the capabilities of the 753, plus the ability to calibrate, maintain and troubleshoot HART instrumentation. Integrated HART communication functions permit you to monitor, control and calibrate HART instrumentation. It handles fast pulsed instruments such as RTD transmitters and PLCs responding to pulses within 1 ms.

Instrumentation Management Software

The Fluke 753 and 754 are compatible with Fluke 750SW DPC/TRACK2 software and with software from Cornerstone, Emerson, Honeywell, On Time Support, Prime Technologies, Yokogawa, Intools, Meridium and Beamex.

For more information, visit www.fluke.com.au

Functions	Measure	Sourcing
DC voltage	0.020 % reading + 0.005 % full scale	0.01 % output + 0.005 % full scale
DC current	0.01 % reading + 5 µA	0.01 % output + 0.003 mA
Resistance	0.05 % reading + 50 mΩ	0.01 % output + 240 mΩ
Frequency	0 to 50 KHz, ± 0.5 Hz to 1100 Hz	0 to 50 KHz, ± 0.1 Hz to 1099.9 Hz
Thermocouples	0.3 °C	0.2 °C
RTDs	0.3 °C	0.1 °C
Pressure	To 0.025 % of full scale, per pressure module specifications	

General Specifications

Battery life	Typically over eight hours
Internal battery pack	Li ion 4400 mAh
Battery replacement	Via twist lock fastener without opening calibrator; no tools required
Weight	1.2 kg
Size (HxWxD)	245 mm x 136 mm x 63 mm
RTDs	0.3 °C
Pressure	To 0.025 % of full scale, per pressure module specifications

Recommended Accessories



750PXX
Pressure Modules
See page 132



750SW
DPC/TRACK2 Software



700PTP-1
Pneumatic Test Pump
See page 171



C799
Field Soft Case
See page 161



700HTP-2
Hydraulic Test Pump
See page 171



754HCC
Smart Instrument
Communication Cable

Recommended Kits

Buy more, Save more



Fluke 754/750SW 754DPC and 750SW DPC-TRACK2 Bundle Package

Purchase the Fluke 754 with the Fluke DPC/TRACK2™ software at a special bundle package price.

Included Accessories

Stackable Test Leads (3 sets), TP220 Test Probes (3 sets) with extended Tooth Alligator Clips (3 sets), AC280 Hook Clips (2 sets), BP7240 Li-ion Battery Pack, BC7240 Battery Charger, C799 Field Soft Case, USB Communication Cable, Getting Started Guide, Instruction Manual on CDROM, NIST Traceable Certificate of Calibration, DPCTrack™ 2 Sample Software that enables upload and printing of calibration records, 754 HHC HART Communication Cable (754 only).

Ordering Information

FLUKE-753 Documenting Process Calibrator

FLUKE-754 Documenting Process Calibrator HART

FLUKE-707EX 754DPC and 750SW DPCTrack2 Bundle Package

FLUKE-750SW DPC/TRACK2 Software

Fluke 725 and 726 Multifunction Process Calibrators



Fluke 726

Fluke 725



More calibration power!

- Two separate channels; measure, source and view process signals simultaneously
- Measure volts, mA, RTDs, thermocouples, frequency, and resistance to test sensors and transmitters
- Source/simulate volts, mA, thermocouples, RTDs, frequency, and pressure to calibrate transmitters
- Measure or source pressure using any of 50 Fluke 750Pxx Pressure Modules
- Source mA with simultaneous pressure measurement to conduct valve and I/P tests
- Perform fast linearity tests with auto step and auto ramp
- Power transmitters during test using 24 V loop supply and simultaneous mA measurement
- Store frequently-used test setups for later use
- Three year warranty

726 additional features:

- More precise measurement and calibration source performance, accuracies of 0.01%
- Transmitter error% calculation
- Memory storage for up to 8 calibration results
- Frequency totaliser and frequency pulse train source mode
- HART mode inserts 250 ohm resistor in mA measure and source for compatibility with HART instrumentation
- Integrated pressure switch test
- Custom RTD curves, add calibration constants for certified RTD probes for enhanced temperature measurement

Function or Source	Range or Type	Resolution	Accuracy	Notes
Voltage	0 to 100 mV 725: 0 to 10V (source) 0 to 20V (source) 725/726: 0 to 30V (measure)	0.01 mV 0.001 V 0.001 V 0.001 V	0.01% 0.02% Rdg + 2 LSD	Max load, 1 mA
mA	0 to 24	0.001 mA	0.01%; 0.02% Rdg + 2 LSD	Max load, 725/726: 1000Ω 725Ex: 250Ω
mV (TC terminals)	-10.00 mV to +75.00 mV	0.01 mV	0.01% 0.025% of range + 1 LSD	
Ohms	15Ω to 3200Ω 5Ω to 4000Ω	0.01Ω to 0.1Ω	0.10Ω to 1.0Ω 0.015%	
Hz - CPM	2.0 to 1000 CPM 1 to 1000 Hz 1.0 to 10.0 kHz 10.0 to 15.0 kHz	0.1 CPM 1 Hz 0.1 kHz 0.1 kHz	±0.05% ±0.05% ±0.25% ±0.05%	Source; 5V p-p 1V - 20 V p-p squarewave, -0.1 V offset
Loop Supply	725/726: 24 V DC 725Ex: 12 V DC	N/A	10%	
T/C	J, K, T, E, L, N, U, XK	0.1 °C	to 0.7 °C to 0.2 °C	
T/C	B, R, S, BP	1 °C	to 1.7 °C to 1.2 °C	
RTDs	Cu (10), Ni 120 (672) Pt 100, 200, 500, 1000 (385) Pt 100 (3916), Pt 100 (3926)	0.01 °C 0.1 °C	to 0.15 °C to 0.2 °C	

Unique 726 features are in bold

Simultaneous function capability	Channel A	Channel B
24.000 mA DC	M	M or S
24.000 mA DC with 24 V loop supply	M	—
100.00 mV DC	—	M or S
30.000 V DC measure	M	—
20.000 V DC measure; 10.000 V DC source; 20.000 V DC source	—	M or S
15 to 3200 Ohms (725); 5 to 4000 Ohms (726)	—	M or S
Thermocouple J, K, T, E, R, S, B, M, L, U, N, XK, BP	—	M or S
RTD Cu 10, Ni120; Pt100 (392); Pt100 (JIS); Pt100, 200, 500, 1000 (385), XK and BP	—	M or S
Pressure (requires Fluke 750PXX Modules)	M	M used as S
Frequency; 10 kHz; (15 KHz)	—	M or S

M = Measure, S = Source/Simulate

Recommended Accessories



TL220
SureGrip™ Industrial
Test Lead Set
See page 152



C125
Soft Carry Case
See page 161



80PK-27
SureGrip™ Industrial
Surface Probe
See page 154



700PRV
Pressure Relief
Valve Kit
See page 171



750PXX
Pressure Modules
See page 132

Included Accessories

TL75 Test Lead Set (TL75), AC70A Test Clip Set (725), AC72 Test Clip Set (726), Stackable Test Lead Set, four AA Batteries, Replacement Fuse (725), User Manual on CD, NIST Traceable Calibration Certificate.

Ordering Information

FLUKE-725	Multifunction Process Calibrator
FLUKE-726	Precision Multi-function Process Calibrator

Fluke 712B, 714B and 724 Temperature Calibrators



Fluke 714B

Fluke 712B



Accuracy and simplicity

The Fluke 712B and 714B are designed for both simplicity, ease of use and high accuracy. They are a powerful combination of temperature and loop calibration.

Fluke 714B Thermocouple Calibrator

- Measure and simulate 17 different thermocouple types and millivolts
- Measure 4–20mA signals while simultaneously sourcing a temperature signal
- Hanging tool designed in and included with every unit
- Configurable 0% and 100% source settings for quick 25% linearity checks
- Linear ramp and 25% step auto ramp based on 0% and 100% settings
- Dual inputs and backlit display for easy interpretation of measurements
- Power down settings remembered at power up for easy restart of tests
- 1 and 2 year specifications and traceable certificate of calibration
- Three year warranty

Fluke 712B RTD Calibrator

- Measure and simulate 13 different RTD types and resistance
- Measure 4–20mA signals while simultaneously sourcing a temperature signal
- Configurable 0% and 100% source settings for quick 25% linearity checks
- Linear ramp and 25% step auto ramp based on 0% and 100% settings
- Dual inputs and backlit display for easy interpretation of measurements
- 1-year and 2-year specifications and traceable certificate of calibration
- Three year warranty

General specifications		712B	714B
Operating temperature	-10 °C to 50 °C		
Operating altitude	2,000 metres		
Relative humidity (% RH operating without condensation)	Non condensing 90 % (10 °C to 30 °C), 75 % (30 °C to 40 °C), 45 % (40 °C to 50 °C) (Without condensation)		
Vibration requirements	MIL-T-28800E, Class 2		
Drop test requirements	1 metre		
IP Rating	IEC 60529: IP52		
Safety	IEC 61010-1, Max 30 V to earth, Pollution Degree 2		
Power supply	4 AA NEDA 1.5A IEC LR6 batteries		
DC mA measurement			
Resolution	0-24 mA		
Range	0.001 mA		
Accuracy (% of reading + counts)	0.010 % + 2 µA		
Ohms measurement			
Ohms range	0.00 Ω to 400.00 Ω, 400.0 Ω to 4000.0 Ω		
Accuracy (% of reading +counts)	0.015 % + 0.05 Ω, 0.015 % + 0.5 Ω		
Ohms source			
Ohms range	1.0 Ω to 400.0 Ω, 1.00 Ω to 400.00 Ω, 400.0 Ω to 1500.0 Ω, 1500.0 Ω to 4000.0 Ω		
Accuracy (% of reading + counts)	0.015 % + 0.1 Ω, 0.015 % + 0.05 Ω, 0.015 % + 0.5 Ω, 0.015 % + 0.5 Ω		
Resolution			
0.00 Ω to 400.00 Ω	0.01 Ω		
400.0 Ω to 4000.0 Ω	0.1 Ω		
Millivolt measurement & source			
Resolution			-10 mV to 75 mV
Range			0.01 mV
Accuracy (% of reading +counts)			0.015 % + 10 µA

Speciality Model

Fluke 724 Temperature Calibrator

- Easy to read dual display allows for input and output simultaneous view
- Source/measure TCs, RTDs, volts and ohms
- Measure mA while supplying loop power
- 25 % and 100 % stepping, auto-step and auto ramp



Recommended Accessories



TPAK
Magnetic
Meter Hanger
See page 162



AC220
SureGrip™ Alligator
Clips
See page 149

Fluke 712/724



TL175
TwistGuard™ Test
Leads
See page 148



TL220
SureGrip™ Industrial
Test Lead Set
See page 152



80PK-24
SureGrip™ Air
Temperature Probe
See page 154



80PK-3A
Surface Probe
See page 154



C101
Hard Case
See page 161



C25
Meter Case
See page 160

Included Accessories

Fluke 714B/712B: Magnetic Hanging Tool, Batteries, Manual, Traceable Calibration Certificate and Test Leads.

Fluke 724: TL75 Test Leads, AC175 Test Clips, Stackable Test Leads (1 pair), Spare Fuse and User Manual.

Ordering Information

FLUKE-714B	Thermocouple Temperature Calibrator
FLUKE-712B	RTD Calibrator
FLUKE-724	Temperature Calibrator

Fluke Calibration 9142, 9143 and 9144 Field Metrology Wells



Fluke 9144



Field temperature calibration with precision and speed

Whether you need to calibrate 4–20 mA transmitters or a simple thermostatic switch, a Fluke Calibration Field Metrology Well is the right tool for the job. With three models covering the range of –25 °C to 660 °C, this family of Metrology Wells calibrates a wide range of sensor types. The optional process version (models 914X-X-P) provides a built-in two-channel thermometer readout that measures PRTs, RTDs, thermocouples, and 4–20 mA transmitters which includes the 24 V loop supply to power the transmitter.

- Lightweight, portable, and fast
- **9142** –25 °C to 150 °C ± 0.2 °C
- **9143** 33 °C to 350 °C ± 0.2 °C
- **9144** 50 °C to 660 °C ± 0.35 °C to 420 °C ± 0.5 °C at 660 °C
- Cool to –25 °C in 15 minutes and heat to 660 °C in 15 minutes
- Built-in two-channel readout for PRT, RTD, thermocouple, 4–20 mA current
- True reference thermometry with accuracy to ±0.01 °C
- Automate calibration with the Fluke 754 or Fluke 1586A or use on-board automation with process version
- One year warranty

Models		Well inserts X in the model number to be replaced with A, B, C, D, E, or F as appropriate for the desired insert.	
9142-X	Field Metrology Well, –25 °C to 150 °C	9142-INS A	Insert A, 9142, misc holes
9142-X-P	Field Metrology Well, –25 °C to 150 °C, process version	9142-INS B	Insert B, 9142, comp holes
		9142-INS C	Insert C, 9142, 6 x 0.25 in holes
9143-X	Field Metrology Well, 33 °C to 350 °C	9143-INS A	Insert A, 9143, misc holes
9143-X-P	Field Metrology Well, 33 °C to 350 °C, process version	9143-INS B	Insert B, 9143, comp holes
		9143-INS C	Insert C, 9143, 6 x 0.25 in holes
9144-X	Field Metrology Well, 50 °C to 660 °C	9144-INS A	Insert A, 9144, misc holes
9144-X-P	Field Metrology Well, 50 °C to 660 °C, process version	9144-INS B	Insert B, 9144, comp holes
		9144-INS C	Insert C, 9144, 6 x 0.25 in holes

Fluke Calibration 9103 and 9140 Field Dry-Well Calibrators



Fluke 9140



Fluke Calibration's 9103 and 9140 Field Dry-Well Calibrators beat every other comparable dry-well in the industry in performance, size, weight, convenience, ease of calibration, software, and price. In addition, the heating and cooling rate of each of these dry-wells is adjustable from the front panel, thermal switches can be checked for actuation testing, and multiple-hole inserts are available for a variety of probe sizes.

- Lightweight and very portable
- Two models ranging from –25 °C to 350 °C
- Accuracy to ± 0.25 °C
- Stability to ± 0.02 °C
- RS-232 and Interface-it software included
- Easy to recalibrate
- One year warranty

Models	Specify X, X = A, B, C, or D included insert
9103-X Field Dry-Well Calibrator, –25 °C to 140 °C	Insert A: 1/16" (1.6 mm), 1/8" (3.2 mm), 3/16" (4.8 mm), 1/4" (6.35 mm), 3/8" (9.5 mm) & 1/2" (12.7 mm)
9140-X Field Dry-Well Calibrator, 35 °C to 350 °C	Insert B: 2 at 3/16" (4.8 mm), 2 at 1/4" (6.35 mm) & 2 at 3/8" (9.5 mm)
	Insert C: 6 at 1/4" (6.35 mm)
	Insert D: 2 at 3mm, 2 at 4 mm & 2 at 6 mm

Recommended Accessories



HART DRYWELL CABLE
754/Dry-Well/Micro-bath Interface Cable



9142-CASE
Carrying Case (914X)

Fluke 9308/9316



9308
Carrying Case



9316
Rugged Carrying Case

Complete Solution



Fluke 754 with 914X Series Field Metrology Well

documenting capabilities of the Fluke 754 Documenting Process Calibrator (see page 109) with Fluke Calibration's intelligent and stable family of field drywells and micro-baths, you have the capability to test the entire loop.

This combination of equipment allows you to easily verify the characteristics of the temperature sensor and measurement electronics. Using this information, the entire loop can be adjusted to optimise system measurement performance.

Fluke Calibration 9100S and 9102S Handheld Dry-Well Temperature Calibrators



Fluke 9102S



Fluke 9100S



The Fluke Calibration 9100S and 9102S are the world's smallest, lightest and most portable dry-wells. With an easy-to-use interface and temperature range to 375 °C the 9100S is ideal for checking RTDs, thermocouple, and small bimetal thermometers in the field. For work in the temperature range of -10 °C to 122 °C the 9102S is ideal for dial gauges, digital thermometers, bulb switches, and other sensors that need calibration below ambient.

9102S Handheld Dry-Well

- Smallest dry-wells in the world
- Interchangeable and customisable inserts available
- Ranges from -10 °C to 122 °C
- Accuracy to $\pm 0.25^{\circ}\text{C}$
- Stability of $\pm 0.05^{\circ}\text{C}$ at 0 °C
- One year warranty

9100S Handheld Dry-Well

- High performance, convenience and easy-to-use
- Ranges from 35 °C to 375 °C
- Accuracy $\pm 0.25^{\circ}\text{C}$ at 50 °C; $\pm 0.25^{\circ}\text{C}$ at 100 °C; $\pm 0.5^{\circ}\text{C}$ at 375 °C
- NIST traceable calibration
- One year warranty

Recommended Accessories

Fluke 9100S/9102S



9300
Rugged Carrying Case
(9100S)



1586-CASE
Carrying Case
(1586A Super DAQ)

Ordering Information

9100S-A-256	HDRC Handheld Dry-Well, Block A, High-Temp
9100S-B-256	HDRC Handheld Dry-Well, Block B, High-Temp
9100S-C-256	HDRC Handheld Dry-Well, Block C, High-Temp
9100S-D-256	HDRC Handheld Dry-Well, Block D, High-Temp
9102S-256	HDRC Handheld Dry-Well, Low-Temp
1586A	Super-DAQ Precision Temperature Scanner,
1586A/1DS	Super-DAQ Precision Temperature Scanner, 1 DAQ-STAQ Multiplexer
1586A/2DS	Super-DAQ Precision Temperature Scanner, 2 DAQ-STAQ Multiplexers
1586A/DS-HC	Super-DAQ Precision Temperature Scanner, 1 High-Capacity Module, 1 DAQ-STAQ Multiplexer
1586A/1HC	Super-DAQ Precision Temperature Scanner, 1 High-Capacity Module
1586A/2HC	Super-DAQ Precision Temperature Scanner, 2 High-Capacity Modules
2638A/20	Data Acquisition Unit/Data Logger: 20 universal channels includes one relay board (2638A-RLY) and one (2638A-100) connector
2638A/40	Data Acquisition Unit/Data Logger: 40 universal channels includes two relay boards (2638A-RLY) and two (2638A-100) connectors
2638A/60	Data Acquisition Unit/Data Logger: 60 universal channels includes three relay boards (2638A-RLY) and three (2638A-100) connectors

Fluke Calibration 1586A and 2638A Data Acquisition Systems



Fluke 1586A



Fluke 2638A



1586A Super DAQ Precision Temperature Scanner

The 1586A Super DAQ automates calibration when connected to a Fluke Calibration temperature source. It is a powerful thermometer readout and the most accurate and flexible temperature data acquisition system on the market.

- Measure thermocouples, PRTs, thermistors, DC voltage, DC current, and resistance
- Best-in-class temperature measurement accuracy
- Fluke DAQ 6.0 software incl. to visualise & handle data
- PRTs: $\pm 0.005^{\circ}\text{C}$
- Thermocouples: $\pm 0.3^{\circ}\text{C}$ (Type K,T,J w/ internal CJC)
- Thermistors: $\pm 0.002^{\circ}\text{C}$
- One year warranty

2638A Hydra Series III Data Acquisition System

The Fluke Hydra Series III provides best-in-class thermocouple accuracy in a portable system. Price performance breakthrough in a stand alone data acquisition system.

- DC accuracy of 0.0024 %
- Thermocouple accuracy of 0.5 °C
- Up to 66 universal differential isolated inputs
- On-screen colour trend graphing of up to four channels at a time
- Input types: AC V, DC V, AC I, DC I, thermocouple, PRT (2, 3, 4 w), thermistor, resistance (2-4 w), frequency
- 6.5-digit bench DMM function for front-panel inputs
- /C models include Accredited Calibration
- 2638A-100 Extra Universal Input Module
- Dedicated low burden AC/DC current channels
- 20 universal channels and two dedicated low burden current channels (AC/DC) per module
- One year warranty

Optional: ISO 17025 Accredited Calibration available for 1586A models (add "/C" to the below model number).

Fluke Calibration 9132 and 9133 Portable Infrared Calibrator



Fluke 9132



Fluke 9133

Precision when you need it for infrared temperature calibration

Whether you're using in-line or handheld infrared pyrometers, you need good calibration standards to verify their accuracy. Our portable IR calibrators provide stable blackbody targets for calibrating noncontact IR thermometers from -30°C to 500°C .

These units feature a temperature controlled measurement surface with a diameter of 57 mm. The target temperature can be controlled in set-point increments of 0.1° from -30°C to 500°C and a well is located directly behind the blackbody surface for contact calibration.

- Certify IR pyrometers from -30°C to 500°C
- Large 57 mm blackbody target
- RTD reference well for contact temperature measurement
- Small, compact design
- One year warranty

General specifications	9132	9133
Temperature Range	50°C to 500°C	-30°C to 150°C at 23°C ambient
Accuracy	$\pm 0.5^{\circ}\text{C}$ at 100°C $\pm 0.8^{\circ}\text{C}$ at 500°C	$\pm 0.4^{\circ}\text{C}$
Target Size	57 mm	57 mm
Target Emissivity	0.95 (± 0.02 from 8 to 14 mm)	0.95 (± 0.02 from 8 to 14 mm)
Heating Time	30 minutes (50°C to 500°C)	15 minutes (25°C to 150°C)
Cooling Time	30 minutes (500°C to 100°C)	15 minutes (25°C to -20°C)

Fluke Calibration 4180 and 4181 Precision Infrared Calibrators



Fluke 4180



Fluke 4181

Accredited performance for point and shoot calibrations

Now it's easy to increase your IR temperature measurement accuracy with the 4180 and 4181 Precision Infrared Calibrators. These infrared temperature calibrators give more consistent, accurate and reliable calibrations because emissivity is radiometrically calibrated, and the target size minimises size of source effect errors. In addition, these infrared calibrators simplify calibration because they uniquely compensate for errors caused by thermometer emissivity settings.

- Calibrated radiometrically for meaningful, consistent results
- Accurate, reliable performance from -15°C to 500°C
- Large target size of 152 mm is required for calibrating most thermometers
- Accredited radiometric calibration report
- One year warranty

Recommended Accessories


9308
Carrying Case

9302
Carrying Case

4180-CASE
Carrying Case,
(4180 or 4181)

4180-APRT 2"
Aperture,
(4180 or 4181)


Included Accessories

Fluke 714B/712B: Magnetic Hanging Tool, Batteries, Manual, Traceable Calibration Certificate and Test Leads.

Fluke 724: TL75 Test Leads, AC175 Test Clips, Stackable Test Leads (1 pair), Spare Fuse and User Manual.

Ordering Information

9312-256	Portable IR Calibrator 50°C to 500°C
9133-256	Portable IR Calibrator -30°C to 150°C
4180	Precision Infrared Calibrator, -15°C to 120°C
4181	Precision Infrared Calibrator, 35°C to 500°C

Fluke Calibration 6109A and 7109A Portable Calibration Baths



Fluke 6109A

Four times more calibration throughput with twice the accuracy of Micro-Baths and dry-block calibrators

The Fluke Calibration 6109A and 7109A Portable Calibration Baths let process industry professionals calibrate four times more sanitary sensors per batch in less time and with twice the accuracy of other baths in this class. Up to four tri-clamp sanitary sensors fit easily into these baths for calibration at $\pm 0.1^\circ\text{C}$ temperature display accuracy. Throughput is even higher for sanitary RTDs with small or no flanges.

- Calibrate up to four tri-clamp sanitary sensors at the same time
- Wide temperature ranges cover most process applications:
 - 6109A: 35°C to 250°C
 - 7109A: -25°C to 140°C
- Excellent display accuracy of $\pm 0.1^\circ\text{C}$ provides 4:1 test uncertainty ratio (TUR) for critical applications
- One year warranty

	6109A	7109A
Range (at 25°C ambient temperature)	35°C to 250°C	-25°C to 140°C (-15°C cover off)
Accuracy (MAX possible error)	0.1°C	0.1°C
Display resolution	0.01, 0.001	.0.1, 0.001 $^\circ\text{C}$
Stability	0.015°C	0.01°C
Typical uniformity	0.03°C up to 200°C 0.04°C above 200°C	0.02°C

Fluke Calibration 1502A and 1504 Tweener Thermometer Readouts



Fluke 1502A

Best performance thermometers in their price range

The 1502A and 1504 Tweener Thermometer Readouts are low-cost high-accuracy digital thermometers featuring accuracy of up to $\pm 0.006^\circ\text{C}$ (Fluke 1502A) and up to $\pm 0.002^\circ\text{C}$ (Fluke 1504).

The **1502A** is designed to be used with 25Ω and 100Ω RTDs and SPRTs.

The **1504** Thermometer Readout is designed to be used with thermistors or RTDs with a nominal resistance of $1,000\Omega$ or greater.

One year warranty.

Fluke Calibration 1620A Precision Thermo-Hygrometer



Fluke 1620A

The most accurate temperature and humidity graphical data loggers on the market

Now you can easily monitor and record conditions throughout your entire facility with the DewK's new Ethernet and wireless capabilities, and set your upgraded LogWare III software to notify you immediately of changing conditions.

The 1620A accepts inputs from up to two sensors, which may be mounted directly on the unit or remotely. Each sensor comes with a NVLAP-accredited calibration for temperature and relative humidity from Fluke Calibration, containing its own NIST-traceable calibration data. The 1620A-S reads temperature to $\pm 0.25^\circ\text{C}$ over its calibrated range of 15°C to 35°C . Relative humidity readings are to $\pm 2\%$ RH from 20% RH to 70% RH.

One year warranty.

Recommended Accessories

Fluke 6109A/7109A



7109-CASE
Carrying Case



7109-2027
Adjustable Probe
Holding Fixture



7109-2051
Single Probe
Clamp Kit



7109-2080
Fluid Overflow Kit

Fluke 1502A/1504



9301
Carrying Case, fits
Tweener and 12 in
probe



2505
Spare Connector



2508
Serial Cable Kit



2361
Spare Power Supply
100 to 240 V AC
(1620A)

Ordering Information

6109A	Portable Calibration Bath, 35°C to 250°C
6109A-P	Portable Calibration Bath with Process Electronics, 35°C to 250°C
7109A	Portable Calibration Bath, -25°C to 140°C
7109A-P	Portable Calibration Bath with Process Electronics, -25°C to 140°C
1502A	Tweener PRT Readout
1502A-2506	Tweener PRT Readout, with IEEE-488
1504	Tweener Thermistor Readout
1504-2506	Tweener Thermistor Readout, with IEEE-488
1620A-H	The "DewK" Thermo-Hygrometer, High-Accuracy Value Kit
1621A-H	The "DewK" Thermo-Hygrometer, High-Accuracy Value Kit
1620A-S	The "DewK" Thermo-Hygrometer, Standard-Accuracy Value Kit
1621A-S	The "DewK" Thermo-Hygrometer, Standard-Accuracy Value Kit
9936A	LogWare III Software

Fluke Calibration 1523 and 1524 Reference Thermometers



Fluke 1524

Fluke 1523

The 1523/1524 Reference Thermometers from Fluke Calibration measure, graph and record PRTs, thermocouples and thermistors. You can measure up to 0.3 seconds per sample and plot and scale trends in real time. Both thermometers have memory for up to 25 readings with statistics. The 1524 has two inputs with data logging memory for 15,000 measurements with date and time stamps.

- High accuracy PRTs: $\pm 0.011\text{ }^{\circ}\text{C}$; Thermocouples: $\pm 0.24\text{ }^{\circ}\text{C}$; Thermistors: $\pm 0.002\text{ }^{\circ}\text{C}$
- A simple user interface to see trends quickly
- Smart connectors to load probe information automatically
- Use a PC and optional LogWare II software to monitor and log more data over time
- One year warranty

Included accessories

Fluke 1523 Bundled with:

1523-P1	5616 PRT ($-200\text{ }^{\circ}\text{C}$ to $420\text{ }^{\circ}\text{C}$, 100 ohm (1/4 x 12 inch)), Universal TC INFO-CON Connector, TPAK and Case
1523-P2	5628 PRT ($-200\text{ }^{\circ}\text{C}$ to $660\text{ }^{\circ}\text{C}$, 25 ohm (1/4 x 12 inch)), Universal TC INFO-CON Connector, TPAK and Case
1523-P3	5627A PRT ($-200\text{ }^{\circ}\text{C}$ to $420\text{ }^{\circ}\text{C}$, 100 ohm (1/4 x 12 inch)), Universal TC INFO-CON Connector, TPAK and Case

Fluke 1524 Bundled with:

1524-P1	5616 PRT, Universal TC INFO-CON Connector, TPAK and Case
1524-P2	5628 PRT, Universal TC INFO-CON Connector, TPAK and Case
1524-P3	5627A PRT, Universal TC INFO-CON Connector, TPAK and Case

Recommended Accessories

Fluke 1523/1524



5616-12-P
Precision PRT
305 mm x 6.35 mm

5610-9-P
Precision Thermistor
229 mm x 3.2 mm



1523-CASE
1523/1524 Readout & Probe Carrying Case



2384-P, 2384-T
INFO-CON Connectors, PRT (gray cap) or TC (blue cap)

Fluke 1551AEx/2AEx



1551-CASE
Carrying Case



1551-CBL
Cable, RS-232



Fluke Calibration 7526A Precision Process Calibrator

The Fluke Calibration 7526A Precision Process Calibrator offers the best balance of economy and accuracy for benchtop calibration of temperature and pressure process instrumentation.

Easily calibrate RTD and thermocouple readouts, pressure gauges, temperature transmitters, digital process simulators, data loggers, multimeters and more.

- Sources and measures DC voltage, current, resistance, RTDs and thermocouples
- Precision pressure measurement using Fluke 750P Series Pressure Modules
- Measures 4–20 mA loop current
- Includes certificate of calibration traceable to national standards
- Thermocouple output/input: -10 mV to $75\text{ mV} \pm (30\text{ ppm of reading} + 2\text{ }\mu\text{V})$
- Transmitter output: 0 mA to 24 mA (input with loop power) $\pm (100\text{ ppm} + 1\text{ }\mu\text{A})$
- Resistance output: $5\text{ }\Omega$ to $400\text{ }\Omega \pm 0.015\text{ }\Omega$

Fluke Calibration 1551AEx and 1552AEx Stik Thermometer Readouts



Fluke 1552A



Best substitute for precision mercury-filled glass thermometers

The Fluke 1551A and 1552A Stik Thermometers are an accurate and repeatable substitute to mercury-in-glass thermometers. Whether working outdoors in environments where potentially explosive gases may be present or on the floor of a processing plant, these intrinsically-safe, battery operated, portable reference thermometers are designed to go where you work.

- User-configurable temperature Trend/Stability indicator
- Optional data logging to internal memory
- 300-hour battery life
- NVLAP-accredited, NIST-traceable calibration included
- Accuracy of $\pm 0.05\text{ }^{\circ}\text{C}$ ($\pm 0.09\text{ }^{\circ}\text{F}$) over full range
- Intrinsically safe (ATEX and IECEx compliant) Ex ib IIB T4 Gb
- Two models to choose from ($-50\text{ }^{\circ}\text{C}$ to $160\text{ }^{\circ}\text{C}$ or $-80\text{ }^{\circ}\text{C}$ to $300\text{ }^{\circ}\text{C}$)
- One year warranty

Models	Included accessories
1551A-9*	1551A Ex Thermometer, Fixed RTD, $-50\text{ }^{\circ}\text{C}$ to $160\text{ }^{\circ}\text{C}$, 4.8 mm x 229 mm
1551A-12*	1551A Ex Thermometer, Fixed RTD, $-50\text{ }^{\circ}\text{C}$ to $160\text{ }^{\circ}\text{C}$, 6.35 mm x 305 mm
1551A-20*	1551A Ex Thermometer, Fixed RTD, $-50\text{ }^{\circ}\text{C}$ to $160\text{ }^{\circ}\text{C}$, 6.35 mm x 508 mm
1552A-12*	Thermometer, Fixed PRT, $-80\text{ }^{\circ}\text{C}$ to $300\text{ }^{\circ}\text{C}$, 6.35 mm x 305 mm

*Datalogging option models also available as -DL

Fluke 717, 718, 718Ex and 719 Pressure Calibrators

Accurate and rugged, temperature calibration tools



Fluke 719



Fluke 717 Pressure Calibrators

- Measure up to 10,000 psi/690 bar sensor (10000G model)
- Compatible with non-corrosive gases and liquids

Fluke 718 Pressure Calibrators

- 1, 30, 100 and 300 psi ranges available
- Pump to 300 psi, 20 bar with internal pump (718-300G)
- 718-1G includes special low volume pump and high measurement resolution for low pressure calibration

Fluke 719 Electric Pressure Calibrators

- Electric pump enables one-handed pressure pumping and makes pressure calibration quicker and easier
- Best in class 0.025 % pressure measurement accuracy
- Programmable pump limit settings can eliminate over-pressurisation—set 'pump to' pressure values
- Two ranges, 30 psi and 100 psi

Fluke 717, 718 and 719 common features

- Pressure switch test makes a difficult task easy, captures set, reset and deadband values of a pressure switch
- 717 and 718 measure pressure to 0.025 % of full scale with internal sensor
- Measure mA with 0.015 % accuracy and 0.001 mA resolution, while sourcing 24 V loop power
- Three year warranty



Fluke 718



Fluke 717

Models	Range	Resolution	Comment
717-1G 718-1G	+/- 1 psi, 27.5 in H ₂ O, (-7 - +7 kPa)	+0.0001 psi, 0.0001 kPa, 0.0001 in H ₂ O	Fluke 718 dry air only and includes on board pump
717-15G	-12 to 15 psi, -83 to 103 kPa	0.001 psi, 0.01 kPa, 0.01 in H ₂ O	—
717-30G 718-30G* and 719-30G	-12 to + 30 psi, (-83 to 207 kPa)	0.001 psi, 0.001 kPa, 0.001 in H ₂ O	Fluke 718 and Fluke 719 dry air only and includes on board pump
717-100G 718-100G*	-12 to + 100 psi, (-83 to 690 kPa)	0.01 psi, 0.01 kPa, 0.01 in H ₂ O	Fluke 718 and Fluke 719 dry air only and includes on board pump
717-300G 718-300G* and 719-100G	-12 to +300 psi, (-83 to +2070 kPa)	0.01 psi, 0.01 kPa, 0.01 in H ₂ O	Fluke 718 dry air only and includes on board pump
717-500G	0-500 psi, 0-3450 kPa	0.01 psi, 0.1 kPa	Compatible with non-corrosive gases and fluids
717-1000G	0-1000 psi, 0-6900 kPa	0.01 psi, 0.1 kPa	Compatible with non-corrosive gases and fluids
717-1500G	0-1500 psi, 0-10342 kPa	0.1 psi, 1 kPa	Compatible with non-corrosive gases and fluids
717-3000G	0-3000 psi, 0-20700 kPa	0.1 psi, 1 kPa	Compatible with non-corrosive gases and fluids
717-5000G	0-5000 psi, 0-34500 kPa	0.1 psi, 1 kPa	Compatible with non-corrosive gases and fluids
717-10000G	0-10000 psi, 0-69000 kPa	1 psi, 1 kPa	Compatible with non-corrosive gases and fluids
Pressure accuracy	0.035 % of range, 1 year. 0.025 % for 6 months, 717 and 718-1G: 0.05 % 6 months, 1 year, 718 and 717-300G 0.035 % 6 months, 0.05 % 1 year		
mA measurement	0-24 mA range	0.001 mA resolution	Accuracy: ± 0.015 % + 1 count
Loop power	24 V DC		Accuracy: ± 10 %

*Intrinsically safe models available, see page 135.

Speciality Model

Fluke 718Ex Intrinsically Safe Pressure Calibrator The Fluke 718Ex offers a convenient,



- ATEX II 1 G Ex ia IIC T4
- 30, 100, and 300 psi ranges (2, 7, and 20 bar)
- Pressure measurement to 0.05% of full span, using an internal pressure sensor.
- Pressure measurement to 200 bar using any of eight

Recommended Accessories



700ILF
In-Line Filter
See page 171



700LTP-1
Low Pressure Test Pump
See page 171



700HTP-2
Hydraulic Test Pump
See page 171



C116
Soft Carrying Case
See page 160

Included Accessories

Fluke 717/718/719: Protective Yellow Holster with Test Lead Storage, Instruction Sheet, 9 V Alkaline Battery (1x 717, 2x 718 & 719), Test Leads and Alligator Clips, Hose Kit (719), NIST- Traceable Calibration Report & Data.

Fluke 718Ex: Protective Red Holster, TL75 Test Leads, AC72 Test Clips, User Manual (CD), Fluke 718Ex CCD, NIST- Traceable Calibration Report & Data.

Ordering Information

FLUKE-717 Pressure Calibrator, 10,000G - 1G 10,000 PSI - 1 PSI (10 models)

FLUKE-718 Pressure Calibrator 300G, 100G, 30G

FLUKE-718EX Intrinsically Safe 300G, 100G, Pressure Calibrator 30G

FLUKE-719 Electric Pressure Calibrator 100PSI, 30 PSI

Fluke 719Pro Pressure Calibrators



Fluke 719Pro



Integrated electric pump - now to 300PSI/20 bar

The Fluke 719Pro is an exciting enhancement of the popular original 719 pressure calibrators. Notable improvements include expanding the pressure measurement range of the 100 PSI model up to 150 PSI and the addition of a 300 PSI range. The 719Pro adds a backlit display and precision temperature measurement with the addition of an accessory RTD probe available as a new accessory.

- Electric pump for one handed pressure calibration
- Best in class pressure measurement uncertainty of 0.025%
- Variable release rate bleed valve for easy pressure adjustment
- 30 PSI, 150 PSI and the long requested 300 PSI (2, 10 and 20 bar) pressure ranges
- Programmable pressure calibrator pump limit eliminates over-pressurisation and allows the user to program target pressures for pumping
- Extended pressure measurement range with any of 50 750PXX Pressure Modules
- Source mA with simultaneous pressure measurement to test valves and I/Ps
- Simulate mA signals to troubleshoot 4-20 mA loops
- Test pressure switches with built in switch test function
- Power transmitters during test using 24 V loop supply with simultaneous mA measurement
- Three year warranty

Pressure measurement	Range	Resolution	Accuracy
Fluke-719Pro-30G	-12 to 30 PSI / -0.8 to 2 bar	0.001 PSI, 0.0001 bar	± 0.025 % of full scale, 6 months
Fluke-719Pro-150G	-12 to 150 PSI / -0.8 to 10 bar	0.01 PSI, 0.001 bar	
Fluke-719Pro-300G	-12 to 300 PSI / -0.8 to 20 bar	0.01 PSI, 0.001 bar	

Function	Range	Resolution	Accuracy (1 year)
mA DC (simulation & measurement)	0-24 mA DC	0.001 mA	± 0.015 % of reading ± 2 counts
Volts DC (measurement only)	30 V DC	0.001 V	± 0.015 % of reading ± 2 counts
Temperature (measurement only, Pt100 RTD)	-50 to 150 °C	0.01 °C	Temperature ± 0.1 °C
Loop power supply	24 V DC	N/A	24 mA at 24 V
Temperature effect (all functions)			Add ± 0.002 % F.S./°C for temps outside of 15 °C to 35 °C

Environmental	
Operating temperature	-10 °C to +50 °C
Storage temperature (without batteries)	-20 °C to +60 °C

Power requirements	
Battery	8 standard alkaline AA batteries
Battery life	300 pump cycles to 150 PSI minimum; 1000 pump cycles to 30 PSI; 100 pump cycles to 300 PSI minimum

Physical	
Size (HxWxD)	24.13 cm x 11.18 cm x 7 cm
Weight	With holster 1.2 kg

Connections	
Pressure	1/8 inch female NPT
Electrical	Standard banana jacks
RTD	4 pin miniature circular
External module	6 pin miniature circular

Pressure Modules

Fluke 750 Series Pressure Modules

- 50 Pressure Modules
- 0.025 % reference uncertainty
- Ranges from 1.000 in H2O (0.2491 kPa) to 10,000 psi (68.948 MPa)
- Gage, differential, dual range, absolute and vacuum measurement models
- Rugged cases protect the modules from harsh environments
- Temperature compensated 0 °C to 50 °C

For more information see page 124



Fluke Process Calibrators in this catalogue displaying the Pressure Enabled symbol display readings from the 750 Series Pressure Modules.

Recommended Accessories



FLUKE-720RTD
RTD Probe for 721 and 719PRO
See page 171



FLUKE-720URTDA
Universal RTD adapter for 721 and 719PRO
See page 171



FLUKE-71X-TRAP
Liquid and Dirt Trap for 718, 719 & 719PRO
See page 171

Included Accessories

Test Leads with Alligator Clips, Printed User Manual/CD-ROM, Fluid Trap, Carrying Case, 1/4 inch NPT to 1/4 inch ISO Adapter, Accessory Hose Kit with (2) 1/8 inch Quick Fit Adapters and 1 metre of hose, Traceable Certificate of Calibration.

Ordering Information

FLUKE-719PRO-30G Electric Pressure Calibrator, 30PSIG

FLUKE-719PRO-150G Electric Pressure Calibrator, 150PSIG

FLUKE-719PRO-300G Electric Pressure Calibrator, 300PSIG

FLUKE-71X-TRAP Liquid & Dirt Trap for Fluke 718, 719 and 719Pro

Fluke 721 Precision Pressure Calibrators



Fluke 721

Pressure calibration and temperature

measurement for custody transfer applications The Fluke 721 Precision Pressure Calibrators with dual isolated pressure sensors are the ideal tool for gas custody transfer applications allowing you to take simultaneous static and differential pressure measurements with a single tool.

The 721 can be configured by selecting either a 16 PSI (1.1 bar) or 36 psi (2.48 bar) low pressure sensor then add any of 7 high pressure ranges including 100, 300, 500, 1000, 1500, 3000 or 5000 psi (6.9, 20, 24.5, 69, 103.4, 200, 345 bar).

- Ideal for gas flow calibration (custody transfer) applications
- Two isolated, stainless steel, pressure sensors with 0.025% accuracy
- Switch test on both pressure inputs
- Pt100 RTD input for temperature measurement, (probe optional)
- Measures 4-20 mA signals
- Internal 24 V loop power supply can power a transmitter under test
- Three year warranty

Recommended Accessories



FLUKE-720RTD
RTD Probe for 721 and 719PRO
See page 171



FLUKE-720URTD
Universal RTD adapter for 721 and 719PRO
See page 171

Included Accessories

Fluke 721/Ex: Soft Case, four AA Batteries, Manual, Traceable Calibration Certificate, Test Leads.

Ordering Information

FLUKE-721-3650	Dual Sensor Pressure Calibrator
FLUKE-721-3630	Dual Sensor Pressure Calibrator
FLUKE-721-3615	Dual Sensor Pressure Calibrator
FLUKE-721-3610	Dual Sensor Pressure Calibrator
FLUKE-721-3605	Dual Sensor Pressure Calibrator
FLUKE-721-3603	Dual Sensor Pressure Calibrator
FLUKE-721-3601	Dual Sensor Pressure Calibrator
FLUKE-721-1650	Dual Sensor Pressure Calibrator
FLUKE-721-1630	Dual Sensor Pressure Calibrator
FLUKE-721-1615	Dual Sensor Pressure Calibrator
FLUKE-721-1610	Dual Sensor Pressure Calibrator
FLUKE-721-1605	Dual Sensor Pressure Calibrator
FLUKE-721-1603	Dual Sensor Pressure Calibrator
FLUKE-721-1601	Dual Sensor Pressure Calibrator
FLUKE-720RTD	RTD Probe for Fluke 721 and 719Pro
FLUKE-720RTDUA	Universal RTD Adapter for Fluke 721 and 719Pro

Low Pressure Sensor			High Pressure Sensor		
Model	Range 1	Resolution Accuracy	Range 2	Resolution Accuracy	
Fluke-721-1601 16PSIG, 100PSIG	-14psi to +16psi -0.97bar to 1.1bar	0.001psi, 0.0001bar	-12psi to +100psi -0.83bar to 6.9bar	0.01psi 0.0001bar	0.025% of full scale
Fluke-721-1603 16PSIG, 300PSIG			-12psi to +300psi -0.83bar to 20bar	0.01psi 0.001bar	
Fluke-721-1605 16PSIG, 500PSIG			-12psi to +500psi -0.83bar to 34.5bar	0.01psi 0.001bar	
Fluke-721-1610 16PSIG, 1000PSIG			0psi to +1000psi 0.00bar to 69bar	0.1psi 0.001bar	
Fluke-721-1615 16PSIG, 1500PSIG			0psi to +1500psi 0.00bar to 103.4bar	0.1psi 0.001bar	
Fluke-721-1630 16PSIG, 3000PSIG			0psi to +3000psi 0.00bar to 200bar	0.1psi 0.01bar	
Fluke-721-1650 16PSIG, 5000PSIG			0 psi to +5000 psi 0.00 bar to 345 bar	0.1psi 0.01bar	
Fluke-721-3601 36PSIG, 100PSIG	-14psi to +36psi -0.97bar to 2.48bar	0.025% of full scale	-12psi to +100psi -0.83bar to 6.9bar	0.01psi 0.0001bar	0.025% of full scale
Fluke-721-3603 36PSIG, 300PSIG			-12psi to +300psi -0.83bar to 20bar	0.01psi 0.001bar	
Fluke-721-3605 36PSIG, 500PSIG			-12psi to +500psi -0.83bar to 34.5bar	0.01psi 0.001bar	
Fluke-721-3610 36PSIG, 1000PSIG			0psi to +1000psi 0.00bar to 69bar	0.1psi 0.001bar	
Fluke-721-3615 36PSIG, 1500PSIG			0psi to +1500psi 0.00bar to 103.4bar	0.1psi 0.01bar	
Fluke-721-3630 36PSIG, 3000PSIG			0psi to +3000psi 0.00bar to 200bar	0.1psi 0.01bar	
Fluke-721-3650 36PSIG, 5000PSIG			0psi to +5000psi 0.00bar to 345bar	0.1psi 0.01bar	

Fluke 729 Pro Automatic Pressure Calibrator



Portable pressure calibrator with replaceable module

- Automatic pressure generation and regulation to 1000psi
- Replaceable pressure control modules
- Built-in test template, one-key calibration
- HART communication
- Pressure leakage testing
- Automatic fine-pressure adjustment, automatic pressure stabilization
- Powerful, replaceable Li-ion battery
- Quick pressure release valve with a muffler
- Optional portable manifold with quick connection
- Extend measurement range with 750P Series pressure modules
- Measure temperature with 720RTD probe
- Bright dual-three-channel /color graphic display
- Weight <5kg
- Rugged and portable design with standard 3-year warranty

Key parameters	729pro 7M	729pro 4M
Pressure control range	(-13 to 1000) psi	(-13 to 600) psi
Control stability	0.005% of FS, minimum	
Replaceable pressure control modules	6 modules	4 modules
Warranty	3 years	

Internal pressure measurement module		
Pressure module	Pressure type	Range
FLK-PMM-200K	Gauge	(-15 to 30) psi
FLK-PMM-200KA	Absolute	(0 to 30) psi
FLK-PMM-2000K	Gauge	(-14 to 300) psi
FLK-PMM-4000K	Gauge	(-14 to 600) psi
FLK-PMM-7000K	Gauge	(-14 to 1000) psi
FLK-PMM-7000KA	Absolute	(0 to 1000) psi

Ordering Information

FLK-729PRO 4M	Fluke 729 Pro Automatic Pressure calibrator, 4Mpa
FLK-729PRO 7M	Fluke 729 Pro Automatic Pressure Calibrator, 7Mpa
FLK-PMM-200K	Replaceable pressure module, (-15 to 30) psi
FLK-PMM-2000K	Replaceable pressure module, (-14 to 300) psi
FLK-PMM-7000KA	Replaceable pressure module, absolute, (0 to 1000) psi
FLK-PMM-200KA	Replaceable pressure module, absolute, (0 to 30) psi
FLK-PMM-7000K	Replaceable pressure module, (-14 to 1000) psi
FLK-PMM-4000K	Replaceable pressure module, (-14 to 600) psi

Fluke 729 Automatic Pressure Calibrator



Fluke 729



Portable automatic pressure calibrator simplifies pressure calibration

The Fluke 729 Automatic Pressure Calibrator has been designed specifically with process technicians in mind to simplify the pressure calibration process and provide faster, more accurate test results. Technicians know that calibrating pressure can be a time consuming task, but the 729 makes it easier than ever with an internal electric pump that provides automatic pressure generation and regulation in an easy-to-use, rugged, portable package.

The Fluke 729 can also automatically test multiple pressure test points and automatically document the results. Calibration is as easy as typing in the starting and ending pressure and the number of test points and tolerance level; the 729 does the rest.

With three ranges to choose from 30 psi (2 bar, 200 kPa), 150 psi (10 bar, 1 MPa) and 300 psi (20 bar, 2 MPa), the Fluke 729 Automatic Pressure Calibrator is designed to perform when and where you need.

- Automatic pressure generation and regulation to 300 psi
- Easily document the process using on-board test templates
- Automatic internal fine-pressure adjustment
- Measure, source and simulate 4 to 20 mA signals
- 24V loop power for powering transmitters for tests
- HART communication for testing HART smart transmitters
- Built-in leak testing for verifying test setups for leakage
- Fluke Connect® App compatibility
- Measure temperature with optional 720RTD probe
- Measure VDC for testing 1 V DC to 5 V DC output transmitters
- Compatible with Fluke 700G Series and 750 Series Pressure Modules
- Upload documented test results to DPCTrack2™
- Calibration Management Software to manage your instrumentation, create scheduled tests and reports and manage calibration data
- Three year warranty

Pressure specification*

One-year specification	0.02 % of full scale
Control specification	0.005 % full scale minimum

*See manual for detailed specifications

Model	Psi range, resolution	Bar range, resolution	kPa range, resolution	Comment
729 30G	-12.0000 to 30.0000 psi	-0.82737 to 2.06842 bar	-82.737 to 206.843 kPa	No wireless communication
729 150G	-12.000 to 150.000 psi	-0.8273 to 10.3421 bar	-82.73 to 1034.21 kPa	No wireless communication
729 300G	-12.000 to 300.000 psi	-0.8273 to 20.6843 bar	-82.73 to 2068.43 kPa	No wireless communication
729 30G FC	-12.0000 to 30.0000 psi	-0.82737 to 2.06842 bar	-82.737 to 206.843 kPa	Wireless communication for Fluke Connect
729 150G FC	-12.000 to 150.000 psi	-0.8273 to 10.3421 bar	-82.73 to 1034.21 kPa	Wireless communication for Fluke Connect
729 300G FC	-12.000 to 300.000 psi	-0.8273 to 20.6843 bar	-82.73 to 2068.43 kPa	Wireless communication for Fluke Connect

*Fluke Connect is only available in selected countries. Please check with your local distributor for available models.

Recommended Accessories



750SW DPC/
TRACK2
Software



FLUKE 750P
Series Pressure
Modules
See page 132



FLUKE-720URTD
Universal RTD adapter
for 721 and 719PRO
See page 171

Included Accessories

Soft Case, Stackable Test Leads, AC280 Hook Clips, Alligator Clips, Test Probes, Magnetic Hanger Kit, Carrying Strap, Power Supply, Rechargeable Battery (installed), Hose Kit with Push Fit Adapters, Hanging Clip, USB Cable, 1/8 in FNPT to 1/4 in FNPT Adapter, 1/8 in FNPT to F-M20 Adapter, 1/8 in FNPT to 1/4 in FBSP Adapter, PTFE Tape, (2) Sintered Filters, Liquid Dirt Trap, Water Trap Drain and Valve Tuning Hoses, Wireless Adapter (FC Models only), Quick Start Guide, Safety Sheet.

Ordering Information

FLK-729 30G	30 psi, 2 Bar Automatic Pressure Calibrator
FLK-729 150G	150 psi, 10 Bar Automatic Pressure Calibrator
FLK-729 300G	300 psi, 20 Bar Automatic Pressure Calibrator
FLK-729 30G FC	30 psi, 2 Bar Automatic Pressure Calibrator with Fluke Connect
FLK-729 150G FC	150 psi, 10 Bar Automatic Pressure Calibrator with Fluke Connect
FLK-729 300G FC	300 psi, 20 Bar Automatic Pressure Calibrator with Fluke Connect
FLUKE-729 /750SW BU	300 psi, 20 Bar Automatic Pressure Calibrator and DPC-TRACK2 Software Bundle

Fluke 730G Smart Digital Pressure Calibrator

NEW


Fluke 730G

A compact, digital pressure calibrator solution for bench or field.

The Fluke 730G Smart Digital Pressure Calibrator with internal HART communication, designed in a pressure gauge form. In conjunction with a pressure test pump, the 730G enables high-efficiency and high-accuracy measurement and calibration of pressure gauges, pressure switches, pressure transmitters, which makes it ideal for mobile metrology labs, metrology institutes and enterprises to establish pressure laboratories.

- Pressure measurement from ± 10 inH₂O/2.5 kPa to 10000 psi/69 MPa
- Four absolute pressure measurement range 15 PSIA (103 kPa), 30 PSIA (207 kPa), 100 PSIA (690 kPa), 300 PSIA (2 MPa)
- Pressure measurement accuracy 0.05% of full scale, 0.02% optional and 0.01% current and voltage accuracy
- Current measurement range: 0-24mA; voltage measurement range: 0-30VDC
- 24V loop powered, no external power supply needed
- Storage up to 128 sets of calibration data
- Compatible with 730G/PCSW management software for paperless reporting.
- Combine with the Fluke 730 series test pumps for high accuracy and precise pressure measurement for up to 10,000 psi.

Specifications

Size (HxWxD)	155 mm x 130 mm x 44 mm (6.1" x 5.1" x 1.7")
Pressure connection	1/4 in NPT Male
Weight	850g (1.87 lb)
Display	LCD
Power	One rechargeable Lithium battery
Battery life	25 hours continuously (without 24 V loop power), or 8 hours continuously (24 V loop power)

Recommended Kits

Combine with any Fluke 730G Series Calibrator



Fluke-730LTP/40K

- Pressure range -40 KPa to 40 KPa
- Ultra-fine precision adjustment to support low pressure calibration
- Special insulation to reduce the influence of external temperature environment



Fluke-730LTP/600K

- Pressure range -95KPa to 600KPa
- Pressure is generated by the combination of the pressure rod and screw for faster and smoother pressure increase and decrease
- Safely switch between pressure and vacuum



Fluke-730PTP/10M

- Pressure range -95 KPa to 10 MPa
- Multi-stage boost system design makes the process 5 times more efficient.
- Safety lock ensures safe switching between positive and negative pressure



Fluke-730HTP/70M

- Pressure range 0 KPa to 70 MPa
- The screw press design supports high pressure range with less effort.
- Fine pressure adjustment capability with shut-off valve for stable measurements.

Fluke 700G Precision Pressure Test Gauges



Pressure Gauges designed to handle all your Pressure Calibration needs

With best-in-class accuracy and measurements, the Fluke 700G Series Precision Pressure Test Gauges were designed to handle all of your pressure calibration needs. The 700G Series Gauges are rugged and easy to use, with twenty three models ranging from ± 10 inH₂O/20 mbar to 10,000 psi/690 bar including absolute pressure ranges.

When combined with the Fluke 700PTPK or 700HTPK you've got a complete pressure testing solution for up to 600 psi (40 bar) with the PTP-1 pneumatic pump and up to 10,000 psi (690 bar) with the HTP-2 hydraulic pump.

- Precision pressure measurement from ± 10 inH₂O/20 mbar to 10,000 psi/690 bar
- Absolute pressure measurement ranges 15, 30, 100, 300 psia
- Accuracy to 0.05 % of full scale
- Reference class gauge accuracies to 0.04 % of reading
- Easy to use, rugged construction for reliable performance
- CSA; Class 1, Div 2, Groups A-D rating
- ATEX rating: II 3 G Ex nA IIB T6
- Combine the Pneumatic Test Pump Kits and Hydraulic Test Pump Kits with any Fluke-700G Series Gauge, 1,000 psi (69 bar) or less, to make a complete pressure testing
- Log up to 8,493 pressure measurements to memory (requires 700G/TRACK software)
- Three year warranty

Specifications	
Size (HxWxD)	12.7 cm x 11.4 cm x 3.7 cm
Pressure connection	1/4 in NPT Male
Housing/Weight	Cast ZNAl 0.56 kg with holster
Display	5.5 digits, 16.53 mm high 20-segment bar graph, 0 to 100%
Power	Three AA alkaline batteries
Battery life	1,500 hours without backlight (continuous on), 2,000 hours at slow sample rate

Recommended Kits

Buy more, Save more



Fluke-700PTPK Pneumatic Test Kit

- Combine with any Fluke-700G Series Gauge, 1,000 psi (69 bar) or less, to make a complete pressure testing kit
- Connect the 700G Series gauge directly to the included PTP-1 hand pump



Fluke 700HTPK Hydraulic Test Kit

- Combine with any Fluke-700G Series Gauge, 1,000 psi (69 bar) range or greater, to make a complete pressure testing kit
- Generate pressure up to 10,000 psi, 690 bar with the included 700HTP-2 test pump
- Hard case protects pump and gauge and allows gauge to remain connected to the pump



Fluke-700PTPK2 Premium Pneumatic Test Pump Kit

- Pneumatic Hand Pump
- Premium, no tools required gauge connector
- One premium transmitter test hose kit and adapters



Fluke-700HTPK2 Premium Hydraulic Test Pump Kit

- Hydraulic Hand Pump
- Premium, no tools required gauge connector
- One premium transmitter test hose kit and adapters

For more details see page 172

Fluke 700G Precision Pressure Test Gauges

Model	Range	Burst Pressure
Fluke-700G01	-10 to +10 inH2O -20 mbar to 20 mbar	3 psi 210 mbar
Fluke-700G02	-1 to +1 psi -70 mbar to 70 mbar	5 psi 350 mbar
Fluke-700G04	-14 psi to 15 psi -.97 bar to 1 bar	60 psi 4 bar
Fluke-700G05	-14 psi to 30 psi -.97 bar to 2 bar	120 psi 8 bar
Fluke-700G06	-12 psi to 100 psi -.83 bar to 6.9 bar	400 psi 26 bar
Fluke-700G27	-12 psi to 300 psi -.83 bar to 20 bar	1200 psi 80 bar
Fluke-700G07	-12 psi to 500 psi -.83 bar to 34 bar	2000 psi 138 bar
Fluke-700G08	-14 psi to 1000 psi -.97 bar to 69 bar	4000 psi 266 bar
Fluke-700G10	-14 to 2000 psi -.97 bar to 140 bar	8000 psi 550 bar
Fluke-700G29	-14 psi to 3000 psi -.97 bar to 200 bar	10000 psi 690 bar
Fluke-700G30	-14 psi to 5000 psi -.97 bar to 340 bar	10000 psi 690 bar
Fluke-700G31	-14 psi to 10000 psi -.97 bar to 690 bar	20000 psi 1035 bar
Fluke-700GA4	0 to 15 psia 0 to 1 bar absolute	60 psi 4 bar
Fluke-700GA5	0 to 30 psia 0 to 2 bar absolute	120 psi 8 bar
Fluke-700GA6	0 to 100 psia 0 to 6.9 bar absolute	400 psi 27 bar
Fluke-700GA27	0 to 300 psia 0 to 20 bar absolute	1200 psi 80 bar
Fluke-700RG05	-14 to +30 psi -.97 to +2 bar	90 psi 6 bar
Fluke-700RG06	-12 to 100 psi -.83 to 6.9 bar	400 psi 27 bar
Fluke-700RG07	-12 to 500 psi -.83 to 34	2000 psi 138 bar
Fluke-700RG08	-14 to 1000 psi -.97 to 69 bar	4000 psi 275 bar
Fluke-700RG29	-14 to 3000 psi -.97 to 200 bar	10000 psi 690 bar
Fluke-700RG30	-14 to 5000 psi -.97 to 340 bar	15000 psi 1035 bar
Fluke-700RG31	-14 to 10000 psi -.97 to 690 bar	20000 psi 1380 bar

700R Ranges: Temperature Compensation 0 °C to 50 °C to rated accuracy. For temperatures from -10 °C to 0 °C and 50 °C to 55 °C, add .005 % FS/°C.

Media compatibility:

10 inH2O, 1, 15, 30 psi: any clean dry non-corrosive gas
100, 300, 500, 1000 psi: any liquids or gases compatible with 316 stainless steel and above

1000 psi: any non-flammable, non-toxic, non-explosive, non-oxidising liquid or gas compatible with 316 stainless steel.

Fluke 730G Precision Pressure Test Gauges

Model	Range	Burst Pressure
FLK-730G01	-10 to +10 inH2O -20 mbar to 20 mbar	3 psi 210 mbar
FLK-730G02	-1 to +1 psi -70 mbar to 70 mbar	5 psi 350 mbar
FLK-730G04	-14 psi to 15 psi -.97 bar to 1 bar	60 psi 4 bar
FLK-730G05	-14 psi to 30 psi -.97 bar to 2 bar	120 psi 8 bar
FLK-730G06	-12 psi to 100 psi -.83 bar to 6.9 bar	400 psi 26 bar
FLK-730G27	-12 psi to 300 psi -.83 bar to 20 bar	1200 psi 80 bar
FLK-730G07	-12 psi to 500 psi -.83 bar to 34 bar	2000 psi 138 bar
FLK-730G08	-14 psi to 1000 psi -.97 bar to 69 bar	4000 psi 266 bar
FLK-730G10	-14 to 2000 psi -.97 bar to 140 bar	8000 psi 550 bar
FLK-730G29	-14 psi to 3000 psi -.97 bar to 200 bar	10000 psi 690 bar
FLK-730G30	-14 psi to 5000 psi -.97 bar to 340 bar	10000 psi 690 bar
FLK-730G31	-14 psi to 10000 psi -.97 bar to 690 bar	20000 psi 1035 bar
FLK-730GA4	0 to 15 psia 0 to 1 bar absolute	60 psi 4 bar
FLK-730GA5	0 to 30 psia 0 to 2 bar absolute	120 psi 8 bar
FLK-730GA6	0 to 100 psia 0 to 6.9 bar absolute	400 psi 27 bar
FLK-730GA27	0 to 300 psia 0 to 20 bar absolute	1200 psi 80 bar
FLK-730RG04	-14 to 15 psi -.97 to 1 bar	45 psi 3 bar
FLK-730RG05	-14 to +30 psi -.97 to +2 bar	90 psi 6 bar
FLK-730RG06	-12 to 100 psi -.83 to 6.9 bar	400 psi 27 bar
FLK-730RG07	-12 to 500 psi -.83 to 34	2000 psi 138 bar
FLK-730RG08	-14 to 1000 psi -.97 to 69 bar	4000 psi 275 bar
FLK-730RG27	-12 psi to 300 psi -80 kPa to 2 MPa	2000 psi 14 MPa
FLK-730RG29	-14 to 3000 psi -.97 to 200 bar	10000 psi 690 bar
FLK-730RG30	-14 to 5000 psi -.97 to 340 bar	15000 psi 1035 bar
FLK-730RG31	-14 to 10000 psi -.97 to 690 bar	20000 psi 1380 bar

730R Ranges: Temperature Compensation 0 °C to 50 °C to rated accuracy. For temperatures from -10 °C to 0 °C and 50 °C to 55 °C, add .005 % FS/°C.

Media compatibility:

10 inH2O, 1, 15, 30 psi: any clean dry non-corrosive gas
100, 300, 500, 1000 psi: any liquids or gases compatible with 316 stainless steel and above

1000 psi: any non-flammable, non-toxic, non-explosive, non-oxidising liquid or gas compatible with 316 stainless steel.

730G01, 730G02, 730G04, 730G05, 730RG04, 730RG05: any clean dry non-corrosive gas

Above 100 psi: any liquids or gases compatible with 316 stainless steel

Recommended Kits

Buy more, Save more



Fluke 700MTH Premium Transmitter Test Hose Kit

- Easy to use premium pressure transmitter test hose kit for connection to 1/4" female metric/BSP
- 5,000 psi rating
- Includes 1/8" NPT connection for permanent mount to a calibrator or test pump



Fluke 700M20TH Premium Transmitter Test Hose Kit

- Easy to use premium pressure transmitter test hose kit for use with female M20 connections
- 5,000 psi rating
- Includes 1/8" NPT connection for permanent mount to a calibrator or test pump

For more details see page 163

Included Accessories

700G: Manual on CD-ROM, Traceable Certificate of Calibration, 1/4" NPT to 1/4" ISO Adapter.

730G: Manual, Traceable Certificate of Calibration, 1/4" NPT to 1/4" ISO Adapter, Test Lead Set with Alligator Clip.

Ordering Information

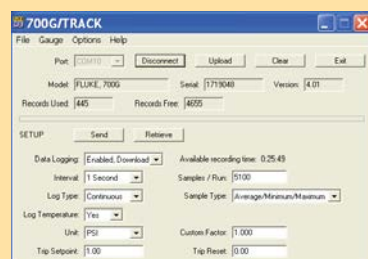
Please refer to the table on the left for Fluke 700G and Fluke 730G Models

700G-TRACK	Datalogging Software and Cable for 700G
FLK-730PCSWAP	Pressure Verification Software for 730G
FLUKE-700HTPK	Hydraulic Test Pump Kit, 0 to 10000 PSI/690 BAR
FLUKE-700PTPK	Pneumatic Test Pump Kit, 0 to 600PSI/40BAR
FLUKE-700HTPK2	Premium Hydraulic Test Pump Kit
FLUKE-700PTPK2	Premium Hydraulic Test Pump Kit
FLUKE 700M20TH	Premium Hydraulic Test Pump Kit
FLUKE 700MTH	Premium Hydraulic Test Pump Kit

700G/TRACK Logging Software

The Fluke 700G/Track Data Logging Software (700G only) makes managing your instruments and calibration data easy to do. With the Fluke 700G-Track Software, you can gauge and record (log) multiple data sets, each of which is identified by a sequential run number.

- Use with Fluke 700G Series Gauges to perform real time data logging to a PC
- Download logging configurations to the 700G Series Gauges for a remote logging event
- Configure logging event reading rate, duration and measurement units
- Upload measurements logged remotely and display or export measurements
- Includes communication cable for connection to a PC



Fluke 750P and 750PEx Series Pressure Modules



Fluke 750P



Precision pressure measurement for Fluke 750 and 720 Series Calibrators

The Fluke 750P Series Pressure Modules are the ideal pressure modules to enable gage, differential and absolute pressure measurement with Fluke 750 and 740 Series DPCs and 725, 726 MPCs to measure pressure.

Covers pressure calibrations from 0 to 1 in H₂O to 10000 psi (2.5 mBar to 690 bar).

- 0.025 % reference uncertainty
- 6-month and 1-year specifications
- Intrinsically safe models are Class I Div 1 Groups A-D T4, Ta = 0 °C to +50 °C, ATEX II 1G Ex ia IIC T4 compliant
- Three year warranty

Model	Parameter/Range	Burst Rating ⁶	Hi Side Media ²	Lo Side Media ²	Reference Uncertainty ⁴
Differential					
750P00	0 to 1 in H ₂ O (0 to 2.5 mBar)	30X	Dry Air	Dry Air	± 0.15 %
750P01 ⁴	0 to 10 in H ₂ O (0 to 25 mBar)	3X	Dry Air	Dry Air	± 0.1 %
750P02	0 to 1 psi (0 to 70 mBar)	3X	Dry Air	Dry Air	± 0.050 %
750P22	0 to 1 psi (0 to 70 mBar)	3X	316 SS	Dry Air	± 0.050 %
750P03	0 to 5 psi (0 to 350 mBar)	3X	Dry Air	Dry Air	± 0.02 %
750P23	0 to 5 psi (0 to 350 mBar)	4X	316 SS	Dry Air	± 0.02 %
750P04	0 to 15 psi (0 to 1 bar)	3X	Dry Air	Dry Air	± 0.0175 %
750P24 ⁴	0 to 15 psi (0 to 1 bar)	4X	316 SS	Dry Air	± 0.0175 %
Gage					
750P05 ⁴	0 to 30 psi (0 to 2 bar)	4X	316 SS	N/A	± 0.0175 %
750P06 ⁴	0 to 100 psi (0 to 7 bar)	4X	316 SS	N/A	± 0.0175 %
750P27 ⁴	0 to 300 psi (0 to 20 bar)	4X	316 SS	N/A	± 0.0175 %
750P07	0 to 500 psi (0 to 35 bar)	4X	316 SS	N/A	± 0.0175 %
750P08	0 to 1000 psi (0 to 70 bar)	3X	316 SS	N/A	± 0.0175 %
750P09 ⁴	0 to 1500 psi (0 to 100 bar)	3X	316 SS	N/A	± 0.0175 %
750P2000	0 to 2000 psi (0 to 140 bar)	3X	316 SS	N/A	± 0.0175 %
High					
750P29 ⁴	0 to 3000 psi (0 to 200 bar)	3X	316 SS	N/A	± 0.0175 %
750P30	0 to 5000 psi (0 to 340 bar)	3X	316 SS	N/A	± 0.0175 %
750P31	0 to 10000 psi (0 to 700 bar)	2X	316 SS	N/A	± 0.0175 %
Absolute					
750PA3	0 to 5 psia (0 to 350 mBar)	4X	316 SS	N/A	± 0.03 %
750PA4 ⁴	0 to 15 psia (0 to 1 bar)	4X	316 SS	N/A	± 0.03 %
750PA5	0 to 30 psia (0 to 2 bar)	4X	316 SS	N/A	± 0.03 %
750PA6	0 to 100 psia (0 to 7 bar)	4X	316 SS	N/A	± 0.03 %
750PA27	0 to 300 psia (0 to 20 bar)	4X	316 SS	N/A	± 0.03 %
750PA7	0 to 500 psia (0 to 35 bar)	4X	316 SS	N/A	± 0.03 %
750PA8	0 to 1000 psia (0 to 70 bar)	3X	316 SS	N/A	± 0.03 %
750PA9	0 to 1500 psia (0 to 100 bar)	3X	316 SS	N/A	± 0.03 %
Vacuum					
750PV3	-5 psi (-350 mBar)	4X	316 SS	Dry Air	± 0.03 %
750PV4	-15 psi (-1 bar)	4X	316 SS	Dry Air	± 0.03 %
Dual					
750PD2	-1 to 1 psi (-70 to 70 mBar)	4X	316 SS	Dry Air	± 0.05 %
750PD3	-5 to 5 psi (-350 to 350 mBar)	4X	316 SS	Dry Air	± 0.03 %
750PD10	-10 to 10 psi (-700 to 700 mBar)	4X	316 SS	Dry Air	± 0.025 %
750PD4	-15 to 15 psi (-1 to 1 bar)	4X	316 SS	Dry Air	± 0.0175 %
750PD5	-15 to 30 psi (-1 to 2 bar)	4X	316 SS	N/A	± 0.0175 %
750PD50	-15 to 50 psi (-1 to 3.5 bar)	4X	316 SS	N/A	± 0.0175 %
750PD6	-15 to 100 psi (-1 to 7 bar)	4X	316 SS	N/A	± 0.0175 %
750PD7	-15 to 200 psi (-1 to 14 bar)	4X	316 SS	N/A	± 0.0175 %
750PD27	-15 to 300 psi (-1 to 20 bar)	4X	316 SS	N/A	± 0.0175 %

1. Total uncertainty, % of full span for temperature range 0 °C to +50 °C, one year interval. Total uncertainty, 1.0 % of full span for temperature range -10 °C to 0 °C, one year interval. No 6 month specification available for range -10 °C to 0 °C.

2. "NONCORROSIVE GASSES" indicates dry air or non-corrosive gas as compatible media. "Stainless Steel 316-SS" indicates media compatible with Type 316 Stainless Steel.

3. Specifications % of Full Span unless otherwise noted.

4. Intrinsically Safe pressure module available in this pressure range

Specialty Model

Fluke 700PEx Pressure Modules

The Fluke 750PEx Pressure Modules extend the measurement capabilities of the Fluke 725Ex Multifunction Process Calibrator. Pressure readings can be displayed in any of 10 different pressure units specified in the calibrator setup.

II 1 G Ex ia IIC T4 5a

For more information see page 132



Recommended Accessories



700PTP-1
Pneumatic Test Pump
See page 171



700HTP-2
Hydraulic Test Pump
See page 171



700LTP-1
Low-Pressure Test Pump
See page 171



700HTH-1
Hydraulic Test Hose
See page 171



700PMP
Pressure Pump
See page 171



700PRV-1
Pressure Relief Valve Kit



71X HOSE KIT
Hose Kit
See page 171



Fluke Calibration 2700G Series Reference Pressure Gauges



Fluke 2700G

The Fluke Calibration 2700G Reference Pressure Gauges provide best-in-class measurement performance in a rugged, easy-to-use, economical package. Improved measurement accuracy allows it to be used for a wide variety of applications. It is ideal for calibrating pressure measurement devices such as pressure gauges, transmitters, transducers, and switches. In addition, it can be used as a check standard or to provide process measurements with data logging.

- Precision pressure measurement from 100 kPa (15 psi) to 70 MPa (10,000 psi)
- Accuracy to 0.02 % of full scale
- Easy-to-use, rugged construction for reliable performance
- Combine with a Fluke PTP or HTP pump kit or P551X comparison test pump for a complete pressure testing solution
- One year warranty

Fluke Calibration P5510 Pneumatic Comparison Test Pump



Fluke P5510



Fluke P5531



Fluke P5532

The P5510 Pneumatic Comparison Test Pump is designed for testing pressure measuring instruments against master test instruments. This cost effective instrument provides precise control for important calibration requirements and include many features found in our line of pneumatic deadweight testers. One year warranty.

Higher pressure ranges available:

Fluke P5513 Gas Comparison Test Pump:

Pressure range 0 to 20 MPa (3k psi);
Vacuum -80 kPa (-12 psi)

Fluke P5514 Gas Comparison Test Pump:

Pressure range 0 to 70 MPa (10k psi)

Fluke P5515 Gas Comparison Test Pump

Pressure range 0 to 140 MPa (20k psi)

P5531 Dirt/Moisture Trap

Designed to mount directly on the deadweight tester and featuring an acrylic chamber for visibility of contaminants this unit utilises the standard test port adapters for easy instrument connections.

P5532 Dirt/Moisture Trap

This high pressure version is provided with an aluminium central chamber for safety and utilises the standard test port adapters.

Complete Bench Top Pressure Calibration Solution

Combine P5500 Comparison Test Pumps with one or more 2700G Reference Pressure Gauges for a complete 0.02% accuracy calibration system. The 2700G has an easy-to-use interface that allows you to configure the sampling rate, tare value, damping and auto off time interval as well as reset the min/max pressure.

The unique test port design of the P5500 Series allows for hand tight connection of the 2700G without the use of PTFE tape.



Fluke 5514

- P5510: integrated pneumatic hand pump with pressure generation to 300 psi (2 MPa), vacuum to -12 psi (-80 kPa)
- P5513: pneumatic pressure adjustment to 3,000 psi (21 MPa) with fine adjust inlet and outlet valves and precise screw press
- P5514: hydraulic pressure generation and adjustment to 10 k psi (70 MPa) with fine screw press and reservoir
- P5515: integrated hydraulic pressure generation and adjustment to 20 k psi (140 MPa) with high volume priming pump and fine screw press

Included Accessories

Fluke 2700G Gauges: 1/4 NPT Female to 1/4 BSP Male Adapter, 1/4 NPT Female to M20X1.5 Adapter, Universal AC Power Supply, USB Communication Cable, Manual on CD, Calibration Certificate showing traceability.

Optional: ISO 17025 Accredited Calibration available for 2700G and P551X/2700G models (add "/C" to the below model number).

Ordering Information

2700G-BG100K	Reference Pressure Gauge, -15 to 15 PSI
2700G-BG200K	Reference Pressure Gauge, -15 to 30 PSI
2700G-BG700K	Reference Pressure Gauge, -12 to 100 PSI
2700G-BG2M	Reference Pressure Gauge, -12 to 300 PSI
2700G-BG3.5M	Reference Pressure Gauge, -12 to 500 PSI
2700G-BG7M	Reference Pressure Gauge, -12 to 1000 PSI
2700G-G20M	Reference Pressure Gauge, 0 to 3,000 PSI
2700G-G35M	Reference Pressure Gauge, 0 to 5,000 PSI
2700G-G70M	Reference Pressure Gauge, 0 to 10,000 PSI
P5510-2M	Pneumatic Comparison Test Pump
P5513-20M	Pneumatic Comparison Test Pump
P5514-70M*	Hydraulic Comparison Test Pump, Viton Seals 0-10 000 PSI (70 MPa)
P5515-140M*	Hydraulic Comparison Test Pump, Viton Seals 0 to 20 000 PSI (140 MPa)

Ethylene Propylene Seals option also available, add -EP to the above model.

P5510-2700G-1	P5510 Pneumatic Calibrator, 2 MPa (300 PSI), 1 Gauge
P5513-2700G-1	P5513 Pneumatic Calibrator, 20 MPa (3000 PSI), 1 Gauge
P5514-2700G-1	P5514 Pneumatic Calibrator, 70 MPa (10,000 PSI), 1 Gauge
P5515-2700G-1	P5515 Pneumatic Calibrator, 70 MPa (10,000 PSI), 1 Gauge

P551X-2700G Kits available with 3 gauge option, add -3 to the above model numbers.

P5531	Dirt/Moisture Trap 0 to 500 PSI (35 bar)
P5532	Dirt/Moisture Trap 0 to 3,000 PSI (210 bar)

Fluke Calibration P3000 Deadweight Testers



Fluke P3000

The P3000 Series is the culmination of over 50 years of experience in the production and design of high performance pressure standards.

With features designed to improve accuracy and performance, increase reliability and simplify operation these deadweight testers can be used to calibrate virtually any pressure sensing device, including transducers, transmitters, gauges or pressure switches. All units provided with accredited calibration.

One year warranty.

P3000 Pneumatic Deadweight Tester

High performance gas deadweight testers with unique suspended piston design for vacuum calibration.

- 0.015% of reading accuracy standard (0.008% optional)
- 3 to 500 psi (0.2 to 35 bar) pressure
- Optional low range 0.03 to 1 bar vacuum (1 to 30 inHg)
- Integrated vacuum and pressure pump available to 2 MPa (300 psi)

P3100 Hydraulic Deadweight Tester

- Highly accurate oil deadweight tester with quick and easy-to use single and dual piston deadweight models
- Pressure ranges to 140MPa (20 k psi, 1400 bar)
- 0.015% of reading accuracy standard (0.008% optional)
- Built in pressure generation and adjustment
- Single or dual piston formats

P3200 Hydraulic Deadweight Tester

- Hydraulic deadweight tester specially designed to use water as a test medium.
- Pressure ranges to 70MPa (10 k psi, 700 bar)
- 0.015% of reading accuracy standard (0.008% optional)
- Built in pressure generation and adjustment is standard
- Single or dual piston formats
- Water media

Accuracy*

±0.015% of reading (±0.008% optional)

*Accuracy based on % of reading from 10% to 100% of the piston range when used in accordance with the corrections found on the calibration certificate. Below 10% ± (accuracy class) x 10% of the piston range.

Mass and PCU Materials of Construction

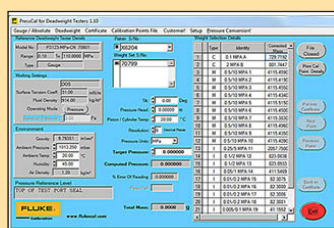
Standard weight material	Series 3 non-magnetic austenitic stainless steel	
Weight density	7.8 g/cm ³	
Optional fractional weights	Solution heat treated aluminum	
Weight density	2.7 g/cm ³	
Models P3011, P3012, P3013, P3022, P3023, P3025 (V)	Piston Material:	Ceramic
	Cylinder Material:	Martensitic steel
	Coefficient of Expansion:	11 ppm/°C
Models P3014, P3015, P3025 (P) P3031, P3032 (P & V)	Piston Material:	Tungsten carbide
	Cylinder Material:	Martensitic steel
	Coefficient of Expansion:	16.5 ppm/°C

PressCal software

PressCal software provides a quick and effective solution to enhance the pressure measurement uncertainty of Deadweight Testers. PressCal features an easy-to-use user interface that allows you to enter all the necessary corrections and parameters to accurately determine the pressure generated by the DWT.

PressCal also provides:

- Automatic certificate generation
- Customer details management
- Real-time auditing
- Choice of 12 pressure units



Recommended Accessories



5540 METRIC & 5541 BSP Adapter Sets



P5543 Angle Adapter

Included Accessories

ISO 17025 Accredited Calibration Certificate, Operating Fluid (where applicable), Spare Seals, Adaptors for 1/8, 1/4, 3/8, 1/2 NPT and BSP, and Metric Adaptors (M20 and M14).

Ordering Information

* -P indicates built-in pump optional.

P3011-KPA-P* Vacuum Deadweight Tester (-100 KPA)

P3011-INHG-P* Vacuum Deadweight Tester (-30 INHG)

P3011-MBAR-P* Vacuum Deadweight Tester (-1000 MBAR)

P3011-MMHG-P* Vacuum Deadweight Tester (-760 MMHG)

P3012-KPA-P Gas Deadweight Tester, 100 KPA, with Pump

P3012-MBAR-P Gas Deadweight Tester, 1000 MBAR, with Pump

P3012-INH20-P Gas Deadweight Tester, 400 INH20, with Pump

P3013-KPA-P Gas Deadweight Tester, 200 KPA, with Pump

P3013-MBAR-P Gas Deadweight Tester, 2000 MBAR, with Pump

P3013-INH20-P Gas Deadweight Tester, 800 INH20, with Pump

P3014-KGCM2-P Gas Deadweight Tester, 10 KG/CM2, with Pump

P3014-PSI-P Gas Deadweight Tester, 150 PSI, with Pump

P3014-KPA-P Gas Deadweight Tester, 1 MPA, with Pump

P3014-MPA-P Gas Deadweight Tester, 1 MPA, with Pump

P3015-BAR-P* Gas Deadweight Tester, 35 BAR

P3015-KGCM2-P* Gas Deadweight Tester, 35 KG/CM2

P3015-PSI-P* Gas Deadweight Tester, 500 PSI

P3015-KPA-P* Gas Deadweight Tester, 3500 KPA

P3015-MPA-P Gas Deadweight Tester, 3.5 MPA

Fluke Calibration 700HPPK Pneumatic Test Pump Kit



Fluke 700HPPK



Generated 21 MPa (3000 psi) easily in the field, without liquid contamination or the hazard of a pressurised gas cylinder.

The Fluke Calibration 700HPPK Pneumatic Test Pump Kit generates and adjusts pneumatic pressures up to 21 MPa (3000 psi), without requiring a nitrogen bottle or other external pressure supply. It supplies pressure to devices under test (DUTs) that include transmitters, controllers, pilots, digital and analog gauges, and more. It's the perfect solution for generating high pressure in the field, where conditions and operating surfaces can vary.

The 700HPPK is the ideal choice for calibration technicians, test engineers, and instrument technicians working in industries like natural gas transmission and distribution, process, aerospace and defense, who need a simple-to-use, safe and portable pressure source that they can depend on in a wide variety of conditions.

The 700HPPK contains both a calibration manifold and high pressure pump to generate and finely adjust pressures. A second model, the 700HPP, is available for people who only prefer a high pressure source.

Use the 700HPPK Test Pump Kits with 2700G Reference Pressure Gauges or 700G Precision Pressure Gauges for a complete pressure calibration solution.

- Generate and adjust pneumatic pressures up to 21 MPa (3000 psi)
- Rugged, portable and stable enough to go anywhere on any surface
- Reaches pressure in 20 seconds to full scale into a 30 cm³ volume
- Detachable pressure adjustment system for adjusting pressure, connecting reference and test devices on bench and in the field, and isolating and venting pressure
- Easily switch out reference gauges without requiring PTFE tape or tools
- 2 metre pressure line and assorted pressure fittings enable a wide variety of possible connections
- In-line filter and desiccant systems protect device from contamination from the DUT
- One year warranty

General specifications	700HPP	700HPPK
Maximum working pressure	21 MPa, 3000 psi	
Time to generate full scale pressure with 10 cc volume (g)	20	
Weight	5.5 kg	7.2 kg
Dimensions	66 x 25 x 13 cm	66 x 30.5 x 13 cm
Reference gauge connection	1/4 NPT, quick connect	
Inlet supply contaminations protection filter	Desiccant filter	
DUT contamination protection filter	-	100 micron
Fine adjustment resolution	-	0.05 % reading
Maximum leak rate	-	0.01 % reading

Recommended Accessories



Included Accessories

Fluke Calibration 700HPPK:
Canvas Carrying Bag, High Pressure Pneumatic Quick Service Kit (seals for pump), Dry Pac Refill, Silicone Grease, High Pressure Hose, Test Port Adapters

Ordering Information

700HPPK-NPT	High Pressure Pneumatic Pump/Comparator, 21 MPa (3000 psi)
700HPP-NPT	High Pressure Pneumatic Test Pump, 21 MPa (3000 psi), NPT
700HPPK-BSP	High Pressure Pneumatic Test Pump/Comparator, 21 MPa (3000 psi), BCP
700HPP-BSP	High Pressure Pneumatic Test Pump, 21 MPa (3000 psi), BSP
700HPPK-MET	High Pressure Pneumatic Pump/Comparator, 21MPa (3000 psi), Metric
700HPP-MET	High Pressure Pneumatic Test Pump, 21MPa (3000 psi), Metric

Fluke Calibration 3130 Portable Pressure Calibrator



Fluke P3130



The Fluke 3130 Portable Pneumatic Pressure Calibrator is ideal for calibrating pressure transmitters, transducers, gauges and similar devices. The Fluke 3130 contains everything you need to generate, control and measure pressure, as well as read the output of the device under test.

- Measure and generate pressures from vacuum to 2 MPa (300 psi, 20 bar)
- Internal pump can generate vacuum to -80 kPa (-12 psi, -0.8 bar) or pressure to 2 MPa (300 psi, 20 bar)
- Supply pressure connection allowing the use of external gas supply up to 2 MPa (300 psi, 20 bar)
- Measure or generate 4-20 mA
- Measure 0 to 30 V DC
- Compatible with Fluke 750P Pressure Modules
- Variable volume for fine adjustment of pressures
- Pressure measurement accuracy of $\pm 0.025\%$ reading + 0.01% FS)
- Electrical measurement and 24 volt supply for close looped calibrations
- One year warranty

Environmental

Temperature Operating: -10 °C to +50 °C; Storage: -20 °C to +60 °C

Physical

Size in cm (LxWxD) and Weight 38.7 x 30.5 x 17.8, 7.7 kg

EMI/RFI Conformance EN61326:2006 Annex A

Connectors/Ports 1/8 in NPT (External supply port and test port)

Ranges

Pressure (internal pump) -80 kPa to 2 MPa (-12 to 300 psi, -0.8 to 20 bar)

Pressure (external air) 0 to 2 MPa (0 to 300 psi, 0 to 20 bar)

mA 0 to 24.000 mA

Volts 0 to 30.000 V DC

Instrumental Measurement Uncertainty

Pressure 0.025 % of reading ± 0.01 % FS

mA 0.015 % of reading ± 0.002 mA

Volts 0.015 % of reading ± 0.002 V

Fluke Calibration 2271A Industrial Pressure Calibrator



Fluke 2271A



Everything you need to calibrate and test pressure transmitter gauges, all in one box

The Fluke Calibration 2271A Industrial Pressure Calibrator provides a complete, automated pressure testing solution for calibrating a wide variety of pressure gauges and sensors. Its modular design, allows it to be configured to meet different needs and budgets and expanded to cover a broad workload.

- Calibrate a wide range of gauges and sensors with a single instrument
- Wide measurement range from -100 kPa to 20 MPa (-15 to 3000 psi)
- Removable pressure measurement modules make it easy to change or add measurement ranges
- Integrated electrical measurement module with HART communication provides a complete solution for calibrating pressure transmitters
- Built-in dual test ports enable you to connect multiple devices under test (DUTs)
- 0.02 % FS pressure measurement uncertainty
- One year warranty

Recommended Accessories

Fluke 3130



750PXX
Pressure Modules
See page 132



CPS-2270-20M-P3K
Contamination Prevention System, P3000 Test Port Connection

Fluke 2271A



CASE-2271
Shipping Case



CPS-2270-20M-P3K
Contamination Prevention System, P3000 Test Port Connection



PMM-CAL-KIT-20M
Pressure Measurement Module Calibration Kit

PK-2271-BSP-HC20/P3K
Lines and Fittings Kit, 2271A-BSP-HC20/P3K

PK-2271-NPT-HC20/P3K
Lines and Fittings Kit, 2271A-NPT-HC20/P3K

Included Accessories

Fluke Calibration 3130: Ruggedised Case, Rechargeable, NiMH Battery, Test Leads, Operating Manual.

Fluke Calibration 2271A: Mains Power Cord, Pressure Measurement Module, Electrical Measurement Module, Safety Information, Manual (CD), Test Port Adapters.

Ordering Information

3130-G2M Portable Gas Pressure Calibrator

3130-G2M/C Portable Gas Pressure Calibrator with Accredited Calibration

2271A-NPT-HC20 Industrial Pressure Calibrator Chassis, NPT Manifold, HC20 Test Port Connections

2271A-NPT-P3K Industrial Pressure Calibrator Chassis, NPT Manifold, P3000 Test Port Connections

2271A-BSP-HC20 Industrial Pressure Calibrator Chassis, BSP Manifold, HC20 Test Port Connections



Intrinsically Safe Test Tools

Intrinsically Safe is a protection method employed in potentially explosive atmospheres. Certificate IS tools are designed to prevent the release of sufficient energy to cause ignition of flammable material. IS standards apply to all equipment that can create one or more of a range of defined potential explosion sources.

Intrinsically Safe Test Tools for Hazardous Areas

Intrinsically Safe is a protection method employed in potentially explosive atmospheres. Certificate IS tools are designed to prevent the release of sufficient energy to cause ignition of flammable material. IS standards apply to all equipment that can create one or more of a range of defined potential explosion sources.



ATEX – The primary intrinsically safe standard, which has been set in the European Union with the Directive 94/9/EC, commonly called ATEX (ATmosphères EXplosibles).

Fluke Products	ATEX certified	Certification
 28II Ex Intrinsically Safe True-rms Multimeter ANZEx 12 2008x Ex ia I Ma	 II 2G Ex ia IIC T4 Gb I M1 Ex ia I Ma	Class I, Div 1, Groups A,B,C,D T4 Class I, Zone 1, AEx ia IIC T4 Ex ia IIC T4 IP67
 718Ex Intrinsically Safe Pressure Calibrator	 II 1G Ex ia IIC T4	I.S. Class I, Div 1, Groups A,B,C,D T4
 750PEX Intrinsically Safe Pressure Modules	 II 1G Ex ia IIC T4 Ga	IECEx: Ex ia IIC T4 Ga
 568Ex Intrinsically Safe Infrared Thermometer	 II 2G Ex ia IIC T4 Gb	Class I, Div 1, Groups A,B,C,D, T4 Class I, Div 2, Groups A,B,C,D, T4 Class I, Zone 1, AEx ia IIC T4 Gb
 700G Series Intrinsically Safe Pressure Gauges	 II 3G Ex ic IIB T6 Gc	CSA Class I, Div. 2 Groups A,B,C,D
 1551A Ex/1552A Ex Intrinsically Safe "Stik" Thermometers	 II 2G Ex ib IIB T4 Gb	
 Fluke FL-45 Ex Intrinsically Safe Flashlight	 II 1G Ex ia IIC T5 Ga I M1 Ex ia I Ma	Class I Div 1 and 2 Group A,B,C,D Class II Div 1 and 2 Group E,F,G Class III T5 IP67
 Fluke FL-120 Ex Intrinsically Safe Flashlight	 II 1G Ex ia IIC T4 Ga I M1 Ex ia I Ma	Class I Div 1 and 2 Group A,B,C,D Class II Div 1 and 2 Group E,F,G Class III T4 IP6X
 Fluke FL-150 Ex Intrinsically Safe Flashlight	 II 1G Ex ia IIC T4 Ga I M1 Ex ia I Ma	Class I Div 1 and 2 Group A,B,C,D Class II Div 1 and 2 Group E,F,G Class III T4 IP67
 Fluke HL-200 Ex Intrinsically Safe Headlamp	 II 1G Ex ia IIC T4 Ga	Class I Div 1 and 2 Group A,B,C,D Class II Div 1 and 2 Group E,F,G Class III T4 IP67



Ordering Information

FLUKE-28IIEX	Intrinsically Safe True-RMS Digital Multimeter
FLUKE-718EX 30,100,300G RANGES	Intrinsically Safe Pressure Calibrator
FLUKE-750PEX (750P: 01, 05, 06, 09, 24, 27, 29, A4EX)	Intrinsically Safe Pressure Modules
FLUKE-568EX	Intrinsically Safe Infrared Thermometer
FLUKE-700G	Pressure Test Gauges (23 ranges) 0 to 10 in H2O up to 10,000psi
FLUKE-1551AEX FLUKE-1552AEX	"Stik" Thermometer 1551A: -50 to 160C 1552A: -80 to 300C
FLUKE-568EX	Intrinsically Safe Infrared Thermometer
FL-45 EX	45 Lumen Intrinsically Safe Flashlight
FL-120 EX	120 Lumen Intrinsically Safe Flashlight
FL-150 EX	150 Lumen Intrinsically Safe Flashlight
HL-200 EX	200 Lumen Intrinsically Safe Headlamp

Mechanical Maintenance

Fluke Mechanical Maintenance Testers are designed specifically for maintenance professionals who need to quickly and easily perform precision shaft alignments on most rotating machines in the plant and perform vibration analysis and evaluate alignment to understand the root cause of equipment condition.



Fluke 805 FC Vibration Meter

Forget the pens, think meter



Fluke 805 FC



The Fluke 805 FC is not a vibration pen; it's a meter. A Fluke meter that eliminates the confusion of vibration screening and provides reliable measurements you can trust to make critical go or no-go maintenance decisions. With the Fluke 805 FC, you can identify the strength and severity of vibration and easily track the data over time to monitor an asset's condition.

- Innovative sensor design minimises measurement variations caused by device angle or contact pressure
- Consistent data quality at both low and high frequency ranges
- Four-level severity scale assesses urgency of problems for overall vibration and bearing condition
- Exportable data via USB
- Trending in Microsoft® Excel using pre-built templates
- Overall vibration measurement (10 Hz to 1,000 Hz) for acceleration, velocity and displacement units of measurement for a wide variety of machines
- Crest Factor+ technology provides reliable bearing assessment using direct sensor tip measurements between 4,000 Hz and 20,000 Hz
- Compare vibration levels with ISO-10816 severity scales and store results to the Fluke Connect Cloud
- Get authorisation to take next steps in an instant if machine health is at risk via Fluke Connect™ Share-Live™ video call
- Coloured lighting system (green, red) and on-screen comments indicate how much pressure needs to be applied to take measurements
- Temperature measurement with Spot Infrared Sensor increases diagnostic capabilities
- On-board memory holds and saves up to 3,500 measurements
- Flashlight for viewing measurement locations in dark areas
- One year warranty

Specifications

Vibration meter	Low frequency range (overall measurement)	10 Hz to 1,000 Hz
	High frequency range (CF+ measurement)	4,000 Hz to 20,000 Hz
	Severity levels	Good, Satisfactory, Unsatisfactory, Unacceptable
	Vibration limit	50 g peak (100 g peak-peak)
	A/D converter	16-bit
	Signal to noise ratio	80 dB
	Sampling rate	Low frequency: 20,000 Hz; high frequency: 80,000 Hz
Sensor	Real time clock backup	Coin battery
	Sensitivity	100 mV / g ± 10%
	Measurement range	0.01 g to 50 g
	Low frequency range (overall measurement)	10 Hz to 1,000 Hz
	High frequency range (CF+ measurement)	4,000 Hz to 20,000 Hz
	Resolution	0.01 g
	Accuracy	At 100 Hz ± 5 % of measured value
Amplitude units	Acceleration	g, m/sec ²
	Velocity	in/sec, mm/sec
	Displacement	mils, mm
Infrared thermometer (temperature measurement)	Range	-20 °C to 200 °C
	Accuracy	±2 °C
	Focal length	Fixed, at ~3.8 cm
External sensor (Fluke supports, but doesn't provide, external sensors)	Frequency range	10 Hz to 1,000 Hz
	Bias voltage (to supply power)	20 V DC to 22 V DC
	Bias Current (to supply power)	Maximum 5 mA
Firmware	External interfaces	USB 2.0 (full speed) communication
	Data capacity	Database on internal flash memory
	Memory	Up to 3,500 measurements
Environmental	IP rating	IP54
	Drop test	1 metre
	Battery type	AA (2) Alkaline or Lithium-ion 2 V DC
	Battery life	250 measurements
General specifications	Size (LxWxH) and Weight	25.72 cm x 16.19 cm x 9.84 cm, 1.16 kg
	Connectors	USB mini-B 7-pin, stereo audio output jack (3.5 mm Audio Plug), external sensor jack (SMB connector)

Recommended Accessories



805ES
External Assembly
Vibration Sensor
See page 172

Fluke 820-2 LED Stroboscope



The Fluke 820-2 LED Stroboscope is a simple, easy to use tool to stop motion for measurement and diagnostic purposes.

Investigate and observe potential mechanism failure with confidence on a variety of machinery, in a wide range of industries, without making physical contact with the machine. The Fluke 820-2 LED Stroboscope is a rugged, compact, portable strobe with high intensity LED head, ideal for stop motion diagnostics, mechanical troubleshooting, and process or product research and development.

- High intensity 7-LED array—4,800 Lux @ 6,000 FPM/30cm
- High efficiency LED solid-state light source with uniform flash characteristics allow for higher flash rates—30–300,000 FPM (flashes per minute)
- Digital pulse width modulation for exceptionally sharp images at high speeds
- Rugged, durable design utilises solid-state LEDs with no filaments, gases, hollow cavities, or glass
- Quartz-accuracy control system provides high accuracy—0.02% (± 1 digit)
- Multi-line LCD display
- Check the rotating speed of machinery without physical contact or need for reflective tape

Included Accessories

USB Cable, Storage Case, Belt Holster, Quick Reference Guide, CD-ROM (includes MS Excel Template and Documentation) and two AA Batteries.

Ordering Information

FLUKE-805FC Fluke Connect® Vibration Meter

FLUKE 805ES External Vibration Sensor for 805 Vibration Meter

FLK-820-2 LED Stroboscope

**Fluke Connect is only available in selected countries. Please check with your local distributor for available models.*

Fluke 810 Vibration Tester

Take a vibration expert along



Fluke 810



Get answers now!

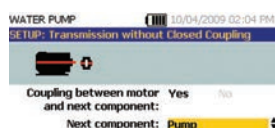
The Fluke 810 Vibration Tester is the most advanced troubleshooting tool for mechanical maintenance teams who need an answer now. It is a unique new kind of troubleshooting tool, engineered to detect and evaluate the most common mechanical problems.

The Fluke 810 Vibration Tester uses a simple step-by-step process to report on machine faults the first time measurements are taken, without prior machine history.

- Easily determine the root cause, location and severity of common mechanical faults
- Efficiently prioritise and plan equipment repair or replacement
- Effectively deploy maintenance resources at the point of greatest impact
- Three year warranty

Simple 3 Step Process

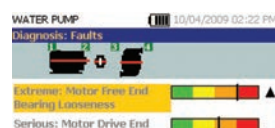
The Fluke 810 helps you locate and diagnose common mechanical problems and prioritise repair actions in three simple steps:



1. Setup: Vibration testing has never been easier. The Fluke 810 asks for basic machine information you already know, like RPM and horsepower. Its onboard info feature gives you field tips for setting up and taking measurements like a professional.



2. Measure: The Fluke 810 easily fits into your maintenance routine. Use it to quickly troubleshoot problems or monitor machine condition.



3. Diagnose: Fix it right the first time with the press of a button, the Fluke 810 identifies the root cause, its location, and the problem's severity.

Diagnostic specifications

Analysis for	Motors, fans, blowers, belts and chain drives, gearboxes, couplings, centrifugal pumps, piston pumps, sliding vane pumps, propeller pumps, screw pumps, rotary thread/gear/lobe pumps, piston compressors, centrifugal compressors, screw compressors, closed coupled machines, spindles
Standard faults	Unbalance, looseness, misalignment and bearing failures
Motor rotational speed range	200 rpm to 12000 rpm
Diagnosis details	Plain-text diagnosis, fault severity (slight, moderate, serious, extreme), repair details, cited peaks, spectra

Tester specifications

IP rating	IP 54
A/D converter	4 channel, 24 bit
Dynamic range	128 dB
FFT resolution	800 lines
Battery	Lithium-ion, rechargeable, 8 hours operating life
Onboard storage capacity	2 GB internal + user accessible slot for additional storage

Sensor specifications

Sensor type	Tri-axial accelerometer, 100 mV/g ($\pm 5\%$, 25 °C)
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Tachometer specifications

Tachometer type	Laser Diode Class 2
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Recommended Accessories



810T
Non-Contact Precision
Laser Tachometer
See Page 172



810S
Vibration Sensor
See Page 172



810QDC
Quick Disconnect
Cable
See Page 172



SBP810
Battery Pack
See Page 172



810SMM
Sensor Magnetic
Mount
See Page 172



810SMP
Sensor Mounting Pads
(Pack of 10)
See Page 172

Viewer PC Software

- Store and track your data
- Generate diagnostic reports and track the severity of your machine's condition
- Import and store JPEG images



Interactive, self-paced training on DVD

Learn more about the basics of vibration and how to fully utilise the features and functionality of the Fluke 810. Fluke has partnered with Mobius Institute, an industry leader in vibration training, to develop an interactive training DVD included with each Fluke 810.

Included Accessories

Tri-axial TEDS Accelerometer, Accelerometer Magnet Mount, Accelerometer Mounting Pad Kit with Adhesive, Accelerometer Quick Disconnect Cable, Laser Tachometer and Storage Pouch, Smart Battery Pack with Cable and Adapters, Shoulder Strap, Adjustable Hand Strap, Viewer PC Application Software, Mini-USB to USB Cable, Getting Started Guide, Illustrated Quick Reference Guide, User Manual CD, Instructional Training DVD, Hard Carrying Case.

Ordering Information

FLUKE-810 Vibration Tester

Fluke 830/BT *

Laser Shaft Alignment Tool



Fluke 830/BT

The ideal test tool to precision-align rotating shafts in your facility.

The Fluke 830 Laser Shaft Alignment tool is easy-to-use, giving you fast, accurate and actionable answers that will keep your plant up and running. When it comes to laser shaft alignment, data is good but answers are better. Unlike using the straightedge method or dial indicators the Fluke 830 performs the complicated alignment calculations for you, meaning you'll have the answers you need to quickly align your machine and get your plant up and running fast.

An enhanced user interface provides easy to understand results that don't require extensive alignment knowledge and the unique "All-in-One" result screen that shows you both coupling results and feet corrections (vertical and horizontal) in real terms making it easy to take corrective action. Since machine downtime is costly, test repeatability is critical.

- **Single laser measurement technology** means reduced errors from backlash resulting in better data accuracy
- **Intuitive guided** user interface quickly and easily complete machine alignments
- **Compass measurement mode** enables flexible, reliable and repeatable measurements using an activated electronic inclinometer
- **Dynamic machine tolerance** check provides continuous evaluation of alignment adjustments so you know when your machine in acceptable range
- **Unique extend mode** handles gross misalignment by virtually increasing laser detector size
- **Data protection** ensures your data is there when you need it with auto save and resume capability
- Two year warranty

Computer	
CPU	Intel XScale PXA270 running at 312 MHz
Memory	64 MB RAM, 64 MB flash
Display	Type: TFT, transmissive (sunlight-readable), 65,535 colours, backlit LED Integrated light sensor for automated adjustment of the brightness to the display according to the lighting conditions which extends battery life Resolution: 320 x 240 pixel; Dimensions: 89 mm diagonal Keyboard elements: Setup, measure, diagnose, menu, clear, enter, back keys, navigation cursor cross, alphanumeric keyboard and on/off button
LED indicators	Multicolour LED for laser status and alignment condition
External interface	USB host and USB device (slave) Integrated wireless communication, transmitting power 100 mW RS232 (serial) for sensor AC adapter/charger socket
Environmental protection	IP 65 (dustproof and water spray resistant), shockproof Relative humidity 10 % to 90 %
Temperature	Operating temp: -10 °C to 50 °C, Storage temp: -20 °C to 60 °C
Dimensions and Weight	220 mm x 165 mm x 45 mm, 742 g
Sensor	
Measurement principle	Coaxial, reflected laser beam
Environmental protection	IP 67 (submersible, dustproof)
Ambient light protection	Yes
Temperature	Storage: -20 °C to 80 °C, Operating: 0 °C to 55 °C
Dimensions	107 mm x 70 mm x 49 mm
Weight	177 g
Laser	Type: Ga-Al-As semiconductor laser Wavelength (typical) 675 nm (red, visible) Safety class: Class 2, FDA 21 CFR 1000 and 1040 Beam power: < 1 mW Safety precautions: Do not look into laser beam

Recommended Accessories



830/MAGNET
Compact magnetic sensor/ prism mounting bracket
See Page 172

Recommended Kits

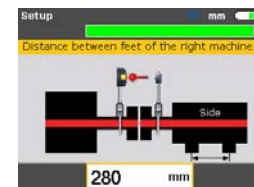
Buy more, Save more



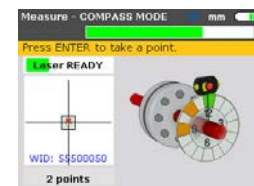
Fluke 830/SHIMS Precision Alignment Kit

For more details see page 172

Evaluate Alignment in 3 Simple Steps



1. Set-up



2. Measure



3. Diagnose

Included Accessories

Laser Sensor, Laser Prism, Chain-type Mounting Bracket with 150 mm Support Posts (2x), 300 mm Support Post (4x), Micro-fiber Cleaning Cloth, Sensor Cable, PC Cable, USB Drive, USB Cable, Tape Measure, Wireless Bluetooth Module, Power Adapter, Instruction Kit and Carrying Case.

Ordering Information

FLK-830/BT Laser Shaft Alignment Tool with Bluetooth Installed

FLUKE-830 /SHIMS Laser Alignment Tool Kit

*Fluke Connect is only available in selected countries. Please check with your local distributor for available models.

Insulated Hand Tools

Safe, rugged and with a lifetime warranty. Forged from German steel, Fluke offers a line of premium insulated hand tools that are built to last a lifetime.





Fluke Insulated Screwdrivers

Precision insulated tools fit and rip the fastener properly to apply maximum torque without damage to the head. Hardened chromium-molybdenum-vanadium steel blades minimise wear. Fluke offers three styles and multiple sizes—seven drivers in all. All certified to 1000 volts AC and 1500 V DC. Every screwdriver individually tested to 10,000 volts.

- The ergonomic handle adapts to the user's hand, causing less strain and work fatigue and providing maximum torque
- The full length, impact-proof handle core is coated with soft-grip outer material and has a hanging hole for extra security and an anti-roll handle design
- The slim insulated shaft allows access in hard to reach areas
- All blades are manufactured from German CMV steel for superior durability



Fluke Insulated Pliers and Cutters

Fluke insulated pliers and cutters give you a range of options when the job requires jaws with bite. All Fluke pliers and cutters are built with German CMV steel.

Long Nose Pliers

- Unique milled wave pattern gripping zones
- Straight, half-round, long and slim knurled jaws, specially profiled
- Side cutting edge for wire cutting



Heavy-Duty, High-Leverage Diagonal Cutter

- Cuts hard materials including steel and piano wire
- Power joint and precision cutting edges

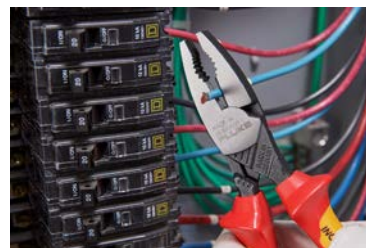
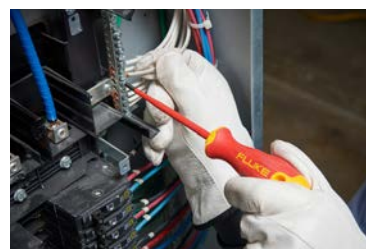
Fast Adjust Pump Pliers

- 27 jaw adjustment steps for more accurate gripping of the workpiece with less slippage than other designs
- Self-locking on pipes and nuts: no slipping on the workpiece, with low hand force required
- Gripping surfaces with teeth hardened to HRC61 for low wear and reliable gripping
- Box-joint design; high stability because of double guide
- Pinch guard that prevents operators' fingers being pinched



Heavy Duty Combination Pliers

- Secure hold by aggressive serrated jaws and 4-point gripping hole
- Slim shape for better access to wires in tight spaces
- Powerful gripping jaw, yet 20 % lighter weight than other designs



Ordering Information

ISLS3	Insulated Slotted Screwdriver 2.5 mm x 75 mm
ISLS5	Insulated Slotted Screwdriver 4 mm x 100 mm
ISLS8	Insulated Slotted Screwdriver 6 mm x 125 mm
IPHS1	Insulated Phillips Screwdriver 75 mm
IPHS2	Insulated Phillips Screwdriver 100 mm
ISQ1	Insulated Squared Screwdriver 100 mm
ISQS2	Insulated Squared Screwdriver 125 mm
INLP8	Insulated Long Nose Plier 200 mm
INDC8	Insulated Diagonal Cutter 200 mm
INPP10	Insulated Pump Plier 250 mm
INCP8	Insulated Lineman Combination Plier 200 mm

Fluke Insulated Hand Tools Kits

NEW


Hand Tool Kits	IKSC7	IKPL3	IKST7	IKPK7
Description	Insulated 7 Unit Screwdriver Kit, 1,000 V	Insulated 3 Unit Pliers Kit, 1,000 V	Insulated Hand Tools Starter Kit, 1,000 V	Fluke Pack30 Professional Tool Backpack + Insulated Hand Tools Starter Kit
Included	3 slotted tips, 2 Phillips tips, 2 square drive tips	Long Nose Pliers, Heavy Duty Diagonal Cutter, Heavy Duty Combo Pliers, Roll-up Tool Pouch	3 Slotted Tips, 2 Phillips Tips, Long Nose Pliers, Diagonal Cutter, Linesman Combination Plier, Roll-up Tool Pouch	Fluke Pack30 Professional Tool Backpack, 3 Slotted Tips, 2 Phillips Tips, Long Nose Pliers, Diagonal Cutter, Combination Pliers, Roll-up Tool Pouch
Warranty	Lifetime	Lifetime	Lifetime	1 year*

*Hand tools in kits all carry the limited lifetime warranty.



Tools + Hand Tool Kits	IBT6K	IB875K	IB117K	IB179K	IB376K
Description	Fluke T6 Electrical Tester + Insulated Hand Tools Starter Kit	Fluke 87V Industrial Multimeter + Insulated Hand Tools Starter Kit	Fluke 117 Electrician's Multimeter + Insulated Hand Tools Starter Kit	Fluke 179 True-RMS Digital Multimeter + Insulated Hand Tools Starter Kit	Fluke 376FC True-RMS Clamp Meter + Insulated Hand Tools Starter Kit
Included	Fluke T6 Electrical Tester, 3 Slotted Tips, 2 Phillips Tips, Long Nose Pliers, Diagonal Cutter, Combination Pliers, Roll-up Tool Pouch	Fluke 87V Industrial Multimeter, 3 Slotted Tips, 2 Phillips Tips, Long Nose Pliers, Diagonal Cutter, Combination Pliers, Roll-up Tool Pouch	Fluke 117 Electrician's Multimeter, 3 Slotted Tips, 2 Phillips Tips, Long Nose Pliers, Diagonal Cutter, Combination Pliers, Roll-up Tool Pouch	Fluke 179 True-RMS Digital Multimeter, 3 Slotted Tips, 2 Phillips Tips, Long Nose Pliers, Diagonal Cutter, Combination Pliers, Roll-up Tool Pouch	Fluke 376FC True-RMS Clamp Meter, 3 Slotted Tips, 2 Phillips Tips, Long Nose Pliers, Diagonal Cutter, Combination Pliers, Roll-up Tool Pouch
Warranty	2 year*	Lifetime	3 year*	Lifetime	Lifetime

*Hand tools in kits all carry the limited lifetime warranty.



Accessories	RUP8	CPAK8
Description	Roll-up Tool Pouch. Holds up to 3 pliers and 5 screwdrivers, rolls shut, closes with hook and loop fasteners	Multiple pockets, protected inside, magnetic strap, holds up to 3 Pliers and 7 Screwdrivers
Included	Tools not included	Tools not included
Warranty	1 year	1 year

Insulated Hand Tool Lifetime Limited Warranty

Each Fluke Insulated Hand Tool will be free from defects in material and workmanship for its lifetime. As used herein, "lifetime" is defined as seven years after Fluke discontinues manufacturing the product, but the warranty period shall be at least fifteen years from the date of purchase. This warranty does not cover damage from neglect, misuse, contamination, alteration, accident or abnormal conditions of operation or handling, damage or normal wear and tear of mechanical components. This warranty covers the original purchaser only and is not transferable.

To establish original ownership and prove date of purchase, please complete and return the registration card accompanying the product, or register your product on <http://www.fluke.com/registration>. Fluke will, at its option, repair at no charge, replace or refund the purchase price of a defective product purchased through a Fluke authorised sales outlet and at the applicable international price. Fluke reserves the right to charge for importation costs of repair/replacement parts if the product purchased in one country is sent for repair elsewhere.

If the product is defective, contact the authorised seller you purchased the tool from for immediate replacement or your nearest Fluke authorised service center to obtain return authorisation information, then send the product to that service center, with a description of the difficulty, postage and insurance prepaid (FOB Destination). Fluke assumes no risk for damage in transit. Fluke will pay return transportation for product repaired or replaced in-warranty. Before making any non-warranty repair, Fluke will estimate cost and obtain authorisation, then invoice you for repair and return transportation.

THIS WARRANTY IS YOUR ONLY REMEDY. NO OTHER WARRANTIES, SUCH AS FITNESS FOR A PARTICULAR PURPOSE, ARE EXPRESSED OR IMPLIED. FLUKE SHALL NOT BE LIABLE FOR ANY SPECIAL, INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES OR LOSSES, INCLUDING LOSS OF DATA, ARISING FROM ANY CAUSE OR THEORY. AUTHORISED RESELLERS ARE NOT AUTHORISED TO EXTEND ANY DIFFERENT WARRANTY ON FLUKE'S BEHALF.

Insulated Hand Tools



Ordering Information

IKSC7	Insulated 7 Unit Screwdriver Kit, 1,000 V
IKPL3	Insulated 3 Unit Pliers Kit, 1,000 V
IKST7	Insulated Hand Tools Starter Kit, 1,000 V
IKPK7	Pack30 Professional Tool Backpack + Insulated Hand Tools Starter Kit
IBT6K	Fluke T6 Electrical Tester + Insulated Hand Tools Starter Kit
IB875K	Fluke 87V Industrial Multimeter + Insulated Hand Tools Starter Kit
IB117K	Fluke 117 Electrician's Multimeter + Insulated Hand Tools Starter Kit
IB179K	Fluke 179 True-RMS Digital Multimeter + Insulated Hand Tools Starter Kit
IB376K	Fluke 376FC True-RMS Clamp Meter + Insulated Hand Tools Starter Kit
RUP8	Roll-up Tool Pouch
CPAK8	Magnetic Tool Pouch

Accessories

Accessories increase the functionality of your test tool and increase your safety and proficiency. Your digital multimeter can become a thermometer, clamp meter, or even a pressure gauge. With Fluke genuine accessories, you can broaden the ability to take meter measurements in different environments to meet your industrial, electrical, and electronic needs.



Test Leads, Clips and Probes

Model Number	TL175	TL26A	TL40	TL71	TL75	TL76	TL221	TL222	TL224	TL910
Test Leads										
110/114/115/116/117	•	•	•	•	•	•	•	•	•	•
175/177/179	•	•	•	•	•	•	•	•	•	•
87V	•	•	•	•	•	•	•	•	•	•
287/289	•	•	•	•	•	•	•	•	•	•
8845/8846	•	•	•	•	•	•	•	•	•	•
120 Series	•	•	•	•	•	•	•	•	•	•
190 Series	•	•	•	•	•	•	•	•	•	•
323/324/325	•	•	•	•	•	•	•	•	•	•
370 Series, 381	•	•	•	•	•	•	•	•	•	•
705/707	•	•	•	•	•	•	•	•	•	•
712	•	•	•	•	•	•	•	•	•	•
715	•	•	•	•	•	•	•	•	•	•
716/717	•	•	•	•	•	•	•	•	•	•
718	•	•	•	•	•	•	•	•	•	•
725/726	•	•	•	•	•	•	•	•	•	•
787/B/789	•	•	•	•	•	•	•	•	•	•
1577/1587 FC	•	•	•	•	•	•	•	•	•	•
Clips and Probes										
AC175				•	•	•				
AC87							•	•	•	
AC89							•	•	•	
AC220							•	•	•	
AC280							•	•	•	
AC238A							•	•	•	
AC285							•	•	•	
AC288							•	•	•	
FTP-1							•	•	•	
TLK290							•	•	•	
TLK291							•	•	•	
TP1							•	•	•	
TP2							•	•	•	
TP4							•	•	•	
TP38							•	•	•	
TP74							•	•	•	
TP80							•	•	•	
TP175							•	•	•	
TP220							•	•	•	
TP912										•
TP920				•	•					
T5 Starter Kit				(compatible with T5/T+/T+Pro/330 Series Clamp Meters)						
TP165X				(compatible with 1503/1507/1577/1587 FC/1650/1660 Series)						

Test Leads, Probes and Clips

Test Lead/Probe-in-One



TL175 TwistGuard™ Test Leads

- Probes meet IEC 61010-031 requirements for safety
- Patented extendable tip guard meets CAT III 1000 V, CAT IV 600 V requirements while providing the flexibility you need for CAT II measurements
- Probes always show correct category rating for tip length being used



TL75 Hard Point™ Test Lead Set

One pair (red, black) comfort grip probes with PVC-insulated, right-angle shrouded 4 mm banana plugs.

- Safety rating: CAT II 1000 V, 10 A (CAT III 1000 V, CAT IV 600 V with protective cap)



TL71 Premium Test Lead Set

One pair (red, black) comfort grip probes with flexible silicone insulated, right-angle test leads.

- Heat and cold resistant
- Safety rating: CAT II 1000 V, 10 A
- (CAT III 1000 V, CAT IV 600 V with protective cap)



TL76 2mm/4mm Test Lead Set

One pair (red, black) silicone test leads with right angle shrouded 4 mm banana plugs.

- Removable lantern tip for easy access to terminal blocks, 2 mm diameter
- Safety rating: CAT II 1000 V, 10 A (CAT III 1000 V, CAT IV 600 V with protective cap)



TL40 Retractable Tip Test Lead Set

One pair (red, black) flexible silicone insulated test leads with sharp needle point tips adjustable to desired length from 0 mm to 76 mm.

- Extra hard probe tips to provide long service life
- Safety rating: CAT II 600 V, 3 A rating



TL26A 60 in 5-Way Test Lead Set

One pair (red, black) silicone-insulated leads with five different ways to connect.

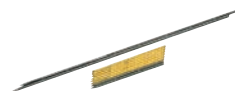
- U-shaped nose for blade-shaped terminals
- Notched jaw for gripping screw heads, bare wire or terminals
- Serrated teeth for gripping threaded or wire-wrapped terminals
- Sharp needle cluster for piercing small gauge (#22-#28 AWG) wires
- Large piercing needle
- Safety rating: 30 V, 10 A



TL910 Electronic Test Probes

One pair (red, black) leads with very small tips to access hard-to-reach electronic test points.

- Includes three sets of spring-loaded gold tips and two sets of stainless steel tips
- Tip length up to 100 mm
- Tip diameter: 1 mm
- Safety rating: CAT II 1000 V, 3 A



TP912 Replacement Tips for TL910

Five sets of spring-loaded, tips to refurbish TL910 Electronic Test Probes.

- Very small 1 mm tips to access hard-to-reach electronic test points
- Probe tip length up to 100 mm
- Three sets of gold-plated and two sets of stainless steel tips



TP165X Remote Control Probe

Probe with integrated test button simplifies measurement when accessing hard-to-reach points.

- Probe designed for 1500 Series Insulation and 1650/1660 Series Installation Testers
- Tip length up to .735 in
- Tip diameter: 1 mm
- Safety rating: CAT II 1000 V, (CAT III 1000 V, CAT IV 600 V with protective cap), 10 A

Probe-in-one clips



AC288 SureGrip™ Terminal Block Probe

One pair (red, black) of probes features a retractable probe tip for connections to clamp and screw type terminal blocks.

- Designed for increased safety, while providing the flexibility to reach deep connection points
- 1 mm diameter probe tip extends out to 8.4 mm length
- Recommended for use with the TL224, TL222, TL221 test leads
- Safety rating: CAT III 1000 V, CAT IV 600 V



AC175 Alligator Clip Set

One pair (red, black) slide-on alligator clips.

- 8 mm clip opening
- Slide-on alligator clips are compatible with TL71, TL75, TL175 and TP175 test probes
- Safety rating: CAT IV 600 V, CAT III 1000 V, 10 A



TP920 Test Probe Adapter Set

Three pairs (red, black) push-on adapters.

- Includes IC test adapters, extended probe tips, and medium alligator clips
- Maximum opening 7.6 mm
- Safety rating: IC test adapter CAT II 300 V, extended probe tips CAT II 300 V, medium alligator clips CAT II 1000 V

Test Leads, Probes and Clips

Modular Test Leads



TL221 SureGrip™ Test Lead Extensions Set

One pair (red, black) silicone-insulated leads with safety-shrouded, 4 mm banana plugs.

- Couplers have female connectors on both ends
- Safety rating: CAT IV 600 V, CAT III 1000 V, 10 A



TL222 SureGrip™ Silicone Insulated Test Leads

One pair (red, black) silicone-insulated test leads (red, black) with safety-shrouded, 4 mm banana plugs.

- Right angle connectors on both ends



TL224 SureGrip™ Insulated Test Leads

One pair (red, black) silicone-insulated test leads with safety-shrouded 4 mm banana plugs.

- Right angle connector on one end and straight connector on the other
- Safety rating: CAT IV 600 V, CAT III 1000 V, 10 A



TL27 Heavy-duty Test Lead Set

One pair (red, black) rugged, EPDM-insulated test leads with safety-shrouded 4 mm banana plugs.

- Straight connectors on both ends
- Safety rating: CAT III 1000 V, 10 A

Test Lead Holder



H900 Test Lead Holder

Heavy-duty holder for conveniently storing test lead wires.

- Mounting holes for securing to wall or other surfaces
- For test lead wires up to 8 mm in diameter
- Overall dimensions (LxWxH): 279 mm x 89 mm x 32 mm

Modular Clips



AC285/-FTP SureGrip™ Alligator Clips

One pair (red, black) large alligator clips with insulated, nickel-plated steel jaws.

- Multi-purpose tooth pattern grips from fine gauge wire to a 20 mm bolt
- Safety rating: CAT IV 600 V, CAT III 1000 V, 10 A
- AC285-FTP includes AC285 and adapters for FTP-1 or FTPL-1 Fused Test Probes



AC220 SureGrip™ Alligator Clips

One pair (red, black) of small, insulated, nickel-plated jaws.

- Blunt tip grabs round screw heads up to 9.5 mm
- Safety rating: CAT IV 600 V, CAT III 1000 V, 10 A



AC280 SureGrip™ Hook Clips

One pair (red, black) nickel-plated hook-style clips.

- Hook opening 6.4 mm at front
- Base opening of 0.2 mm
- Safety rating: CAT IV 600 V, CAT III 1000 V, 3 A



AC283A SureGrip™ Pincer Clips

One pair (red, black) nickel-plated pincers open to 5 mm.

- 11.4 cm flexible insulated shaft
- Safety rating: CAT II



AC89 Heavy Duty Insulation Piercing Test Clip

Ideal probe for establishing accurate contact through insulation.

- Pierces 0.25 mm to 1.5 mm insulated wire
- Safety rating: 1000 V, 10 A



AC87 Heavy Duty Bus Bar Clip Set

One pair (red, black) flat, right angle clips designed for connecting to bus bars.

- Adjustable collar provides two ranges of jaw openings up to 30 mm
- Safety rating: CAT III 600 V, 5 A

Modular Test Probes



TP175 TwistGuard™ Test Probes

- Modular test probes of the popular TL175 Test Leads
- Patented extendable tip guard meets CAT III 1000 V, CAT IV 600 V requirements while providing the flexibility you need for CAT II measurements
- 2 mm (0.08 in) diameter stainless steel probe tips



TP220 SureGrip™ Industrial Test Probes

One pair (red, black) industrial test probes with stainless steel tip.

- Sharp, 12 mm tips
- Safety rating: CAT II 1000 V (CAT III 1000 V, CAT IV 600 V with protective cap), 10 A



TP1 Slim Reach™ Test Probes

One pair (red, black) slender probes with flat stainless steel blade to hold securely in blade-type electrical wall sockets.

- Tip length up to 14.7 mm
- Safety rating: CAT II 1000 V, 10 A (CAT III 1000 V, CAT IV 600 V with protective cap)



TP2 Slim Reach™ Test Probes

One pair (red, black) slender stainless steel probes for accessing closely-spaced or recessed terminals such as in electronic environments.

- 2 mm diameter tip
- Safety rating: CAT II 1000 V, 10 A (CAT III 1000 V, CAT IV 600 V with protective cap)

Test Leads, Probes and Clips

Modular Test Leads



TP4 Slim Reach™ Test Probes

One pair (red, black) slender stainless steel probes for accessing closely-spaced or recessed electrical terminals.

- 4 mm diameter probe tip designed to fit securely into IEC (C13 and C14) electrical wall outlets
- Safety rating: CAT II 1000 V, 10 A



TP80 Electronic Test Probes

One pair (red, black) electronics test probes.

- IC-insulated cap prevents shortening of IC legs for probing high density components or boards
- Tip length up to 3.9 mm
- Tip diameter: 1 mm
- Safety rating: CAT III 1000 V, 1 A



TP74 Lantern Tip Test Probes

One pair (red, black) featuring nickel-plated brass ends.

- Banana-style 4 mm spring contacts
- Safety rating: CAT II 1000 V, 10 A (CAT III 1000 V, CAT IV 600 V with protective cap)



TP38 Slim Reach™ Test Probes

One pair (red, black) slender stainless steel probes for accessing closely-spaced or recessed terminals.

- Tip length: 24 mm which includes the insulated part of the tip
- Probe tip insulated to 4 mm from the end
- Safety rating: CAT IV 600 V, CAT III 1000 V, 10 A

Patch Cords



TL932 Patch Cords (90 cm)

One pair (red, black) multi-stacking banana plug patch cords, 90 cm long.

- Nickel-plated, 4 mm banana plugs
- 90 cm long PVC insulated leads
- 30 V rms or 60 V dc, 15 A



TL930 Patch Cords (60 cm)

One pair (red, black) multi-stacking banana plug patch cords, 61 cm long.

- Nickel-plated, 4 mm banana plugs
- 61 cm long PVC insulated leads
- 30 V rms or 60 V dc, 15 A



TL935 Patch Cords (60 cm, 90 cm, 120 cm)

Three sets (red and black pairs) of multi-stacking banana plug patch cords in different lengths.

- Nickel-plated, 4 mm banana plugs
- 60 cm, 90 cm, and 120 cm long PVC insulated leads
- 30 V rms or 60 V dc, 15 A



TL940 Mini-Hook Test Leads

One pair (red, black) of test leads with multi-stacking 4 mm banana plugs and mini-hooks.

- Mini-hooks attach to component leads up to 1.5 mm diameter
- 90 cm long PVC insulated leads
- 30 V rms or 60 V DC, 3 A



TL950 Mini-Pincer Test Leads

One pair (red, black) of test leads with multi-stacking 4 mm banana plugs and mini-pincers.

- Mini-pincers open to 2.3 mm
- 90 cm long PVC insulated leads
- 30 V rms or 60 V DC, 3 A



TL960 Micro-Hook Test Leads

One pair (red, black) of test leads with multi-stacking 4 mm banana plugs and micro-hooks.

- Micro-hooks attach to component leads up to 1 mm diameter
- 90 cm long PVC insulated leads
- 30 V rms or 60 V dc, 3 A



TL970 Hook and Pincer Set

- TL940 Mini-Hook Test Lead Set
- TL950 Mini-Pincer Test Lead Set
- TL960 Micro-Hook Test Lead Set

Test Lead Sets and Kits



FTP-1 / FTPL-1 SureGrip™ Fused Test Probes

- Built-in fuses for added protection
- 2 mm threaded probe tips include removable 4 mm lantern-style spring contacts
- FTPL-1 comes with a set of TL224 SureGrip™ Insulated Test Leads
- Safety rating: CAT II 1000 V (CAT III 1000 V, CAT IV 600 V with protective cap), 10 A



TL238 SureGrip™ Test Lead Set for High Energy Environments

This kit is specially designed for high energy environments. Three-piece kit:

- TP238 SureGrip™ Insulated Test Probe Set
- TP280 SureGrip™ Test Probe Extender
- TL224 SureGrip™ Insulated Test Leads
- Safety rating:
 - TP238 and TL224: CAT IV 600 V, CAT III 1000 V, 10 A
 - TP280: CAT III 1000 V, 10 A



TLK290 Flexible Socket Probe Set

Set includes three flexible socket probes and a large alligator clip for use with 4 mm shrouded test leads.

- Test probes are for use on motor and three-phase sockets
- Probes have flexible test points that fit securely between 4 mm and 8 mm sockets
- Safety rating: CAT II 1000 V, 8 A



TLK291 Fused Test Probe Set

One pair (red, black) fused test probes. Probes fit on modular leads or on fixed-lead test tools.

- Each probe contains a 500 mA/1000 V/50 kA fuse
- Safety rating: CAT IV 600 V, CAT III 1000 V

Test Lead Sets and Kits

Model number	TL27	TL80A	TL81A	TL220	TL223	TL225	TL238	TLK220	TLK225	TLK287	TLK289	TLK430
Test Lead Sets and Kits												
110/114/115/116/117	•	•	•	•	•	•	•	•	•	•	•	(compatible with 430 Series II Power Quality Analysers)
27 II	•	•	•	•	•	•	•	•	•	•	•	
175/177	•	•	•	•	•	•	•	•	•	•	•	
179	•	•	•	•	•	•	•	•	•	•	•	
87V	•	•	•	•	•	•	•	•	•	•	•	
287/289	•	•	•	•	•	•	•	•	•	•	•	
8845/8846	•	•	•	•	•	•	•	•	•	•	•	
120/B Series	•	•	•	•	•	•	•	•	•	•	•	
190/-II Series	•	•	•	•	•	•	•	•	•	•	•	
323/324/325	•	•	•	•	•	•	•	•	•	•	•	
370 Series, 381	•	•	•	•	•	•	•	•	•	•	•	
705/707	•	•	•	•	•	•	•	•	•	•	•	
712/713	•	•	•	•	•	•	•	•	•	•	•	
715	•	•	•	•	•	•	•	•	•	•	•	
716/717	•	•	•	•	•	•	•	•	•	•	•	
718	•	•	•	•	•	•	•	•	•	•	•	
725/726	•	•	•	•	•	•	•	•	•	•	•	
787B/789	•	•	•	•	•	•	•	•	•	•	•	
1577/1587 FC	•	•	•	•	•	•	•	•	•	•	•	
Clips and Probes												
AC175		•	•									
AC87	•		•	•	•	•	•	•	•	•	•	
AC89	•		•	•	•	•	•	•	•	•	•	
AC220	•		•	•	•	•	•	•	•	•	•	
AC280	•		•	•	•	•	•	•	•	•	•	
AC238A	•		•	•	•	•	•	•	•	•	•	
AC285	•		•	•	•	•	•	•	•	•	•	
FTP-1	•		•	•	•	•	•	•	•	•	•	
TLK290			•	•	•	•	•	•	•	•	•	
TLK291			•	•	•	•	•	•	•	•	•	
TP1	•		•	•		•	•	•	•	•	•	
TP2	•		•	•	•	•	•	•	•	•	•	
TP4	•		•	•	•	•	•	•	•	•	•	
TP38	•		•	•	•	•	•	•	•	•	•	
TP74	•		•	•	•	•	•	•	•	•	•	
TP80	•		•	•	•	•	•	•	•	•	•	
TP175	•		•	•	•	•	•	•	•	•	•	
TP220	•		•	•	•	•	•	•	•	•	•	
TP912										•		
TP920		•	•									
T5 Starter Kit	(compatible with T5/T+/T+Pro/330 Series Clamp Meters)											
TP165X	(compatible with 1503/1507/1577/1587 FC/1650/1660 Series)											

Test Lead Sets and Kits

Test Lead Sets and Kits



TLK289 Industrial Master Test Lead Set

Designed for electrical and electronics testing including clips and probes for dependable contact with a variety of test points. Includes:

- One pair each (red, black)
 - AC285 Large Jaw Alligator Clips
 - AC220 Plunger Style Alligator Clips
 - AC280 SureGrip™ Hook Clips
 - TP220 SureGrip™ Industrial Test Probes
- TPAK ToolPak™
- 80BK-A Integrated DMM Temperature Probe
- C116 Soft Carrying Case



TLK287 Electronics Master Test Lead Set

The perfect test lead set electronics test and design. Includes 11 items:

- Precision electronic probes with multiple spring-loaded sharp tips to maximise contact with SMD test points
- Micro-grabbers and leads to enable fine SMD testing
- Mini-alligator clips, grabbers, and probes
- Modular test leads and lead-probe combinations
- Couplers for long lead applications



TL81A Deluxe Electronic Test Lead Kit

This 11-item kit includes pouch and two each (red, black) of:

- Test leads with a safety-shrouded, right angle banana connector on one end and a stainless steel test probe on the other. Rated up to 10 A.
- Insulated alligator clips. Rated up to 10 A
- Insulated probe tip extenders. Rated up to 3 A
- Modular test probes with banana jack connector. Rated up to 10 A
- Modular hook-style clip test leads. Rated up to 5 A
- Modular pinch-style clip test leads. Rated up to 5 A
- Modular alligator clips. Rated up to 10 A
- Slide-on IC probe tip adapters (rated up to 3 A) and test lead couplers
- Bare spade lug. Rated up to 10 A



TL220 SureGrip™ Industrial Test Lead Set

Handy all-in-one set that includes essential test items for industrial environments. Three-item set includes:

- AC220 Plunger Style Alligator Clips
- TP220 SureGrip™ Industrial Test Probes CAT II 1000 V, 10 A without protective cap
- TL224 SureGrip™ Silicone Insulated Test Leads
- Safety rating: All CAT IV 600 V, CAT III 1000 V



TL80A Basic Electronic Test Lead Kit

The fundamental accessories for testing are included in this four-item kit.

- Medium alligator clip CAT II 1000 V, 10 A
- Extended probe tips CAT II 300 V, 3 A
- TL71 Premium Test Lead Set
- C75 Accessory Case



TLK225 SureGrip™ Master Accessory Set

Set includes all the SureGrip™ leads, clips, and probes in a handy roll-up pouch. This 13-item set includes:

- AC220 Plunger Style Alligator Clips
- AC280 SureGrip™ Hook Clips
- AC238A SureGrip™ Pincer Clips
- AC285 Large Jaw Alligator Clips
- TP175 TwistGuard™ Test Probes
- TL224 SureGrip™ Insulated Test Leads
- Six-pocket Storage Pouch
- Safety rating: all CAT IV 600 V, CAT III 1000 V



TL223 SureGrip™ Electrical Test Lead Set

All-in-one set includes three test lead accessories:

- AC220 Plunger Style Alligator Clips
- TP1 Slim Reach Test Probes
- TL224 SureGrip™ Insulated Test Leads
- Safety rating: CAT II 1000 V, 10 A (CAT III 1000 V, CAT IV 600 V with protective cap)



TLK-220 SureGrip™ Industrial Test Lead Kit

Special-value SureGrip™ five-piece kit for industrial applications, in a roomy carrying case. Kit includes:

- AC220 Plunger Style Alligator Clips
- AC285 Large Jaw Alligator Clips
- TP220 SureGrip™ Industrial Test Probes
- TL224 SureGrip™ Insulated Test Leads
- C116 Zippered Vinyl Case with Moveable Divider
- Safety rating: CAT II 1000 V (CAT III 1000 V, CAT IV 600 V with protective cap), 10 A



T5 Starter Kit

Special-value three-piece kit for the electrical professional with a Fluke T5 Voltage, Continuity and Current Tester. Kit includes:

- TP238 Insulated Test Probes
- AC285 Large Jaw Alligator Clips
- C33 Soft Carrying Case
- Safety rating: all CAT IV 600 V, CAT III 1000 V



TLS430 Test Leads and Alligator Clips

Test lead replacement set for the Fluke 430 Series II Three-Phase Power Quality Analyzers.

- Set includes five each (4 black, 1 green) of test leads and alligator clips
- Safety rating: CAT IV 600 V, CAT III 1000 V



TL225 SureGrip™ Stray Voltage Adapter Test Lead Kit

The Fluke TL225 adds low input impedance to a multimeter, desensitising it to low energy and eliminating ghost or stray voltages. Four-piece kit includes:

- SV225 Stray Voltage Adapter
- TL224 SureGrip™ Insulated Test Leads
- TP238 Insulated Test Probes
- C75 Accessory Case
- Safety rating: All CAT IV 600 V, CAT III 1000 V, 10 A

Temperature Accessories

	Bead		HVAC	Immersion	Surface	Air	Piercing	General Purpose	Industrial Surface	Pipe Clamp
	80BK-A	80PK-1 80PJ-1	80PK-11	80PK-22	80PK-3A	80PK-24	80PK-25 80PT-25	80PK-26	80PK-27	80PK-8
Lowest Temperature	-40 °C		-30 °C	-40 °C	0 °C	-40 °C	Type K: -40 °C Type T: -196 °C	-40 °C	-127 °C	-29 °C
Highest Temperature	260 °C	105 °C	1090 °C	260 °C	816 °C	350 °C	816 °C	600 °C	149 °C	
Probe Material	Type K wire with teflon insulation		Velcro	Inconel 600	Type K sensor with teflon body	Inconel	316 Stainless Steel	304 Stainless Steel	304 Stainless Steel	Type K sensor with pvc body
Probe Length	1 m lead wire	1 m lead wire	19 m Velcro cuff	21.27 cm	9.525 cm	21.59 cm	10.16 cm	21.57 cm	20.32 cm	for pipes from 6.4 mm to 34.9 mm
Cable Length	1 m	1 m	1 m	1 m	1.3 m	1 m	1 m	1 m	1 m	1 m
Connection	Standard banana jack	Molded thermocouple plug	Molded thermocouple plug	Molded thermocouple plug	Molded thermocouple plug	Molded thermocouple plug	Molded thermocouple plug	Molded thermocouple plug	Molded thermocouple plug	Molded thermocouple plug
SureGrip Handle	No	No	No	Yes	No	Yes	Yes	Yes	Yes	No
Key Feature	Ideal for initial troubleshooting. Can be secured in place with a magnet.		Velcro probe allows hands free temperature measurement.	For use in liquids or in gels.	Exposed junction for direct contact with flat or slightly convex surfaces.	Perforated baffle for air and non-caustic gas measurements.	Probe material safe for use in foods. Sharp tip pierces solid surfaces.	Use for general purpose air or surface measurements.	Low conductivity stainless steel minimizes thermal shunting. Extra rugged.	Clamps securely to pipe. Measurements are repeatable to 0.56 °C
Thermocouple Types	K	K, J	K	K	K	K	K, T	K	K	K

Temperature Compatibility

Model Number	80AK-A	80BK-A	All 80PK Probes	80PJ-1/ 80PJ-9	80PT-25	80TK	80T-150UA	80PJ-EXT	80PK-EXT	80PT-EXT	80CK-M	80CJ-M	80PR-60
110/114/115/116/117	116	116							▲		▲		
27 II						•	•		*		*		
175/177			*			•	•		*		*		
179	•	•	▲						▲		▲		
87V	•	•	▲						▲		▲		
287/289	•	•	▲				•		▲		▲		
8845/8846			*			•	•		*		*		
43B			*			•	•		*		*		
120/B Series			*			•	•		*		*		
190/-II Series			*			•	•		*		*		
51/52/53/54 II			•	•	•			•	•	•	•	•	
63													66/68
714			•	•	•			•	•	•	•	•	
715			*			•	•		*		*		
725/726			•	•	•			•	•	•	•	•	
787B/789			*			•	•		*		*		
902	•	•	•						•				
1587 FC	•	•	▲						▲		▲		
1577	•		▲										
561			•										

• Compatible; * Requires 80TK; ▲ Requires 80AK-A; 116 only: requires 80AK-A

Temperature Accessories



80PJ-1 or 80PK-1 Bead Probe

Type J or K thermocouple probe for general purpose applications. Ideal for troubleshooting.

- 1 mm probe with Teflon® insulation
- Measurement range: -40 °C to 260 °C



80PJ-9 or 80PK-9 General Purpose Probe

Type J or K thermocouple probe for air and non-caustic gases. The sharp tip pierces pipe insulation and the flat surface makes good contact.

- 15.25 cm stainless steel probe
- Measurement range: -40 °C to 260 °C



80PK-26 SureGrip™ Tapered Probe

Type K thermocouple probe with tapered tip for speedy air, surface, non-caustic gas, and liquid measurements.

- 1 m lead
- 203 mm stainless steel probe
- Measurement range: -40 °C to 816 °C



80PK-3A Surface Probe

Type K thermocouple with exposed junction for flat or slightly convex surfaces such as plates and rollers.

- 9.525 cm probe with Teflon® insulation
- Measurement range: 0 °C to 260 °C



80PK-27 SureGrip™ Industrial Surface Temperature Probe

Type K thermocouple probe for surfaces in rugged environments.

- 1 m lead
- 20.32 cm stainless steel probe
- Measurement range: -127 °C to 600 °C



80PK-25 or 80PT-25 SureGrip™ Piercing Probe

Type K or T thermocouple suitable for food industry, liquids, and gels. Sharp tip pierces solid surfaces.

- 1 m lead
- 10.16 cm stainless steel probe
- Measurement range:
 - Type K: -40 °C to 350 °C
 - Type T: -196 °C to 350 °C



80PK-24 SureGrip™ Air Probe

Type K thermocouple probe for air and non-caustic gas measurements.

- 1 m lead
- 21.59 cm Inconel® probe
- Bead protected by perforated baffle
- Measurement range: -40 °C to 816 °C



80PK-22 SureGrip™ Immersion Probe

Type K thermocouple probe for use in liquids and gels.

- 1 m lead
- 21.27 cm Inconel® probe
- Measurement range: -40 °C to 1090 °C



80PK-8 and 80PK-10 Pipe Clamp Probe

Type K thermocouple clamps securely to pipes for fast temperature and superheat measurements.

- Durable ribbon sensor
- 80PK-8 for pipe diameters 6.4 mm to 34.9 mm
- 80PK-10 for pipe diameters 32 mm to 64 mm
- Measurements are repeatable to 0.56 °C
- Measurement range: -29 °C to 149 °C



80PK-11 Type-K Velcro® Thermocouple Probe

Type K Velcro cuff for use with any temperature-measuring instrument that accepts type K thermocouples.

- Use multiples and leave in place for route-based routine maintenance
- 48 cm Velcro® cuff
- Measurement range: -30 °C to 105 °C



80PK-18 Pipe Clamp Temperature Probe Kit

- Includes both 80PK-8 and 80PK-10 Type K clamps
- Provides full range of pipe measurement sizes
- Includes soft carrying case



80PR-60 RTD Temperature Probe

This probe expands the utility of an RTD non-contact infrared thermometer by simultaneously taking contact and non-contact temperature readings.

- For use with the Fluke 66 and 68 Infrared Thermometers
- 90 mm platinum 1 KW probe
- 3.5 mm phono type jack
- Measurement range: -40 °C to 260 °C



80AK-A Thermocouple Adapter

Adapts type K thermocouple mini-connector to dual shrouded 4 mm banana plug inputs.

- Measurement range and accuracy: probe dependent
- Suitable for low voltage applications (below 30 V AC, 60 V DC)



80BK-A Integrated DMM Temperature Probe

Convenient, integrated type K thermocouple probe with standard shrouded 4 mm banana jack.

- Compatible with Fluke DMM with temperature measurement functions
- Measurement range: -40 °C to 260 °C



80TK Thermocouple Module

This module converts a DMM to a thermometer and is designed for use with type K thermocouples in low voltage applications.

- Voltage range: below 24 V ac, 60 V dc
- Measurement range: -50 °C to 1000 °C (probe dependent)



80T-150UA Universal Temperature Probe

Adapts any DMM using shrouded 4 mm banana plugs. This fast, accurate integrated probe is designed for low-voltage applications.

- For air, surface, and non-corrosive applications
- Voltage range: below 24V AC, 60V DC
- 15.7 cm probe tip
- Measurement range: -50 °C to 150 °C
- Output: switchable, from 1 mV/°C to 1 mV/°F

Current Clamps: AC

AC Current Clamp Specifications

	i200	i200s	i400	i400s	i800	i1000s	i3000s	i2000 Flex	i3000s Flex	i6000s
AC current range	1 A to 200 A	1 A to 200 A	1 A to 400 A	0.5 A to 400 A	1 A to 800 A	0.2 A to 1000 A	1 A to 3000 A	2 A to 2000 A	3 A to 3000 A	60 A to 6000 A
Accuracy	< 3% + 0.5 A 48 Hz to 65 Hz	< 1% + 0.5 A 48 Hz to 65 Hz	2% + 0.06 A 45 Hz to 400 Hz	.5 A to 40 A, 2% + .015 A, 5 A to 400 A, 2% + .04 A, 45 Hz to 400 Hz	0.1 A to 10 A ± 3% + .01 A, 10 A to 200 A A ± 2%, 200 A to 800 A ± 1%	0.2 to 10 A: 3% + 0.1 A 10 A to 100 A: 2% + 0.5 A 100 A to 1000 A: 1% + 1 A 48 Hz to 65 Hz	1 to 30 A: 2% + 0.1 A 1 to 300 A: 2% + 0.5 A 1 to 3000 A: 2% + 2 A 48 Hz to 65 Hz	± 1% of range 45 Hz to 65 Hz Ranges: 20 A, 200 A, 2000 A	± 1% of range, 45 Hz to 65 Hz Ranges: 30 A, 300 A, 3000 A	± 1% of range 45 Hz to 65 Hz
Bandwidth (-3 dB)	40 Hz to 40 kHz	40 Hz to 40 kHz	5 kHz to 20 kHz	5 Hz to 10 kHz	30 Hz to 10 kHz (typical)	5 Hz to 100 kHz	10 Hz to 100 kHz	10 Hz to 20 kHz	10 Hz to 50 kHz	10 Hz to 50 kHz, (-3 dB)
Maximum conductor diameter	20 mm	20 mm	32 mm	32 mm	54 mm	54 mm	64 x 100 mm	177 mm	177 mm or 265 mm	193 mm or 289 mm
Maximum conductor size	150 mm ²	150 mm ²	400 mm ²	400 mm ²	2x 240 mm ² or 1x 500 mm ²	2x 240 mm ² or 1x 500 mm ²	64 mm	610 mm circumference	610 mm or 915 mm circumference	610 mm or 915mm
Output levels	1 mA/A	10 mV/A 100 mV/A	1 mA/A	10 mV/A 1 mV/A	1 mA/A	1 mV/A 10 mV/A 100 mV/A	10 mV/A 1 mV/A 0.1 mV/A	100 mV/A 10 mV/A 1 mV/A	100 mV/A 10 mV/A 1 mV/A	50 mV/A 5 mV/A 0.5 mV/A
Output cable	1.5 m shrouded banana plugs	2 m to BNC termination	1.5 m shrouded banana plugs	2.5 m to BNC termination	1.6 m shrouded banana plugs	1.6 m to BNC termination	2.1 m to BNC termination	2 m with double shrouded banana plugs	2.1 m to BNC termination	2 m to BNC, 4 mm plug adapter supplied
Warranty	One-year	One-year	One-year	One-year	One-year	One-year	One-year	One-year	One-year	One-year
Safety rating	CAT III 600 V	CAT III 600 V	One-year CAT III 1000 V CAT IV 600 V	CAT III 1000 V CAT IV 600 V	CAT III 600 V	CAT III 600 V	CAT III 600 V	CAT III 600 V	CAT III 600 V	CAT III 600 V

AC Current Clamp Selection Guide

	i200	i200s	i400	i400s	i800	i1000s	i3000s	i2000 Flex ¹	i3000s Flex
110/114/116		1 A to 200 A		0.6 A to 400 A*		0.6 A to 1000 A*	1 A to 3000 A	2 A to 2000 A	3 A to 3000 A
115/117	60 A to 200 A	1 A to 200 A	60 A to 400 A	0.6 A to 400 A*	60 A to 800 A	0.6 A to 1000 A*	1 A to 3000 A	2 A to 2000 A	3 A to 3000 A
233	60 A to 200 A	1 A to 200 A	60 A to 400 A	0.6 A to 400 A*	60 A to 800 A	0.6 A to 1000 A*	1 A to 3000 A	2 A to 2000 A	3 A to 3000 A
27II	2 A to 200 A	1 A to 200 A	2 A to 400 A	1 A to 400 A*	2 A to 800 A	0.1 A to 1000 A*	1 A to 3000 A	2 A to 2000 A	3 A to 3000 A
28II	1.8 A to 200 A	1 A to 200 A	1.8 A to 400 A	1.8 A to 400 A	1.8 A to 800 A	0.2 A to 1000 A*	2 A to 3000 A	2 A to 2000 A	3 A to 3000 A
77 IV		1 A to 200 A		1 A to 400 A*		0.1 A to 1000 A*	1 A to 3000 A	2 A to 2000 A	3 A to 3000 A
175/177/179	3 A to 200 A	1 A to 200 A	3 A to 400 A	1 A to 400 A*	3 A to 800 A	0.3 A to 1000 A*	3 A to 3000 A	2 A to 2000 A	3 A to 3000 A
1577/1587FC	3 A to 200 A	1 A to 200 A	3 A to 400 A	3 A to 400 A*	3 A to 400 A	0.3 A to 1000 A*	3 A to 3000 A	2 A to 2000 A	3 A to 3000 A
83V/88V	2 A to 200 A	1 A to 200 A	2 A to 400 A	1 A to 400 A*	2 A to 800 A	0.1 A to 1000 A*	1 A to 3000 A	2 A to 2000 A	3 A to 3000 A
87V	2 A to 200 A	1 A to 200 A	2 A to 400 A	2 A to 400 A*	2 A to 800 A	0.2 A to 1000 A*	2 A to 3000 A	2 A to 2000 A	3 A to 3000 A
287/289	1 A to 200 A	1 A to 200 A	1 A to 400 A	0.5 A to 400 A*	1 A to 800 A	0.2 A to 1000 A*	1 A to 3000 A	2 A to 2000 A	3 A to 3000 A
43B		1 A to 200 A		0.35 A to 400 A		0.1 A to 1000 A	1 A to 3000 A	2 A to 2000 A	3 A to 3000 A
434/435-II		1 A to 200 A		1.2 A to 400 A		0.3 A to 1000 A	1.2 A to 3000 A	i430Flex-TF-II	i430Flex-TF-II
120/B		1 A to 200 A		2.5 A to 400 A		0.25 A to 1000 A	2.5 A to 3000 A	2 A to 2000 A	3 A to 3000 A
190/-II		1 A to 200 A		1 A to 400 A		0.1 A to 1000 A	1 A to 3000 A	2 A to 2000 A	3 A to 3000 A
8808A	1 A to 200 A	1 A to 200 A	1 A to 400 A	0.5 A to 400 A*	1 A to 800 A	0.1 A to 1000 A*	1 A to 3000 A	2 A to 2000 A*	3 A to 3000 A*
8845A/8846A	1 A to 200 A	1 A to 200 A	1 A to 400 A	1 A to 400 A*	1 A to 800 A	0.2 A to 1000 A*	1 A to 3000 A	2 A to 2000 A*	3 A to 3000 A*
787B/789	50 A to 200 A	1 A to 200 A	50 A to 400 A	2 A to 400 A*	50 A to 440 A	0.2 A to 1000 A*	2 A to 3000 A	2 A to 2000 A	3 A to 3000 A

Current Clamps AC



i800 AC Current Clamp

This ac current clamp is designed to extend the current measuring capability of a digital multimeter to 800 A AC. It is compatible with a digital multimeter that accepts shrouded 4 mm banana plugs and has an ac milliamper range.

- Current range: 100 mA to 800 A RMS AC
- Frequency range: 30 Hz to 10 kHz (~3 dB)
- Safety rating: CAT III 600 V RMS



i400 AC Current Clamp

This high-safety current clamp for digital multimeters is a single range 400 A AC clamp that is designed to offer maximum utility in a very compact shape. The division ratio is 1000:1.

- Current range: 1 A to 400 A ac
- Frequency range: 5 kHz to 20 kHz (~3 dB)
- Safety rating: CAT IV 600 V, CAT III 1000 V



i400s AC Current Clamp

This high-safety compact current clamp with BNC output is a companion to a ScopeMeter or power quality meter to measure up to 400 A AC.

- Current range: 0.5 A to 400 A AC
- Frequency range: 5 Hz to 10 kHz (~3 dB)
- Optional PM9081/001 Dual Banana Plug Male to Female BNC Adapter is available for digital multimeters
- Safety rating: CAT IV 600 V, CAT III 1000 V



i200 AC Current Clamp

This small-sized single-range current clamp features safety-shrouded 4 mm banana plugs. It is compatible with most Digital Multimeters or other current measurement devices that accept shrouded 4 mm banana plugs and has an ac milliamper range.

- Current range: 1 A to 200 A AC
- Frequency range: 40 Hz to 40 kHz
- Safety rating: CAT III 600 V



i200s AC Current Clamp

This small-sized dual-range current clamp offers voltage output using a safety-insulated BNC connector. A dual banana-to-BNC adapter allows the clamp to be connected to meters with banana inputs.

- Current ranges: 0.1 A and 200 A AC switchable
- Frequency range: 40 Hz to 10 kHz
- Safety rating: CAT III 600 V



i2000 Flex AC Current Clamp

This current probe can be used to measure currents up to 2000 A when used in conjunction with multimeters, recorders, or data loggers. The flexible and lightweight measuring head allows quick and easy installation on thick and hard-to-reach areas.

- Current range: 20 A, 200 A, and 2000 A ac switchable
- Frequency range: 10 Hz to 20 kHz
- Safety rating: CAT III 600 V



i1000s AC Current Clamp

This large AC current clamp expands applications in industrial and power environments by connecting directly to an oscilloscope using a reinforced coaxial cable and an insulated BNC connector. It is ideal for measuring distorted current waveform RMS and harmonics.

- Current range: 0.1 A to 1000 A AC
- Frequency range: 10 Hz to +9100 kHz
- Accurate displays due to a passive filter that eliminates noise and ring on rapidly rising di/dt waveforms
- Safety rating: CAT III 600 V



i3000s AC Current Clamp

This AC current clamp is designed as a clamp-on unit for use with oscilloscopes. It also includes a dual banana to BNC adapter for use with multimeters with 4 mm banana input plugs.

- Current range: 1 A to 3000 A
- Frequency range: 10 Hz to 100 kHz
- Safety rating: CAT III 600 V



i3000s Flex-24 or -36 AC Current Clamp

i3000s Flex-24 is available in a convenient four-pack (i3000s Flex 4 Pack)

The flex clamp uses the Rogowski (air-cored coil) principle and can be used to measure three ranges of currents up to 3000 A when used in conjunction with oscilloscopes, recorders or data loggers. The flexible and lightweight measuring head allows quick and easy installation in hard-to-reach areas without batteries or an external power source. This clamp fits around large conductors and is available in 610 mm and 914 mm lengths.

- Current range: 30 A, 300 A, and 3000 A switchable
- Frequency range: 10 Hz to 50 kHz
- Safety rating: CAT III 600 V



i5s AC Current Clamp

Also available in a convenient three-pack (i5sPQ3). This compact 5 A AC clamp, specially configured to provide low-current accuracy while taking measurements on secondary current transformers, expands the use of the Fluke 430 Series Three-Phase Power Quality Analysers.

- Current range: 10 mA to 5 A
- Frequency range: 40 Hz to 5 kHz
- Safety rating: CAT III 600 V (for insulated conductors only)



i6000s Flex-24 or -36 AC Current Clamp

This ac current clamp flexible and lightweight measuring head allows quick and easy installation in hard-to-reach areas without batteries or an external power source. This clamp fits around large conductors and is available in both 610 mm and 914 mm lengths.

- Current range: 60 A, 600 A, and 6000 A switchable
- Frequency range: 10 Hz to 50 kHz (~3 dB)
- Safety rating: CAT III 600 V

Current Clamps: AC/DC

AC/DC Current Clamp Specifications

	80i-110s	i410	i1010	i30	i30s	i310s
DC range	0.1 A to 100 A	1 A to 400 A	1 A to 1000 A	30 mA to 30 A	30 mA to 30 A	0.1 A to 450 A
AC range	0.1 A to 70 A	1 A to 400 A	1 A to 600 A	30 mA to 20 A RMS	30 mA to 20 A RSM	0.1 A to 300 A
Accuracy	0.1 A to 10 A; AC to 1 kHz: $\pm 3\% + 50 \text{ mA}$; up to 100 A add 15%; up to 20 kHz add 12%	3.5% + 0.5 A for DC or AC (45 to 400 Hz)	2% + 0.5 A for DC or AC (45 to 400 Hz)	$\pm 1\%$ of reading, $\pm 2 \text{ mA}$	$\pm 1\%$ of reading, $\pm 2 \text{ mA}$	30 A range: $1\% + 50 \text{ mA}$ 300 A range: $1\% + 300 \text{ mA}$
Bandwidth (-3 dB)	100 kHz	3 kHz	10 kHz	dc to 20 kHz (-0.5 dB)	dc to 100 kHz (-0.5 dB)	dc to 20 kHz
Zero error adjustment	•	•	•	•	•	•
Maximum conductor diameter	11.8 mm	30 mm	30 mm	19 mm	19 mm	19 mm
Maximum conductor size	35 mm ²	1x 400 mm ² or 2x 240 mm ²	1x 400 mm ² or 2x 240 mm ²	120 mm ²	120 mm ²	120 mm ²
Output levels	10 mV/A, 100 mV/A	1 mV/A	1 mV/A	100 mV/A	100 mV/A	1 mV/A, 10 mV/A
Output cable	1.6 metre with BNC termination	1.2 metre with shrouded banana plugs	1.2 metre with shrouded banana plugs	1.5 metre with shrouded dual banana plugs	2 metres with BNC termination	2 metres with BNC termination and a BNC to safety shrouded banana adapter
Battery life	40 hours	60 hours	60 hours	30 hours	30 hours	30 hours
Warranty	One-year	One-year	One-year	One-year	One-year	One-year
Safety	CAT II 600 V; CAT III 300 V	CAT III 600 V	CAT III 600 V	CAT III 300 V	CAT III 300 V	CAT III 300 V

AC/DC Current Clamp Selection Guide

	80i-110s	i410	i1010	i30	i30s	i310s
114/115/116/117	0.1 A to 100 A DC/ 0.1 A to 70 A AC*	1.4 A to 400 A DC/ 6 A to 400 A AC	1.4 A to 1000 A DC/ 6 A to 600 A AC	30 mA to 30 A DC/ 60 mA to 20 A AC	30 mA to 30 A DC/ 60 mA to 20 A AC	0.1 A to 450 A DC/ 0.6 A to 300 A AC
233	0.1 A to 100 A DC/ 0.1 A to 70 A AC*	1.4 A to 400 A DC/ 6 A to 400 A AC	1.4 A to 1000 A DC/ 6 A to 600 A AC	30 mA to 30 A DC/ 60 mA to 20 A AC	30 mA to 30 A DC/ 60 mA to 20 A AC	0.1 A to 450 A DC/ 0.6 A to 300 A AC
27II	0.1 A to 100 A DC/ 0.1 A to 70 A AC*	1 A to 400 A DC/ 1 A to 400 A AC	1 A to 1000 A DC/ 1 A to 600 A AC	30 mA to 30 A DC/ 30 mA to 20 A AC	30 mA to 30 A DC/ 30 mA to 20 A AC	0.1 A to 450 A DC/ 0.1 A to 300 A AC
28II	0.1 A to 100 A DC/ 0.2 A to 70 A AC*	1 A to 400 A DC/ 6 A to 400 A AC	1 A to 1000 A DC/ 6 A to 600 A AC	30 mA to 30 A DC/ 60 mA to 20 A AC	30 mA to 30 A DC/ 60 mA to 20 A AC	0.1 A to 450 A DC/ 2 A to 300 A AC
77-IV	0.1 A to 100 A DC/ 0.1 A to 70 A AC*	1 A to 400 A DC/ 5 A to 400 A AC	1 A to 1000 A DC/ 5 A to 600 A AC	30 mA to 30 A DC/ 40 mA to 20 A AC	30 mA to 30 A DC/ 40 mA to 20 A AC	0.1 A to 450 A DC/ 0.4 A to 300 A AC
175/177/179	0.11 A to 100 A DC/ 0.3 A to 70 A AC*	1.6 A to 400 A DC/ 30 A to 400 A AC	1.6 A to 1000 A DC/ 30 A to 600 A AC	30 mA to 30 A DC/ 300 mA to 20 A AC	30 mA to 30 A DC/ 300 mA to 20 A AC	0.1 A to 450 A DC/ 3 A to 300 A AC
1577/1587 FC	0.1 A to 100 A DC/ 0.3 A to 70 A AC*	1.2 A to 400 A DC/ 30 A to 400 A AC	1.2 A to 1000 A DC/ 30 A to 600 A AC	30 mA to 30 A DC/ 300 mA to 20 A AC	30 mA to 30 A DC/ 300 mA to 20 A AC	0.1 A to 450 A DC/ 3 A to 300 A AC
83V/88V	0.1 A to 100 A DC/ 0.1 A to 70 A AC*	1 A to 400 A DC/ 1 A to 400 A AC	1 A to 1000 A DC/ 1 A to 600 A AC	30 mA to 30 A DC/ 30 mA to 20 A AC	30 mA to 30 A DC/ 30 mA to 20 A AC	0.1 A to 450 A DC/ 0.1 A to 300 A AC
87V	0.1 A to 100 A DC/ 0.2 A to 70 A AC*	1 A to 400 A DC/ 20 A to 400 A AC	1 A to 1000 A DC/ 20 A to 600 A AC	30 mA to 30 A DC/ 200 mA to 20 A AC	30 mA to 30 A DC/ 200 mA to 20 A AC	0.1 A to 450 A DC/ 2 A to 300 A AC
287/289	0.1 A to 100 A DC/ 0.1 A to 70 A AC*	1 A to 400 A DC/ 1 A to 400 A AC	1 A to 1000 A DC/ 1 A to 600 A AC	30 mA to 30 A DC/ 30 mA to 20 A AC	30 mA to 30 A DC/ 30 mA to 20 A AC	0.1 A to 450 A DC/ 0.1 A to 300 A AC
123/124	0.1 A to 100 A DC/ 0.25 A to 70 A AC	1 A to 400 A DC/ 25 A to 400 A AC**	1 A to 1000 A DC/ 25 A to 600 A AC**		30 mA to 30 A DC/ 250 mA to 20 A AC	0.1 A to 450 A DC/ 2.5 A to 300 A AC
190 Series II	0.1 A to 100 A DC/ 0.1 A to 70 A AC	1 A to 400 A DC/ 5 A to 400 A AC**	1 A to 1000 A DC/ 5 A to 600 A AC**	30 mA to 30 A DC/ 50 mA to 20 A AC**	30 mA to 30 A DC/ 50 mA to 20 A AC	0.1 A to 450 A DC/ 0.5 A to 300 A AC
8808A	0.1 A to 100 A DC/ 0.1 A to 70 A AC*	1 A to 400 A DC/ 2 A to 400 A AC	1 A to 1000 A DC/ 2 A to 600 A AC	30 mA to 30 A DC/ 30 mA to 20 A AC	30 mA to 30 A DC/ 30 mA to 20 A AC	0.1 A to 450 A DC/ 0.2 A to 300 A AC
8845A/8846A	0.1 A to 100 A DC/ 0.1 A to 70 A AC*	1 A to 400 A DC/ 1 A to 400 A AC	1 A to 1000 A DC/ 1 A to 600 A AC	30 mA to 30 A DC/ 30 mA to 20 A AC	30 mA to 30 A DC/ 30 mA to 20 A AC	0.1 A to 450 A DC/ 0.1 A to 300 A AC
705/707	0.1 A to 100 A DC, no AC*	4 A to 400 A DC, no AC	4 A to 1000 A DC, no AC	40 mA to 30 A DC, no AC	40 mA to 30 A DC, no AC	0.4 A to 450 A DC, no AC
715	0.1 A to 100 A DC, no AC*	4 A to 400 A DC, no AC	4 A to 1000 A DC, no AC	40 mA to 30 A DC, no AC	40 mA to 30 A DC, no AC	0.1 A to 450 A DC, no AC
787/789	0.1 A to 100 A DC/ 0.2 A to 70 A AC*	1 A to 400 A DC/ 20 A to 400 A AC	1 A to 1000 A DC/ 20 A to 600 A AC	30 mA to 30 A DC/ 200 mA to 20 A AC	3 mA to 30 A DC/ 200 mA to 20 A AC	0.1 A to 450 A DC/ 2 A to 300 A AC

* Requires PM9081 Adapter

** Requires PM9082/001 Adapter



i410 AC/DC Current Clamp

This battery-powered Hall-effect probe measures 1 A to 400 A with large-claw clamp that gives access to difficult-to-reach areas. It is compatible with most multimeters and other devices that measure AC and DC current and accepts shrouded 4 mm banana plugs.

- On/Off LED indicator
- AC and DC current range: 1 A to 400 A
- Frequency range: 3 kHz
- Safety rating: CAT III 600 V



i410-KIT AC/DC Current Clamp and Carry Case Kit

This special-value kit for electrical professionals adds AC and DC current measurement capabilities to a digital multimeter. A roomy carrying case holds a meter and the current clamp plus test leads, probes and manuals. Kit includes:

- i410 AC/DC Current Clamp
- C116 Soft Carrying Case



i1010 AC/DC Current Clamp

This clamp measures both ac and dc currents with a large-jaw, battery-powered Hall-effect probe that gives access to difficult-to-reach areas. It is compatible with most Fluke multimeters and any other devices that measure AC and DC current and accept shrouded 4 mm banana plugs.

- On/Off LED indicator
- AC current range: 1 A to 600 A AC
- DC current range: 0.5 A to 1000 A DC
- Frequency range: DC to 10 kHz
- Safety rating: CAT III 600 V RMS



i1010-KIT AC/DC Current Clamp and Carry Case Kit

This special-value kit for electrical professional adds AC and DC current measurement capabilities to a digital multimeter. A roomy carrying case holds a meter and the current clamp plus test leads, probes and manuals. Kit includes:

- i1010 AC/DC Current Clamp
- C116 Soft Carrying Case



i30 AC/DC Current Clamp

Based on Hall-effect technology, this battery-powered clamp measures both AC and DC current. It may be used in conjunction with multimeters, recorders and other suitable recording instruments for accurate non-intrusive current measurement.

- AC current range: 30 mA to 20 A RMS
- DC current range: 30 mA to 30 A
- Frequency range: DC to 20 kHz (-0.5 dB)
- Safety rating: CAT III 300 V



i30s AC/DC Current Clamp

Based on Hall effect technology, this battery-powered clamp measures both AC and DC current. It may be used with ScopeMeter and other suitable recording instruments for accurate non-intrusive current measurement.

- AC current range: 30 mA to 20 A RMS
- DC current range: 30 mA to 30 A
- Frequency range: DC to 100 kHz
- Safety rating: CAT III 300 V



i310s AC/DC Current Clamp

Based on Hall-effect technology, this battery-powered clamp measures both AC and DC current. This clamp is especially useful for current measurements on inverters, switching power supplies, industrial controllers, automotive diagnostics, and other applications requiring current measurements and/or waveform analysis.

- AC current range: 0.1 A to 300 A
- DC current range: 0.1 A to 300 A
- Frequency range: DC to 20 kHz
- Safety rating: CAT III 300 V



80i-110s AC/DC Current Clamp

This clamp is compatible with ScopeMeters, power harmonics analysers, multimeters, or other voltage measurement devices that has BNC input connectors.

- AC current range: 0.1 A to 70 A
- DC current range: 0.1 A to 100 A
- Frequency range: 1 Hz to 100 kHz
- Optional PM9081/001 Dual Banana Plug Male to Female BNC Adapter is available for digital multimeters
- Safety rating: CAT II 600 V

Did you know?

Does your current probe read zero current when you clamp it around a power cord?

That's because the power cord has both the hot and neutral current carrying wire in it. If both wires are in the jaws of the clamp meter, the fields cancel each other out, and the current clamp will read nothing. You need to put just one current-carrying conductor in the jaw of the current clamp. If you don't have access to the separate wires within the cord, use a line splitter tool to avoid breaking the circuit.

Cases, Holsters and Hangers

Fluke Tool	110/114/115/116/117	175/177/179	287/289	27 II/28 II	61	77 IV	83V/87V/88V	233	287/289	323/324/325	373/374/375/376/902	353/355	365	1503/1507/1577/1587	9040/9062	430/173X/174X Series	120B Series	190 Series	51/52/53/54 II	561	570 Series	705/707	712/714/715/717	718	724/725/726	753/754	787B	789	922	971	T5/T6/T+/T+Pro	T90/T110/T130/T150
Soft Cases																																
C23	•				•	•		•		•																						
C25	•	•		•		•	•	•		•				•	•				•				•				•	•	•	•		
CAMO- C25	•	•		•		•	•	•		•				•	•				•				•				•	•	•	•		
C33						•				•	•																•				•	
C35	•	•		•		•	•	•						•			•		•			•	•	•	•		•	•	•			
C43							•					•					•							•	•							
C50	•																		•													
C75																																
C90		•				•																							•			
C115	•	•		•		•	•	•						•			•		•			•	•	•	•		•	•				
C116	•	•	•			•	•	•						•			•		•			•	•	•	•		•	•				
C150						•				•	•																•				•	•
C280	•	•				•	•	•						•			•		•			•	•	•	•		•	•				
C345																																
C550																																
C781			•											•			•							•	•	•		•				
C789																	•						•		•	•	•	•				
Hard Cases																																
C101		•		•	•		•	•	•	•				•	•				•			•	•	•		•	•		•			•
CXT80				•			•	•																			•	•				
CXT170	•	•				•								•					•				•				•	•				
CXT280			•																								•	•				
CXT1000																																
C1600																																
Leather Cases																																
C510		•				•	•							•					•				•		•		•	•				
C520A							•																									•
H80M																											•		•			
Holster																																
H3										•	•																					
H5																																•
H15																															T+/T+Pro	•
Hangers																																
ToolPak	•	•				•	•	•	•						•				•				715		•			•				

Cases, Holsters and Hangers

Soft Cases



C12A Meter Case

Zippered case with inside pockets and belt loop for convenient carrying.

- Made of polyester
- Dimensions (HxWxD): 172 mm x 128 mm x 38 mm



C23 Soft Carrying Case

Zippered case featuring a belt loop for convenient carrying and an inner pocket to store test leads or small accessories.

- Made of durable vinyl
- Ideal companion case to: Fluke 61/65 IR Thermometers and Fluke 321/322 Clamp Meters
- Dimensions (HxWxD): 225 mm x 95 mm x 58 mm



C25 Large Soft Case for DMMs

Zippered carrying case with padding and inside pocket for holding accessories.

- Made of polyester
- Dimensions (HxWxD): 218 mm x 128 mm x 64 mm



CAMO-C25 Camouflage Carrying Case

Zippered carrying case with padding and inside pocket for holding accessories.

- High quality 1000D fabric
- Dimensions (HxWxD): 203 mm x 121 mm x 46 mm



C33 Soft Carrying Case

Zippered carrying case with durable vinyl exterior and belt loop. Inner pocket stores test leads and small accessories.

- Made of polyester
- Dimensions (HxWxD): 280 mm x 115 mm x 55 mm



C35 Soft Carrying Case

Case top opens laterally to allow use of test tool without removing it from the case and includes a Velcro® strap to secure the tool.

- Made of durable polyester 600D
- Dimensions (HxWxD): 220 mm x 140 mm x 65 mm



C43 Soft Carrying Case

Zippered carrying case includes inner front pocket with closure and two pockets to store test leads or small accessories.

- Made of durable polyester 600D
- Dimensions (HxWxD): 318 mm x 230 mm x 90 mm



C50 Meter Case

Zippered and padded case featuring an inside strap as well as a belt loop for convenient carrying. Also includes an inside pocket for holding accessories.

- Made of polyester
- Dimensions (HxWxD): 192 mm x 90 mm x 38 mm



C60 Accessory Case

The Fluke C60 is a soft case compatible with many Fluke test tools including: T6 and T5 Series, T+/T+PRO, 110 Series, 170 Series.

- Made of polyester



C75 Accessory Case

Zippered carrying case designed for carrying small accessories. Includes two inside pockets.

- Made of polyester
- Dimensions (HxWxD): 179 mm x 103 mm x 26 mm



C90 Soft Case for DMMs

Zippered carrying case featuring a belt loop. Also includes padding to protect the meter and an inside pocket for holding accessories.

- Made of polyester
- Dimensions (HxWxD): 205 mm x 90 mm x 72 mm



C115 Soft Carrying Case

Includes two padded pockets for protection of two test tools, and a pouch for test leads and other accessories.

- Made of durable polyester 600D
- Dimensions (HxWxD): 240 mm x 205 mm x 75 mm



C116 Soft Carrying Case

Provides adjustable padded space with a moveable Velcro® divider.

- Made of durable polyester 600D
- Dimensions (HxWxD): 240 mm x 230 mm x 65 mm



C150 Soft Carrying Case

Zippered carrying case with inner pocket for storing test leads and small accessories.

- High quality 1000D fabric
- Dimensions (HxWxD): 298 mm x 114 mm x 56 mm



C280 Soft Case

Designed especially for larger format test tools. Includes detachable, extendable shoulder strap and an inner front pocket with closure and dual pouch pockets for test tools and accessories.

- Made of durable polyester 600D
- Dimensions (HxWxD): 230 mm x 185 mm x 65 mm



C345 Soft Case

The perfect case for carrying a wide range of Fluke handheld test tools and accessories. Includes an elastic accessory strap and mesh accessory retainer as well as an outer pouch, outer zipper pocket and two slash pockets for convenient accessory storage.

- Made of durable polyester 600D
- Dimensions (HxWxD):
360 mm x 200 mm x 240 mm



C550 Tool Bag

Rugged, weather-resistant tool bag, features a large storage compartment with 25 pockets as well as steel-reinforced frame.

- Dimensions (HxWxD):
333 mm x 513 mm x 231 mm



C570 Soft Case

Designed specifically for the Fluke 560 and 570 Series Infrared Thermometers

- Made of polyester
- Dimensions (HxWxD):
240 mm x 89 mm to 170 mm x 56 mm



C195 Soft Carry Case

- Zippered with multiple storage compartments & shoulder strap
- Dimensions (HxWxD):
513 mm x 331 mm x 231 mm



C125/C781 Meter Case

Zippered case, designed for carrying a meter as well as a detachable external pouch for holding test leads.

- Made of durable polyester 600D
- Dimensions (HxWxD):
269 mm x 141 mm x 90 mm



C789 Meter and Accessory Case

Large carrying case with three compartments, removable handle, and shoulder strap. Holds a meter and multiple accessories.

- Made of durable polyester 600D
- Dimensions (HxWxD):
308 mm x 256 mm x 77 mm



C799 Soft Field Case

For use with Fluke 750 Series Documenting Process Calibrators

- Allows instrument to be operated inside case with clear front protecting keyboard
- Dimensions (HxWxD):
305 mm x 229 mm x 165 mm

Hard Cases



C101 Hard Case

Tough polypropylene case with configurable diced foam interior to store and protect tools and accessories.

- Exterior dimensions (HxWxD):
305 mm x 360 mm x 105 mm



C290 Hard Shell Protective Carry Case

For use with Fluke 190 Series II SopeMeters

- Dimensions (HxWxD):
1245 mm x 939 mm x 368 mm



C1600 Gear Box

A rugged, molded plastic case with a deep interior and lift-out tray.

- Includes five hook and loop straps to wrap cords and test leads
- Dimensions (HxWxD):
260 mm x 390 mm x 200 mm



CXT Extreme Case Series

- CXT1000: for multiple meters, accessories and other test tools (Dimensions (HxWxD): 343 mm x 465 mm x 178 mm)
- CXT1000 features a diced foam interior for custom storage configuration
- Unbreakable, watertight, airtight, dust proof, chemical resistant and corrosion proof
- Includes an automatic purge valve for quick equalisation after changes in atmospheric pressure
- CXT80: for use with 87V, 80 Series, 187/189, 27 II/28 II series
- CXT170: for use with 170 Series, 114/115/116/117, 77 III, and 77 IV
- CXT280: for use with 287 or 289
- Dimensions (HxWxD):
279 mm x 318 mm x 127 mm

Leather Cases



C520A Leather Tester Case

Rugged leather case designed to hold Fluke electrical testers. It features a large belt loop and a top flap to secure the tester. Made of top-grain cowhide with heavy-duty stitching and reinforced rivets.

- Dimensions (HxWxD):
256 mm x 154 mm x 106 mm



C510 Leather Meter Case

Rugged leather case features a large belt loop and a top flap to secure the tool.

Made of top-grain cowhide with heavy-duty stitching and reinforced rivets.

- Dimensions (HxWxD):
287 mm x 179 mm x 106 mm

holsters, Hangers and Light Kits

Holsters



H3 Clamp Meter Holster

Rugged fabric holster designed to hold Fluke 330 Series Clamp Meters. It features a built-in belt loop and a handy pocket with snap for test lead storage.

- Dimensions (HxWxD):
231 mm x 90 mm x 64 mm



H5 Electrical Tester Holster

Rugged fabric holster designed to hold Fluke T3 and T5 Electrical Testers. It features a built-in belt loop and flap for test lead storage.

- Dimensions (HxWxD):
192 mm x 90 mm x 38 mm



HT6 Holster

For use with models T6-600 and T6-1000

- Flap for test lead storage and built-in belt loop



H15 Electrical Tester Holster

Rugged fabric holster designed to hold Fluke T90, T110, T130 and T150 Two-Pole Testers.

- High quality 1000D fabric
- Dimensions (HxWxD):
279 mm x 92 mm x 51 mm



H80M Protective Holster with Magnetic Hanging Strap

Convenient snap-on holster with a magnetic hanging system enables hands-free work while protecting digital multimeters or calibration tools.

- Includes a hanging magnet, general purpose hanger, and hook/loop straps
- Dimensions (HxWxD):
190 mm x 95 mm x 43 mm

Hangers



TPAK ToolPak™ Magnetic Meter Hanger

Hang your meter in a variety of ways for convenient hands-free operation.

Attaches to back of many Fluke meters, including 110, 170, 180, 280 Series, 83V and 87V DMMs, 724, 725 and 789 Process Calibrators, 70 Series III DMMs, 1503, 1507, 1577 and 1587 FC Insulation Multimeters and 50 Series II Digital Thermometers.

Lights



L200 Probe Light

Small, rugged light that easily attaches to any Fluke test probe, illuminates the contact area and frees hands for work.

- Bright white LED with 120 hours of battery life
- Two 3 V watch batteries included



L205 Mini Hat Light

Rugged, high-intensity Xenon work light with pre-focused optical-quality reflector attaches to a baseball cap to allow hands-free work.

- Includes waterproof ABS case that won't crack or chip
- Two AAA batteries included



L206 Deluxe LED Hat Light

Attach this water-resistant light to a hard hat, a baseball hat, or even a panel door for hands-free bright light where needed. Includes a 360° rotating clip, special hard-hat attachment, and neck lanyard. (Hat not included).

- Three LEDs with 40-hour battery life
- Three AAA battery included



L207 High Intensity Light with Collector's Cap

Powerful, lightweight, mini-Xenon light illuminates work area to free hands for work. Comes with Limited Edition Fluke collector's cap that adjusts for all-day comfort. Waterproof, rugged light attaches to bill of baseball cap.

- Xenon high intensity work light
- Two AAA batteries included



L210 Probe Light Kit

Two probe extenders 20 cm fit modular test probes and keep hands away from live circuits. Ultra-bright white LED provides 120 hours of battery life.

Kit includes:

- L200 Probe Light
- SureGrip™ test probe extenders
- Two 3 V watch batteries included
- Probe extenders safety rating: CAT III 1000 V, 10 A



L211 Probe Light Kit

This special-value combo pairs the new L200 Probe Light with one of the most popular test leads by Fluke and a handy carrying case. Probe light attaches to any Fluke test probe to free both hands for work. Kit includes:

- L200 Probe Light
- TL71 Premium Test Lead Set
- C75 Accessory Case



L215 SureGrip™ Kit with Probe Light and Probe Extender

Kit includes:

- L200 Probe Light
- SureGrip™ Test Probe Extenders, 20 cm
- TP220 SureGrip™ Industrial Test Probes
- TL224 SureGrip™ Insulated Test Leads
- Foldable pouch with six pockets and hook & loop closure
- Safety rating:
 - TP220: CAT II 1000 V, 10 A. (CAT III 1000 V, CAT IV 600 V with protective cap)
 - TL224: CAT III 1000 V, CAT IV 600 V, 10 A
 - Probe extenders: CAT III 1000 V, 10 A

High Frequency



85RF High Frequency Probe

Converts a DC voltmeter with an input impedance of 10 megohms into a high frequency (100 kHz to 500 MHz) RF voltmeter.

- Voltage range: 0.25 V to 3 V AC RMS
- Maximum input: 30 V RMS, 200 V DC
- AC to DC ratio: 1:1
- Ratio accuracy at 25 MHz and loaded with 10 megohms

Fiber Optics



FOM Fiber Optic Meter

Allows testing and maintenance of fiber optic cables without buying a new meter. It plugs directly into any digital multimeter with an mV DC function and a 10 megohm input impedance to quickly and accurately verify fiber optic cable system loss.

- Wave lengths: 1550, 1300, 850 & nm
- Light sources sold separately



FOS-850 and FOS-850/1300 Fiber Optic Light Source

Both of these fiber optics accessories are designed to offer a variety of light sources for testing different cable lengths.

- Wave lengths:
 - FOS-850: 850 nm;
 - FOS-850/1300: 850 and 1300 nm

Miscellaneous



PV350 Pressure Vacuum Module

Single unit allows digital multimeters to make both pressure and vacuum measurements.

- Transducer sealed in 316 stainless steel compatible with variety of liquids and gases
- Vacuum measurement: to 76 cm Hg
- Pressure measurement: to 3447 kPa



IR189USB USB Cable Adapter

Included with FVFS2 and FVF-Basic software.

- Small adapter to connect the cable to the 189, 287, 289, 1653B or the 1550C is included



MC6 and MC50, MeterCleaner™ Wipes, 6-Pack and 50-Pack

Pre-moistened, industrial-strength wipes remove dirt, oil, and grease from meters. Individually packaged, each wipe easily cleans one meter and is safe on rubber and plastic.

- Non-toxic and safe for the environment



SV225 Stray Voltage Adapter

Stray voltage can appear in electrical installations, due to the capacity between wires. This may result in erroneous readings on high impedance meters. The SV225 solves this without compromising safety.

- On energised wires, the meter will indicate the real voltage
- On non-energised circuits the meter will read close to zero (even if there are stray voltages)
- Can be used on all meters with standard input spacing
- Safety rating: CAT III 1000 V, CAT IV 600 V

Note: This adapter should not be used on low-voltage control circuits or where the circuit under test could be adversely-affected by this low impedance load. The adapter is designed to handle continuously-applied power system voltages without damage. However, this adapter can be used intermittently to determine whether a circuit is energised.

Fluke Connect®



ir3000 FC Connector for Fluke Connect®

- Get all the benefits of the Fluke Connect app, and be on the same page, even while in different places
- Wirelessly share measurements with your team—anywhere, anytime
- Connect the Fluke 289/287 Multimeters, Fluke 1550C/1555 Insulation Testers and Fluke 789 ProcessMeter with the ir3000 FC.



PC3000 Wireless PC Adapter

- Fluke pc3000 FC Adapter and software
- Must be connected to the USB port in order to enable communication between FC modules and software.
- SW3000 supports up to two pc3000 FC Adapters

Automotive Accessories



BP880 BNC to Female Double Stacking Banana Plug

Converts a BNC scope lead to a dual banana plug for connection to a digital multimeter to provide hands-free testing in controlled voltage environments.

- Voltage range: up to 500 V AC RMS
- 4 mm banana plug is nickel-plated, beryllium copper for low contact resistance



BP881 BNC to Male Double Stacking Banana

Easily connects a digital multimeter to a BNC patch cord to provide hands-free testing in controlled voltage environments. This adapter connects accessories that have a male BNC output.

- Voltage range: up to 500 V ac rms
- 4 mm banana plug is nickel-plated, beryllium copper for low contact resistance



TL28A Automotive Test Lead Set

Silicone-insulated test leads (red, black) with large, solid copper alligator clips with 12.7 mm opening and serrated teeth.

- 1.5 m test leads
- Safety rating: 30 V, 10 A



TL82 Automotive Pin and Socket Adapter Set

This collection of male and female adapters provides firm connection to pin-and-socket connectors. Rated to 60 V dc. Set includes:

- Two retractable shrouded test leads (red, black) 1.2 m
- Eight pin-and-socket adapters with flexible tips (red, black):
 - Size 22 contact 0.76 mm, rated 5 A
 - Size 20 contact 1.02 mm, rated 7.5 A
 - Size 16 contact 1.60 mm, rated 13 A
 - Size 12 contact 2.36 mm, rated 23 A



TLK281 SureGrip™ Automotive Test Lead Kit

Sharp stainless steel probes can be used to contact the wire conductor or pinpoint tests on a circuit or relay while the large-jaw alligator clips ensure a good ground on the engine or connection to battery terminals. Rated to 60 V dc. Kit includes:

- TP81 Insulation Piercing Clip Set
- TL224 SureGrip™ Insulated Test Leads
- TP220 SureGrip™ Industrial Test Probes
- AC220 SureGrip™ Alligator Clips
- AC285 SureGrip™ Alligator Clips
- Soft case



TLK282 SureGrip™ Deluxe Automotive Test Lead Kit

This kit includes everything in the TLK281 Kit plus a few extras. The back probe pins slide past weather-pack connectors on fuel injectors, TPS, and MAP sensors. A hook probe with plunger actuation allows quick connection to pins or exposed conductors. Rated to 60 V dc. Kit includes:

- TP81 Insulation Piercing Clip Set
- TP40 Automotive Back Probe Pins (five)
- TL224 SureGrip™ Insulated Test Leads
- TP220 SureGrip™ Industrial Test Probes
- AC220 SureGrip™ Alligator Clips
- AC285 SureGrip™ Alligator Clips
- AC280 SureGrip™ Hook Clips
- Soft case



TP40 Automotive Back Probe Pins

Flexible and formable 31-75 mm pins provide an easy connection past weather-pack seals to connector conductors. These five pins are a must-have for fuel injectors, TPS, and MAP sensors, as well as for any under-hood or under-vehicle connector with weather-pack seals.

- 4 mm banana jack accepts digital multimeter and banana jack leads
- Easily connects to modular leads
- Rated to 60 V dc



TP81/TP82 Insulation Piercing Clip Set

Two stainless steel probes (red, black) pierce insulation on 14, 16 and 18 gauge wire. Needle depth can be controlled to minimise insulation damage. Essential for use under hood or under dash. Can be used on fuel injectors or sensors while providing complete insulation to grounding. Probe connects to a banana jack that accepts all digital multimeter and banana jack leads (such as the TL224 SureGrip™ Insulated Test Leads).

- TP81 has non-rotating 4 mm banana jack to prevent leads from tangling
- Rated to 60 V dc
- TP82 is for use with test leads with 2 mm probes



TP88 Rigid Back Probe Pins

Better than a test probe alone, these rigid back probe pins easily pass between a weather-pack seal and wire. A sharp point ensures good contact to the electrical connector, and insulation protects the pin from shorting to other wires. Rated to 60 V dc

- Slides onto 2 mm test probes
- Probe length: 51 mm



RPM80 Inductive Pick-Up/External Trigger

- Provides RPM measurement capability when clipped on spark plug wire
- For use with Fluke 88 Series and 78 Series Digital Multimeters.

IR Camera Accessories

Battery and Charger Compatibility

Prevent the unexpected loss of power with our rugged and rechargeable battery packs and keep your Fluke infrared camera charged while you're on the road with our car chargers.

Model Number	Ti27/ TiR27 / Ti29/ TiR29/ Ti32/ TiR32	Ti29/ TiR29	Ti32/ TiR32	Ti90/ Ti95	TiS20+/ TiS20+ MAX	TiS55+/ TiS60+/ TiS75+	Ti100/ Ti105/ Ti110/ TiR105/ TiR110 Ti125/ TiR125	Ti480 PRO	TiX580	TiX620/ TiX640/ TiX660/ TiX1000
TI-SBC3B Battery Charging Base	•	•	•	•	•	•	•	•	•	
TI-SBP3 Rechargeable Lithium-ion Smart Battery Pack	•	•	•	•	•	•	•	•		
TI-SBP4 Rechargeable Lithium-ion Smart Battery Pack									•	
TI-CAR CHARGER	•	•	•	•	•	•	•	•	•	
XBattery										•
FLK-XCharger										•
TI-BLUETOOTH					•	•			•	
XPower Plug										•
XEthernet 5m										•
XHDMI Cable										•

Sun Visor Compatibility

Instantly reduce LCD screen glare and reflections in bright sunlight or other areas where ambient lighting conditions are bright with our durable, heavy-duty plastic visor. It can be used inside or outside, and easily clips onto to your Fluke infrared camera without the need for any additional hardware.

Model Number	Ti10/ Ti25/ TiR/ TiR1/ Ti20	Ti27/ TiR27	Ti29/ TiR29	Ti32/TiR32	Ti90/Ti95	Ti100/ Ti105/ Ti110/ TiR105/ TiR110	Ti125/ TiR125	Ti480 PRO
TI-VISOR	•	•	•	•				
TI-VISOR2					•	•	•	
TI-VISOR3								•

Tripod Base Compatibility

Lightweight, one-piece mounting accessory quickly and easily attaches to your Fluke Infrared Camera and allows you to mount to a standard tripod or monopod for those applications or situations that require a more stable or semi-fixed platform.

Model Number	64 MAX	Ti27/ TiR27	Ti29/ TiR29	Ti32/ TiR32	Ti90/ Ti95	TiS20+/ TiS20+ MAX	TiS55+/ TiS60+/ TiS75+	Ti100/ Ti105/ Ti110/ TiR105/ TiR110	Ti125/ TiR125	Ti480 PRO
TI-TRIPOD	•	•	•	•						
TI-TRIPOD2					•			•	•	
TI-TRIPOD3						•	•			•

Power Quality Accessories

Fluke Model Number	i3000 Flex/4PK	i400s	i430-FLEXI-TF-II	i5sPQ3	3210-PR -TF-II
Description	4 ... phase 3000A Flexible current clamp set	Single phase 400A current clamp (4 required)	4 ... phase 3000A Flexible current clamp set	3 ... phase 5A Current clamp set	1000A Single phase flexible current clamp
Fluke 1750 Fluke 43X -II	•	•	•	•	•
Nominal current range(s)	30 A 300 A 3000 A	40 A 400 A	3000 A	5 A	
Cont. AC current range	1 A ... 30 A 1 A ... 300 A 1 A ... 2400 M	0.5 A ... 40 A 5 A ... 400 A	30 A ... 3000 A	0.01 A ... 6 A	0.5 A ... 1000 A
Highest current	4000 A	1000 A	100 kA	70 A	1000 A
Lowest measurable current	1 A	0.5 A	30 A	10 mA	0.5 A
Basic accuracy (48 ... 65 Hz) ¹	2% + 2 A	2% + 0.15 A	1%	1%	± 1% of reading
Usable frequency	10 Hz ... 100 kHz	45 Hz ... 3 kHz	10 Hz ... 7 kHz	40 Hz ... 5 kHz	40 Hz ... 5 kHz
Flex head length		Clamp opening: 32mm	61 cm	Clamp opening: 15mm	61cm
Output level(s)	10 mV/A 1 mV/A 0.1 mV/A	10 mV/A 1 mV/A	0.085 mV/A @50 Hz	400 mV/A	2 mV/A
Output cable (m)	2,1	2,5	2,5	2,5	3
Safety rating	CAT III 600 V	CAT III 1000 V CAT IV 600 V	CAT III 1000 V CAT IV 600 V	CAT III 600 V	CAT III 1000 V CAT IV 600 V

¹ Basic accuracy: % reading plus floorspec. n/a = not applicable

Fluke Model Number	i17XX-Flex 1500A 12 IN	i17XX-Flex 3000A 24 IN	i17XX-Flex 6000A 36 IN	i17XX i40s-EL Clamp-On Current Transformer	i17XX-Flex 1500A 12 IN	i17XX-Flex 3000A 24 IN	i17XX-Flex 6000A 36 IN
Description	1500 A Single phase flexible current clamp IP 50	3000 A Single phase flexible current clamp IP 50	6000 A Single phase flexible current clamp IP 50	4/40A Current clamp (3 required)	1500 A Single phase flexible current clamp IP 65	3000 A Single phase flexible current clamp IP 65	6000 A Single phase flexible current clamp IP 65
Fluke 1742/46/48 Fluke 1732/34/36/38	•	•	•	•	•	•	•
Nominal current range(s)	1A to 150A, 10A to 1500A	3A to 300A, 30A to 3000A	6A to 600A, 60A to 6000A	40mA to 4A, 0.4A to 40A	1A to 150A, 10A to 1500A	3A to 300A, 30A to 3000A	6A to 600A, 60A to 6000A
Cont. AC current range	1 A ... 150 A 10 A to 1500 A	1 A ... 300 A 10 A ... 3000A	1 A ... 600 A 10 A ... 6000 A	1 A ... 150 A 10 A ... 1500 A	1 A ... 150 A 10 A to 1500 A	1 A ... 300 A 10 A ... 3000A	1 A ... 600 A 10 A ... 6000 A
Highest current	1500 A	3000 A	6000 A	200 A	1500 A	3000 A	6000 A
Lowest measurable current	1 A	3 A	6 A	0.04 A	1 A	3 A	6 A
Basic accuracy (48 ... 65 Hz) ¹	0,70%	0,70%	0,70%	0,50%	0,70%	0,70%	0,70%
Usable frequency	40 Hz ... 5 kHz	40 Hz ... 5 kHz	40Hz ... 5kHz	40Hz ... 5kHz	40 Hz ... 5 kHz	40 Hz ... 5 kHz	40Hz ... 5kHz
Flex head length	30.5cm	61cm	122cm	n/a	30.5cm	61cm	122cm
Output level(s)	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Output cable (m)	2	2	2	2	2	2	2
Safety rating	CAT III 1000 V CAT IV 600 V	CAT III 1000 V CAT IV 600 V	CAT III 1000 V CAT IV 600 V	CAT III 1000 V CAT IV 600 V	CAT III 1000 V CAT IV 600 V	CAT III 1000 V CAT IV 600 V	CAT III 1000 V CAT IV 600 V

¹ Basic accuracy: % reading plus floorspec. n/a = not applicable

Fluke 430 Series-II



i430-FLEXI-TF-II/4PK 6000 A Thin Flexible Current Probe

6000 A current range

- 61 cm (24 in) length
- Available in single and 4 pack



i400s AC Current Clamp

400 A AC current range

- 32 mm (1.25 in) jaw size
- Optional PM9081/001 Dual Banana Plug Male to Female BNC Adapter is available for digital multimeters



I5SPQ3 5A Current Clamp, 3 pack

5A AC Current Clamp for 430 Series-II

- 15 mm (0.6 in) jaw size



TLS430 Test Lead and Alligator Clip Set

- Test lead replacement set for the 430 Series-II
- Set includes five test leads and five alligator clips (4 black, 1 green)



WC100 Colour Coding Clips and Regional Decals

Cable markers for 3-phase +N leads



GPS430-II GPS Sync Module

IEC61000-4-30 Class A Time Sync Module for 430 Series-II



C1740 SOFT CASE

Soft Case with compartments and shoulder strap for 430 Series II



C437-II Hard Case

Black waterproof case with wheels



BP290 Battery

430 Series-II Replacement Battery Pack



BP291 Battery

430 Series-II Double Capacity Replacement Battery Pack



BC430/820 Battery Charger

Battery Charger for 430 Series II

Fluke 1730 & 1740 Series



117XX-FLEX iFlex® Current Clamps

- iFlex probes connect directly to the 173X Energy or Power Logger, displaying current measurements without error prone scaling factors
- Fluke 17XX iFlex cables are available in 12, 24, and 36 inch models
- Available to order in single, 3 or 4 pack



117XX-FLEX IP65 Current Probes

IP65 rating is obtained when connected to the 1740 Series only.

- 1.5KA 60 cm (24 in) length
- 3KA 60 cm (24 in) length
- 6KA 120 cm (48 in) length
- Available in single, 3 and 4 packs



3PHVL Voltage Cable Assembly

Voltage Measurement Lead Set for 1730 & 1740

- Flat, four wire cable



17XX i40s-EL Clamp-on Current Transformers

- Suitable for making measurements up to 40A, and also measures accurately on 1A and 5A secondary current transformers
- The i40s-EL jaw is capable of being clamped on current conductors up to 15mm in diameter



IP65 VOLT CONN

IP65 rated Voltage Connector for wet measurement environments.

- Six pole connector with six leads for connection of voltage and instrument power.



MP1-Magnet Probe

Magnetic probe tips for voltage test leads with 4 mm banana connectors.



MP1-3R/1B Magnetic Voltage Probes

3 Red/1 Black Magnet Probes for 4mm Banana



117XX-FLEX5M-EXT

Fluke 17XX iFlexi Extension Cable 5m



FLUKE-117XX-TL 0.18M / 0.1M / 1.5M Test Lead Set

1000V CAT III, Non-Stack Conn; Available in: 0.18M / 0.1M / 1.5M; Red/Blk



FLUKE-173X-HANGER STRAP

Two piece hanging kit for the Fluke 173X Energy or Power Logger.



FLUKE-174X-HANGER

Hanger Kit includes strap and magnetic hanger used with 1740 Series.

Power Quality Accessories



C17XX Soft Case

Soft Case for 173X/174X Series



174X GPS-REC

GPS Receiver Antenna



17XX CABLE MARKERS

Cable Marker Kit for 173X and 174X Series



BP1730-BATTERY

173X & 174X Series Replacement Battery Pack



1730-CABLE Auxilliary Input Cable

- Input -10 V to +10 V DC
- Binder to BNC connecting cable



17XX AUX

Auxiliary input adapter for 1740 series



Unit Upgrade Kits

Upgrades your select 17XX Fluke unit to the specified higher end unit and includes accessories that would normally come with the upgraded model.

- 1732 to 1734 Upgrade Kit
- 1736 to 1738 Upgrade Kit
- 1742 to 1746 Upgrade Kit
- 1742 to 1748 Upgrade Kit
- 1746 to 1748 Upgrade Kit

Fluke 1750/ET



3210-PR-TF-II 1000A Thin FLEXI 60 CM (24in)

1000A AC Current Range

- 60 cm length, 20 cm diameter



3310-PR-TF-II 1000A Thin FLEXI 60 CM (24in)

5000A AC Current Range

- 60 cm length, 20 cm diameter



3312-PR-TF-II 1000A Thin FLEXI 120 CM (48in)

5000A AC Current Range

- 120 cm length, 38 cm diameter



ISS-PR 1750, 5A Current Clamp

5 A AC current range

- 15 mm jaw size



I40S-PR 1750, 40A CURRENT CLAMP

40 A AC Current Range

- 15 mm (0.6 in) jaw size



3140R AC CURRENT CLAMP

4000A AC Current Range



ST1760 X57320810100, Standard Ethernet Cable

Standard RJ45 connection plugs



CS1750/1760 SOFT CASE

Soft Carrying case for 1750/1760



1750/CASE Transit Case

Rugged-hard water tight transit case with rollers



TPS FLEX 18-TF-II Thin Flexible Current Probe

100 A/500 A AC current range

- 45 cm length, 15 cm diameter

TPS FLEX 24-TF-II Thin Flexible Current Probe

200 A/1000 A AC current range

- 61 cm length, 20 cm diameter

TPS FLEX 36-TF-II Thin Flexible Current Probe

3000 A/6000 A AC current range

- 91 cm length, 29 cm diameter



TPS Clamp Clip-on Current Transformer

Three 15mm (0.6 in) options available

- TPS Clamp 10 A/1 A Clip-on Current Transformer – 1A/10A AC
- TPS Clamp 200 A/20 A Clip-on Current Transformer – 20A/200A AC
- TPS Clamp 50 A/5 A Clip-on Current Transformer – 5A/50A AC



TPS VoltProbes

Five versions of Voltage Probes for the 1760

- TPS Voltprobe 1 KV
- TPS Voltprobe 10 V
- TPS Voltprobe 100 V
- TPS Voltprobe 400 V
- TPS Voltprobe 600 V

Fluke 6000 NORMA



80I-2010S Current Clamp

Measure up to 2,000A AC and/or DC on large conductors with 0.8% accuracy

- 81.5 mm jaw opening

80I-2010S/3PK Current Clamp

3 pack. Measure up to 2,000A AC and/or DC on large conductors with 0.8% accuracy.

Portable Oscilloscopes Accessories

Compatibility Chart	120B Series	190 Series	190 Series II/III
voltage probes			
VPS41 Voltage Probe Set 10:1, 40MHz, B1 (Black)	•		
VPS410-II-X Ind. Voltage Probe 10:1, 500MHz, X = B (Blue), G (Grey), R (Red) or V (Green)			•
VPS210-X Voltage Probes, 200MHz, R (Red), G (Grey)		•	
STL120-IV Shielded Test Lead Set 1:1, B (Blue) & R (Red)	•		
probe accessories			
AS400 Probe Accessory Extension Set 1			•
RS400 Probe Accessory Replacement Set for VPS400 Series Voltage Probes		•	•
RS500 Probe Accessory Replacement Set for VPS510 Series Voltage Probes		•	•
AC current clamps			
i3000s AC Current Clamp	•*	•	•
i3000s Flex-24/36 AC Current Clamp, 610 mm (24 in. and 36 in.)	•*	•	•
i1000s AC Current Probe	•*	•	•
i400s AC Current Clamp	•*	•	•
i200s AC Current Clamp	•*	•	•
i5s AC Current Clamp	•*	•	•
AC/DC Current Clamps			
80i-110s AC/DC Current Clamp	•*	•	•
i1010 AC/DC Current Clamp	•		
i410 AC/DC Current Clamp	•		
i30s AC/DC Current Clamp	•*	•	•
Automotive			
SCC128 Automotive Troubleshooting Kit for 120 Series	•		
SCC198 Automotive Troubleshooting Kit for 190 Series		•	
SCC298 Automotive Troubleshooting Kit for Fluke 190 Series II			•
Test Lead Accessories			
TL175 TwistGuard™ Test Leads	•	•	
Cables and Adapters			
PM9091 50 Ohm Coaxial BNC Cable Set (3 x 1.5m)		•	•
PM9092 50 Ohm Coaxial BNC Cable Set (3 x 0.5 m),		•	•
PM9093 Male BNC to Dual Female BNC Adapter, 600 V Cat III		•	•
PM9081 Dual Banana Plug (Male) to Female BNC Adapter, 600 V Cat III		•	•
PM9082 Dual Banana Jack (Female) to Male BNC Adapter, 600 V Cat III		•	•
BB120-II Shielded Banana to Female BNC Adapter*	•		
TRM50 Coaxial Feed-through BNC Male to BNC Female Cable Terminator		•	•
Miscellaneous			
CS20MA Current Shunt		•	
EBC290 External Battery Charger for BP290 and BP291	•		•
BC190/830 Mains Adapter/Battery Charger		•	•
BC430/820 Mains Adapter/Battery Charger	•		
BP190 Rechargeable NiMH Battery Pack		•	•
BP290 Li-ion Battery Pack, 2400 mAh	•		•
BP291 Li-ion Battery Pack, 4800 mAh			•
OC4USB USB Interface Cable	•	•	•
BHT190 Break-Out Adapters for Industrial Bus Connections	125B only	•	
HH290 Hanging Hook for ScopeMeter 190-Series II			•

* "s" version clamps require BB120-IV Adapter when used with the Fluke 120B Series



VPS421-X High Working Voltage Ruggedised Probe

- Set includes: VPS421-X 100:1, 150 MHz
- X = Red, Blue, Grey or Green
- Hook clip for Probe tip (Black)
- Large jaw probe clip (Black)
- Reference lead with 4 mm Banana plug
- Large jaw alligator clip for 4 mm banana plug (Black)



AS400 Probe Accessory Extension Set

For VPS400 Series Probes

- CAT III 1000 V/CAT IV 600 V
- Reference lead w/ 4 mm plug (Blk) 60cm
- Reference lead with hook clip (Blk) 22cm
- Large jaw probe clip (black)
- CAT II 1000 V
- 2 mm test probe for probe tip (1x, black)
- 4 mm test probe for probe tip (1x, black)



RS400 Probe Replacement Set

For VPS400 Series Probes and VPS210 Series Probes

- CAT III 1000 V/CAT IV 600 V
- 1 x Probe hook clip (black)
- Ground lead w/ mini alligator clip
- 2 x Insulation sleeve (black)
- CAT II 30V
- 2 x Ground spring (black)



RS500 Probe Replacement Set

For VPS510 Series Probes

- CAT II 300 V
- 1x hook clip (black)
- 1x ground lead with mini alligator clip
- 2 x insulation sleeves for probe's ground contact (black)
- 1 x BNC to probe tip adapter (black)
- CAT II 30 V
- 2 x ground browsers (black)
- 1 x insulated mini screwdriver, for probe adjustment purposes



TP920 Test Probe Adapter Set

Suited for STL120 Test Leads (STL120-III, not compatible), TL71, TL75 & TL76 Test Leads

- Rated for 3 A max



PM9091 Set of 3x Coaxial Cables with BNC connectors

- Length: 1.5m each
- Impedance: 50 ohm
- Colour: 2 x Red, 2 x Black, 2 x Grey
- Max signal voltage: 300 V rms
- Max voltage to ground: 600 V rms CAT III per IEC/EN61010-031



PM9092 Set of Coaxial Cables with BNC connectors

- Length: 0.5 m each
- Impedance: 50 ohm
- Colour: 1 x red, 1 x black, 1 x grey
- Max signal voltage: 300 V rms
- Max voltage to ground: 600 V rms CAT III per IEC/EN61010-031



PM9093 Adapter BNC (Male) to Dual BNC (Female) in T model (6)

- Colour: 2 x Black
- Max signal voltage: 300 V RMS CAT III per IEC/EN61010
- Max voltage to ground: 600 V RMS CAT III per IEC/EN61010



PM9081 Adapter BNC (female) to Dual Banana Jack

- Colour: 2 x red, 2 x black
- Max signal voltage: 600 Vrms CAT III, per IEC/EN61010
- Max voltage to ground: CAT III 600 Vrms / CAT II 1000 V per IEC/EN61010



PM9082 Adapter BNC (male) to Dual Banana Jack

- Colour: 2 x red, 2 x black
- Max signal voltage: CAT III 600 Vrms per IEC/EN61010
- Max voltage to ground: CAT III 600 Vrms / CAT II 1000 V per IEC/EN61010



HC120 Hook Clips

- Colour: 1 x red, 1 x Grey
- Max voltage: 600 Vrms, CAT III per IEC 1010-2-031
- Nickel plated steel



BB120-IV Adapter BNC (female) to Shielded Banana Jack

- Set of 2
- Max signal voltage: 300 Vrms CAT III per IEC/EN61010
- Max voltage to ground: 600 V CAT III per IEC/EN61010



TRM50 Coaxial Feed-through BNC (Male) to BNC (female) Cable Terminator

- Set of 2
- Impedance: 50 ohm
- Max voltage over ground: CAT III 1000 V
- Max power 1W



BHT190 Bus Health Test Break-out Adapter Set

- Board with M12 connectors (male to female, 5 pins)
- DB-9 connectors (male to female, 9 pins + shield)
- RJ-45 connector, with short patch cable providing male to female interconnection (8 pins)



CS20MA Current Shunt for AC and DC measurements on 4 to 20mA control loops

- Sensitivity: 10mV/mA
- Shunt resistance: 10 ohm
- Bandwidth: > 10 kHz
- Max voltage to ground: CAT III 30 Vrms per EN/IEC 61010



EBC290 External Charger

For Fluke 120B and 190 Series II ScopeMeter® Oscilloscope

- Charging time (BP291): five hours, giving an operating time of up to seven hours
- DC input voltage: 15 V to 23 V, 714 mA nom. (DC input from BC190: 17.8 V / 0.84 A max)

Process Tools Accessories



700PTPK2 Pneumatic Test Kit

- Combine with any Fluke 700G Series Gauge, 1,000 psi (69 bar) or less, to make a complete pressure testing kit
- Generate pressure up to 600 psi, 40 bar with the 700PTP-1 test pump
- Connect the 700G Series gauge directly to the included PTP-1 hand pump



700HTPK/2 Hydraulic Test Kit

- Combine with any Fluke-700G Series Gauge, 1,000 psi (69 bar) range or greater, to make a complete pressure testing kit
- Generate pressure up to 10,000 psi, 690 bar with the included 700HTP-2 test pump
- Connect the 700G Series gauge directly to the HTP-2 hand pump



700LTP-1 Low Pressure Test Pump

- Hand operated pressure pump designed to generate either vacuum to -13 psi / -.90 bar or pressures to 100 psi / 6.9 bar
- Has two pressure ports with quick fit connectors
- For use with Fluke 750 Series Pressure Modules and Fluke 717 Pressure Calibrators



700PTP-1 Pneumatic Test Pump

A handheld pressure pump designed to generate either vacuum to -11.6 psi/-0.8 bar or pressure to 600 psi/40 bar



700HTP-2 Hydraulic Test Pump

- Generate pressures up to 10,000 psi/700bar
- Use the Fluke 700PRV adjustable relief valves to limit pressures from 1360 psi to 5450 psi



71X-Trap Liquid and Dirt Trap

- Works with pressure up to 500 psi
- Designed to work with the Fluke 718 and 719PRO



71X Hose Kit

- Compatible with Fluke 717 and 718 calibrators 100 PSI and below
- Kit contains three translucent hoses (1 m long) and one 1/8 to 1/4 NPT female-female adapter



700ILF In-line Filter

- Can be used to isolate the calibrator from incidental contact with fluids
- Useful with the 718 Fluke calibrator to help keep moisture or oils from contaminating the on-board pump



700HTH-1 Hydraulic Test Hose

- 10,000 psi, 690 bar working pressure test hose



700PMP Pressure Pump

- Provides pressures up to 150 psi/1000 kPa
- Output fitting is 1/8 FNPT



720RTD RTD Probe

Fluke-720RTD Temperature Probe is for use with Fluke 721 Precision Pressure Calibrators and Fluke 719Pro Electric Pressure Calibrators

- 10 inch (254mm) insertion depth with 1/4 inch (6.3mm) diameter stainless steel sheath



720URTD Universal RTD Adapter

Fluke Universal RTD Adapter 720URTD for Fluke 721 Precision Pressure Calibrators and Fluke 719Pro Electric Pressure Calibrators



Fluke 700MTH Premium Transmitter Test Hose Kit

Easy to use premium pressure transmitter test hose kit for connection to 1/4" female metric/BSP

- 5,000 psi rating
- Includes 1/8" NPT connection for permanent mount to a calibrator or test pump



Fluke 700M20TH Premium Transmitter Test Hose Kit

Easy to use premium pressure transmitter test hose kit for use with female M20 connections

- Includes: One (1) 5,000 psi rated, premium test hose; Premium, no tools required M20 adapter



700-IV Current Shunt

- Conversion factor: 10 mV = 1 mA
- Accuracy (% of input, one-year): 0.025 %
- Input current: 0 mA to 55 mA
- Input resistance: 250 Ω nominal
- Output resistance: 10 Ω nominal
- Accuracy specification applies from +18 °C and 28 °C to 50 °C
- Maximum input voltage: 30 V DC



700PRV Pressure Relief Valve Kit

- Consists of a relief valve settable from 725 to 5800 PSI (50 to 200 bar) to be used with the 700HTP-1 Hydraulic Test Pump
- The 1/8" NPT male thread to fits directly into the Fluke 700HTP-1 Pressure Pump



BP7235 NiMH Battery Pack

- 7.2V 3500 mA-hour rechargeable Ni-MH battery pack
- Provides typical 16-hour battery life when used in 700 or 740 Calibrator
- Dimensions: 150 mm x 56 mm x 22 mm
- Weight: 310g



BP7240 Li-Ion Battery Pack

- Battery pack for Fluke 75X Documenting Process Calibrators

Vibration and Alignment Accessories

Fluke 805 FC Vibration Meter



805ES External Sensor Assembly

- External vibration sensor that is ideal in situations where it is either difficult or impractical to use the onboard vibration sensor tip of the 805 Vibration Meter
- Low-profile 90-degree sensor body allows the sensor to get into tight spots
- Rugged, coiled cable minimises dangling, while stretching to more than 7ft when needed
- Powerful "U" shaped magnet mount creates a firm connection to flat, or curved measurement surfaces

Fluke 810 Vibration Tester



810QDC Quick Disconnect Cable

Eight-foot quick-disconnect cable connects the triaxial vibration sensor



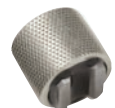
810SC-20 Sensor Cable

20-foot cable connects the triaxial vibration sensor to the Fluke 810 Vibration Tester



810S Triaxial Vibration Sensor

Triaxial vibration sensor captures vibration data in all three primary axes simultaneously for faster, more accurate data collection



810SMM Sensor Magnetic Mounts

- High-power magnet attaches firmly to motors and machinery
- Parallel magnet tips engage both flat and cylindrical surfaces



810SMP Sensor Mounting Pads for Vibration Sensors (pack of 10)

10-pack of Sensor Mounting Pads provide standardised sensor attachment points on critical equipment.



810T Tachometer

- Noncontact tachometer for use with the Fluke 810 Vibration Tester; to measure the speed of motors; conveyor belts; and other moving and rotational systems
- Measures from 6 to 99,999rpm with accuracy to $\pm 0.05\%$
- Takes noncontact measurements using a laser beam that works at a distance of 1 to 100cm for user safety
- Integral 50cm cable connects the tachometer to the vibration tester for power and measurement data recording



810PAAC Power Adapter

- AC power adapter with international plug set



SBP810 Smart Battery Pack

Lithium-ion battery pack provides 8-hours of runtime under normal operating conditions

Fluke 830 Laser Alignment



830/MAGNET Compact Sensor/Prism Magnetic Mounting Bracket Set

- High-power magnets attach firmly to shaft couplings
- Narrow profile can mount on equipment with little clearance between the coupling and the machine housing
- Ideal for large-diameter couplings or for the simplest, most rapid set-ups



830/SHIMS Precision Alignment Shim Kit

Stainless steel precut shims are more accurate and designed to speed up the alignment job - when even minutes of downtime count.

- Bur-free for higher accuracy in alignment
- Time-saving permanent thickness / dimension marking
- Reusable, corrosion-resistant high-quality stainless steel
- Two machine foot sizes and eight thicknesses that fit almost all machine feet

Software

Take your Fluke tools even further with the ability to analyse, interrogate remotely, export and create in depth reports on your PC and smart phone via Fluke's extensive software and application library.

Fluke Product Group	Fluke Software	Compatible Fluke Tools	Availability
Thermal Imaging	Fluke Connect™ Desktop	PTi120 400C Pocket Infrared Camera TiS20+/TiS20+ Max/TiS55+/TiS75+/TiS60+ Ti480Pro/TiX580 Infrared Camera	Free download via www.fluke.com
Thermal Imaging	Fluke SmartView® Desktop	Fluke VTO6/08 Visual Infrared Thermometers TiS20+/TiS20+ Max/TiS55+/TiS75+/TiS60+ Ti480Pro/TiX580 Infrared Camera	Free download via www.fluke.com
Fluke Connect	Fluke SW3000FC	Fluke Connect Modules, 3000FC DMM, 902FC, 376FC/375FC/374FC Must be used with PC3000FC USB dongle	Free download via www.fluke.com
ScopeMeters®	FlukeView® for ScopeMeter®	Fluke 190 Series II ScopeMeter®, Fluke 120 Series ScopeMeter®, Fluke 19xB/C Series, Fluke 2x5C Series,	Sold separately
ScopeMeters®	FlukeView2 for ScopeMeters® (Sold as SW90W)	Fluke 120B Series ScopeMeters® Fluke 190 Series-II ScopeMeter® MDA-510/550 Motor Drive Analyser ScopeMeter®	Sold separately
Power Quality Tools	Fluke Energy Analyse +	Fluke 1748/1746/1742, Fluke 1738/1736/1734/1732, 1730 Power & Energy Loggers Fluke 1777/1775/1773 Power Quality Analysers	Free download via www.fluke.com
Power Quality Tools	PowerLog 430-II Application Software	Fluke 438-II/437-II/435-II/434-II Power Quality Analysers	Free download via www.fluke.com
Power Quality Tools	PowerLog Classic	Fluke 345, VR1710, 1735 and 435/434/433 Power Quality Tools	Free download via www.fluke.com
Battery Testers	Battery Management Software	Fluke BT521/BT5210/BT510 Battery Testers	Free download via www.fluke.com
Process Calibration Tools	DPC/TRACK2	Fluke 754/753/729 Documenting Process Calibrators	Sold separately
Process Calibration Tools	709H/Track HART Communications Software	Fluke 709/H Precision Loop Calibrator with HART	Sold separately
Process Calibration Tools	700G/Track	Fluke 700G Pressure Gauges (with Interface Cable)	Sold separately
Process Calibration Tools	730PCSWCN Pressure Verification Software	Fluke 730G Digital Smart Pressure Calibrator	Sold separately
Vibration & Alignment	Vibration Software	810, 805FC/805 Meters/Testers	Free download via www.fluke.com
Portable Appliance Testers	DMS/Complete Software	Fluke 6500-2 Portable Appliance Tester	Sold separately
General	Fluke ViewForms	FVF-SC2 (with IR Cable): Fluke 1660/1650 Multifunction Installation Testers (1664FC/1663/1662, 1654B/1653B/1653/1652C), Fluke 50-II Series Thermometers (55-II B/53-II B) FVF-SC4 (with IR Cable): Fluke 8846A, 8845A, 8808A, 45 Bench Digital Multimeters FVF-BASIC (with IR Cable): Fluke 289/287 Meters, 789/787B ProcessMeters, 1555/1550B Insulation Resistance Testers, 180 Series Meters	Sold separately

Combo Kits





Fluke 3000 FC General Maintenance System

- Fluke 3000 FC Series Wireless Multimeter
- Fluke v3000 Voltage Module
- Fluke v3001 Voltage Module
- Fluke a3001 FC Wireless iFlex AC
- TL224, TL222, TL175 Test Leads
- AC285, AC220, AC175 Alligator Clips
- iFlex i2500-10 Flexible Current Probe
- Magnetic Hanging Strap (3)
- Fluke Connect® Wireless PC Adapter
- Modular 3-Compartment Soft Carry Case



Fluke 3000 FC Industrial System

- Fluke 3000 FC Series Wireless Multimeter
- Fluke a3001 FC Wireless iFlex AC (3)
- Fluke v3000 Voltage Module
- TL224 Test Leads
- TL175 Test Leads
- AC285 Alligator Clips
- AC175 Alligator Clips
- iFlex i2500-10 Flexible Current Probe (3)
- Magnetic Hanging Strap (4)
- Fluke Connect® Wireless PC Adapter
- Modular 3-Compartment Soft Carry Case



Fluke 3000 FC HVAC System

- Fluke 3000 FC Series Wireless Multimeter
- Fluke a3000 FC Wireless AC
- Fluke t3000 Thermocouple Thermometer
- TL175 Test Leads
- AC175 Alligator Clips
- 80PK-1 K-Type Bead Thermocouple
- Magnetic Hanging Strap
- Fluke Connect® Wireless PC Adapter
- Modular 3-Compartment Soft Carry Case



Fluke 3000 FC/1AC-II Wireless Multimeter and Non-Contact Voltage Detector Kit

- Fluke 3000 FC Series Multimeter
- Fluke 1AC-II VoltAlert™ Tester
- TL224 Test Leads
- TP175 Industrial Test Probes
- AC220 Alligator Clips
- C35 Soft Meter Case
- TPAK Magnetic Hanging Kit



Fluke 3000 FC/TPAK Wireless Multimeter and Magnetic Hanger Combo Kit

- Fluke 3000 FC Series Wireless Multimeter
- TL75 Test Leads
- C35 Soft Meter Case
- TPAK Magnetic Hanging Kit



Fluke 3000FC/EDA2 Combo Kit

- 3000 FC Series Wireless Multimeter
- TL910 Electronic Test Probes
- TL224 Silicone Test Leads
- AC280 Heavy Duty Hook Clips
- C35 Soft Meter Case
- ToolPak™ Magnetic Hanging Kit



Fluke a3000 FC Wireless AC Current Clamp Kit

- Fluke 3000 FC Series Wireless Multimeter
- Fluke a3000 FC Wireless AC Current Clamp Module
- TL175 Test Leads
- AC175 Alligator Clips
- Modular 3-Compartment Soft Carry Case



Fluke a3001 FC Wireless iFlex AC Current Clamp Kit

- Fluke 3000 FC Series Wireless Multimeter
- Fluke a3001 FC Wireless iFlex AC Current Module
- TL175 Test Leads
- AC175 Alligator Clips
- iFlex i2500-10 Flexible Current Probe
- Magnetic Hanging Strap
- Modular 3-Compartment Soft Carry Case



Fluke Wireless t3000 FC Temperature Kit

- Fluke 3000 FC Series Wireless Multimeter
- Fluke t3000 K-Type Thermocouple Thermometer
- TL175 Test Leads
- AC175 Alligator Clips
- 80PK-1 K-Type Bead Thermocouple
- Other K-Type Temperature Probes also available
- Magnetic Hanging Strap
- Modular 3-Compartment Soft Carry Case



Fluke Wireless v3000 FC AC Voltage Kit

- Fluke 3000 FC Series Wireless Multimeter
- Fluke v3000 AC Voltage Module
- TL175 Test Leads
- TL224 Test Leads
- AC175 Alligator Clips
- AC285 Alligator Clips
- Magnetic Hanging Strap
- Modular 3-Compartment Carry Case



Fluke Wireless v3001 FC DC Voltage Kit

- Fluke 3000 FC Series Wireless Multimeter
- Fluke v3001 DC Voltage Module
- TL175 Test Leads
- TL222 Test Leads
- AC175 Alligator Clips
- AC220 Alligator Clips
- Magnetic Hanging Strap
- Modular 3-Compartment Soft Carry Case



Fluke v3003 FC Wireless AC-DC Voltage Measurement Kit

- Fluke 3000 FC Series Wireless Multimeter
- Fluke v3000 AC Voltage Module
- Fluke v3001 DC Voltage Module
- TL175 Test Leads
- TL222 Test Leads
- TL224 Test Leads
- AC175 Alligator Clips
- AC285 Alligator Clips
- AC220 Alligator Clips
- Magnetic Hanging Straps (2)
- Modular 3-Compartment Soft Carry Case



Fluke 279 FC/iFlex TRMS Thermal Multimeter Combo Kit

- 279 FC TRMS Thermal Multimeter
- 18" (45.72 cm) iFlex Flexible Current Probe
- TL175 Test Leads
- Rechargeable Lithium-ion Battery and Charger
- Hanging Strap
- Soft Carrying Case



Fluke 287/289 FlukeView® Forms Combo Kit

- Fluke 287/289 True-RMS Electronics Logging Multimeter
- FlukeView® Forms Software and Cable
- 80BK-A Thermocouple Probe
- TL224 Test Leads with 175 Modular Probe Tips
- AC175 Alligator Clips
- TL71 Probe Caps
- C280 Soft Case



Fluke 287/289 FlukeView® Forms Combo/ with IR Connector

- Fluke 287/289 True-RMS Industrial Logging Multimeter
- FlukeView® Forms Software with Cable
- 80BK-A Thermocouple Probe
- TL71 Silicone Test Lead Set
- AC175 Alligator Clips
- TPAK Magnetic Hanging Kit
- C280 Soft Case
- Fluke IR 3000FC Connector
- AMP Jack Plugset



Fluke 87V/E2 Industrial Electrician Combo Kit

- Fluke 87V True-RMS Industrial Multimeter
- TL224 Silicone Test Leads
- AC220 Alligator Clips
- TP238 Test Probes
- TPAK Magnetic Hanging Kit
- 80BK-A Thermocouple Probe
- C35 Soft Meter Case



Fluke 87V Industrial Multimeter Service Kit

- Fluke 87V Industrial Multimeter
- Fluke i400 400A AC Current Clamp
- 80BK-A Temperature Probe
- TL75 Test Lead Set
- AC175 Alligator Clip Set



Fluke 87V MAX Electrician Combo Kit

- Fluke 87V MAX True-RMS Digital Multimeter
- TL224 SureGrip™ Insulated Test Leads
- AC220 SureGrip™ Alligator Clips
- TL238 SureGrip™ Test Probes
- ToolPak™ Magnetic Meter Hanging Kit
- 80BK-A Temperature Probe
- C35 Soft Carrying Case



Fluke 88V/A Automotive Multimeter Combo Kit

- Fluke 88V Automotive Multimeter
- TL224 Silicone Test Leads
- AC285 Alligator Clips
- TP220 Test Probes
- RPM 80 Inductive RPM
- TPAK ToolPak™ Magnetic Meter Hanging Kit
- 80BK-A Thermocouple Probe
- C800 Carrying Case
- Holster
- 9V Battery (installed)
- Two Automotive Back Probe Pins
- Insulation Piercing Probe



Fluke 116/323 HVAC Combo Kit

- Fluke 116 HVAC Multimeter
- Fluke 323 Clamp Meter
- TL175 Test Lead Set
- TPAK Magnetic Hanging Kit
- 80PK-1 Bead Probe
- 80AK-A Thermocouple Adapter
- 80PK-1 Flexible Cuff Pipe Clamp Thermocouple
- C115 Deluxe Soft Carrying Case with Shoulder Strap



Fluke 116/62 MAX+ HVAC Technician's Combo Kit

- Fluke 116 HVAC Multimeter
- Fluke 62 MAX+ Infrared Thermometer
- TL175 Test Lead Set
- TPAK Magnetic Hanging Kit
- 80BK-A Thermocouple Probe
- 80AK-A Thermocouple Adapter
- 80PK-1 Flexible Cuff Pipe Clamp Thermocouple
- C115 Deluxe Soft Carrying Case with Shoulder Strap



Fluke 117/323 Electricians' Multimeter Combo Kit

- Fluke 117 True-RMS Multimeter
- Fluke 323 Clamp Meter
- TL175 Test Lead Set
- TPAK Magnetic Hanging Kit
- C115 Deluxe Soft Carrying Case with Shoulder Strap



Fluke 179/EDA2 Industrial Electronics Combo Kit

- Fluke 179 Multimeter
- 80BK-A Integrated DMM Temperature Probe
- Installed 9V Battery
- AC280 SureGrip™ Hook Clips
- TL910 Electronic Test Probes
- TL224 SureGrip™ Insulated Test Leads
- TPAK ToolPak™ Magnetic Meter Hanger
- Soft Carry Case



Fluke 179 Industrial Multimeter Service Kit

- Fluke 179 True-RMS Multimeter
- Fluke 323 True-RMS Clamp Meter
- 80BK-A Temperature Probe
- TL75 Test Lead Set
- AC175 Alligator Clip Set



Fluke 289 Industrial Multimeter Service Kit

- Fluke 289 True-RMS Multimeter
- Fluke i400 400A AC Current Clamp
- TL71 Flexible Silicone Test Lead Kit
- AC175 Alligator Clip Set

Electrical Tester Kits



Fluke T6-1000/PRV240FS Kit

- Fluke T6-1000 Electrical Tester
- Fluke PRV240FS Proving Unit with FieldSense®
- C60 Soft Case



Fluke T6-HT6-1AC Kit

- Fluke T6-1000 Electrical Tester
- Fluke 1AC-II VoltAlert™ Tester
- H-T6 Holster



Fluke T6-600/62MAX+/1AC Kit

- Fluke T6-600 Electrical Tester
- Fluke 62MAX+ Infrared Thermometer
- Fluke 1AC-II VoltAlert™ Tester
- C60 Soft Case

Insulation Tester Kits



Fluke 1587/i400 Current Clamp FC Kit

- Fluke 1587 FC 2-in-1 Insulation Multimeter
- Fluke i400 Current Clamp
- TP165X Remote Test Probe
- TL224 Test Leads
- AC285 Alligator Clips
- 80BK-A Thermocouple Probe
- Hard Case



Fluke 1587 FC Advanced Electrical Troubleshooting Kit

- Fluke 1587 FC 2-in-1 Insulation Multimeter
- Fluke i400 Current Clamp
- Fluke 62 MAX+ Infrared Thermometer
- TP165X Remote Test Probe
- TL224 Test Leads
- AC285 Alligator Clips
- 80BK-A Thermocouple Probe
- Hard Case



Fluke 1587/MDT FC Advanced Motor and Drive Troubleshooting Kit

- Fluke 1587 FC 2-in-1 Insulation Digital Multimeter
- Fluke i400 Current Clamp
- Fluke 9040 Phase Rotation Indicator
- TP165X Remote Test Probe
- TL224 Test Leads
- AC285 Alligator Clips
- 80BK-A Thermocouple Probe
- Hard Case



Fluke 1550C 5 kV Insulation Tester Kit

- Fluke 1550C Insulation Resistance Tester
- TL1550B Alligator Clips and Test Lead Set
- TLK1550 Heavy Duty Alligator and Test Lead Set
- FlukeView® Forms Basic CD
- Infrared Adapter to USB Cable
- IP67 Hard Case
- AC Power Cord



Fluke 1550C Insulation Tester Kit

- w/ir3000 FC
- Fluke 1550C 5 kV Insulation Tester
- Fluke ir3000 FC Connector
- Test cables with alligator clips
- IP67 Hard Case



Fluke 1555 10kV kV Insulation Tester Kit

- Fluke 1555 Insulation Resistance Tester
- TL1550B Alligator Clips and Test Lead Set
- TLK1550 Heavy Duty Alligator and Test Lead Set
- FlukeView® Forms Basic CD
- Infrared Adapter to USB Cable
- AC Power Cord
- IP67 Hard Case



Fluke 1555C 10kV kV Insulation Tester Kit w/ir3000 FC

- Fluke 1555C 10kV Insulation Tester
- Fluke ir3000 FC Connector
- Test cables with alligator clips
- IP67 Hard Case



Fluke 1621 Basic Earth Ground Tester Kit

- Fluke 1621 Earth Ground Tester
- Two GEO Cable Reels (1-25 m, 1-50 m)
- ES-162P3 Three Earth Ground Stake Set
- TL224 Test Lead Set
- AC285 Alligator Clips
- Hard Carrying Case



Fluke 1623-2 GEO Earth Ground Tester Kit

- Fluke 1623-2 GEO Earth Ground Tester
- GEOX Probe Cable
- EI-1623 Clamp Set
- 3 Cable Reels
- 4 Earth Ground Stakes
- C1620 Carrying Case



Fluke 1625-2 GEO Earth Ground Tester Kit

- Fluke 1623-2 GEO Earth Ground Tester
- GEOX Probe Cable
- EI-1623 Clamp Set
- 3 Cable Reels
- 4 Earth Ground Stakes
- C1620 Carrying Case



Fluke Insulated 7 Unit Screwdriver Kit (IKSC7)

- ISLS3 Insulated Slotted Screwdriver 2.5 mm, 75 mm
- ISLS5 Insulated Slotted Screwdriver 4 mm, 100 mm
- ISLS8 Insulated Slotted Screwdriver 6 mm, 125 mm
- IPHS1 Insulated Phillips Screwdriver #1, 75 mm
- IPHS2 Insulated Phillips Screwdriver #2, 100 mm
- ISQS1 Insulated Squared Screwdriver #1, 100 mm
- ISQS2 Insulated Squared Screwdriver #2, 125 mm



Fluke Insulated 3 Unit Pliers Kit (IKPL3)

- INLP8 Insulated Long Nose /w side cutter
- INDC8 Insulated Heavy Duty diagonal cutter
- INCP8 Insulated Linesman Combination Plier
- RUP8 Roll up pouch



Fluke Insulated Hand Tools Starter Kit (IKST7)

- ISLS3 Insulated Slotted Screwdriver 2.5 mm, 75 mm
- ISLS5 Insulated Slotted Screwdriver 4 mm, 100 mm
- ISLS8 Insulated Slotted Screwdriver 6 mm, 125 mm
- IPHS1 Insulated Phillips Screwdriver #1, 75 mm
- IPHS2 Insulated Phillips Screwdriver #2, 100 mm
- INLP8 Insulated Long Nose /w side cutter
- INDC8 Insulated Heavy Duty diagonal cutter
- INCP8 Insulated Linesman Combination Plier
- RUP8 Roll up pouch



Fluke Pack30 Professional Tool Backpack + Insulated Hand Tools Kit (IKPK7)

- Fluke Pack30 Professional Backpack
- ISLS3 Insulated Slotted Screwdriver
- ISLS5 Insulated Slotted Screwdriver
- ISLS8 Insulated Slotted Screwdriver
- IPHS1 Insulated Phillips Screwdriver
- IPHS2 Insulated Phillips Screwdriver
- INLP8 Insulated Long Nose /w side cutter
- INDC8 Insulated Heavy Duty diagonal cutter
- INCP8 Insulated Linesman Combination Plier
- RUP8 Roll up pouch



Fluke T6-1000 Electrical Tester + Insulated Hand Tools Kit (IBT6K)

- Fluke T6-1000 Electrical Tester
- ISLS3 Insulated Slotted Screwdriver
- ISLS5 Insulated Slotted Screwdriver
- ISLS8 Insulated Slotted Screwdriver
- IPHS1 Insulated Phillips Screwdriver
- IPHS2 Insulated Phillips Screwdriver
- INLP8 Insulated Long Nose /w side cutter
- INDC8 Insulated Heavy Duty diagonal cutter
- INCP8 Insulated Linesman Combination Plier
- RUP8 Roll up pouch



Fluke 117 Electrician's Multimeter + Insulated Hand Tools Kit (IB117K)

- Fluke 117 Electrician's Multimeter
- ISLS3 Insulated Slotted Screwdriver
- ISLS5 Insulated Slotted Screwdriver
- ISLS8 Insulated Slotted Screwdriver
- IPHS1 Insulated Phillips Screwdriver
- IPHS2 Insulated Phillips Screwdriver
- INLP8 Insulated Long Nose /w side cutter
- INDC8 Insulated Heavy Duty diagonal cutter
- INCP8 Insulated Linesman Combination Plier
- RUP8 Roll up pouch



Fluke 87V Industrial Multimeter + Insulated Hand Tools Kit (IB875K)

- Fluke 87V Industrial Multimeter
- ISLS3 Insulated Slotted Screwdriver
- ISLS5 Insulated Slotted Screwdriver
- ISLS8 Insulated Slotted Screwdriver
- IPHS1 Insulated Phillips Screwdriver
- IPHS2 Insulated Phillips Screwdriver
- INLP8 Insulated Long Nose /w side cutter
- INDC8 Insulated Heavy Duty diagonal cutter
- INCP8 Insulated Linesman Combination Plier
- RUP8 Roll up pouch



Fluke 376 FC True-RMS Clamp Meter + Insulated Hand Tools Kit (IB376K)

- Fluke 376 FC AC/DC Clamp Meter
- iFlex® Flexible Current Probe
- TPAK magnetic hanging strap
- TL75 test leads
- ISLS3 Insulated Slotted Screwdriver
- ISLS5 Insulated Slotted Screwdriver
- ISLS8 Insulated Slotted Screwdriver
- IPHS1 Insulated Phillips Screwdriver
- IPHS2 Insulated Phillips Screwdriver
- INLP8 Insulated Long Nose /w side cutter
- INDC8 Insulated Heavy Duty diagonal cutter
- INCP8 Insulated Linesman Combination Plier
- RUP8 Roll up pouch



PLS 3R/G KIT, 3-Point Red/Green Laser Kit

- PLS 3R/G laser level
- PLS canvas pouch,
- PLS BP5 alkaline battery pack
- PLS FS Floor Stand
- PLS MLB Magnetic L-Bracket
- PLS R/GRT4 Red/Green Reflective Target



PLS 180R/G KIT, Cross Line Red/Green Laser Kit

- PLS 180R/G laser level
- PLS canvas pouch
- PLS BP5 alkaline battery pack
- PLS UB9 universal ceiling and wall bracket
- PLS MLB magnetic L-bracket
- PLS R/GRT4 red/Green reflective target



PLS H2 SYS, Horizontal Red/Green Rotary Laser System

- PLS H2 rotary laser level
- PLS BP10 alkaline battery tray
- PLS RBP10 NiMH rechargeable battery tray with BC20 universal charging cord
- PLS XLD rotary laser detector
- PLS XLD clamp
- PLS R/GRT4 red/Green reflective target



PLS 5R/G KIT, 5-Point Red/Green Laser Kit

- PLS 5R/G laser level,
- PLS canvas pouch
- PLS BP5 alkaline battery pack
- PLS FS floor stand
- PLS MLB magnetic L-bracket
- PLS Pendulum Target
- PLS R/GRT4 red/Green reflective target



PLS 180R/G SYS, Cross Line Red/Green Laser System

- PLS 180R/G laser level
- PLS canvas pouch
- PLS BP5 alkaline battery pack
- PLS SLD Red/Green laser line detector
- PLS 60520 SLD clamp
- PLS UB9 universal ceiling and wall bracket
- PLS MLB magnetic L-bracket
- PLS R/GRT4 red/Green reflective target



PLS HV2R/G KIT, Manual Slope Red/Green Rotary Laser Kit

- PLS HV2R/G rotary laser level
- PLS BP10 alkaline battery tray
- PLS RBP10 NiMH rechargeable battery tray with BC20 universal charging cord
- PLS RC2 Remote Control
- PLS XLD Rotary Laser Detector
- PLS XLD Clamp
- PLS WCB10 Rotary Wall and Ceiling Mount
- PLS R/GRT4 Red/Green Reflective Target
- PLS TPOD500 Elevator Tripod
- PLS GR16 Grade Rod



PLS 6R/G KIT, Cross Line and Point Red/Green Laser Kit

- PLS 6R/G laser level
- PLS canvas pouch
- PLS BP5 alkaline battery pack
- PLS UB9 universal ceiling and wall bracket
- PLS FS floor stand
- PLS MLB magnetic L-bracket
- PLS R/GRT4 Red/Green Reflective Target



PLS H2 KIT, Horizontal Red/Green Rotary Laser Kit

- PLS H2 rotary laser level
- PLS BP10 alkaline battery tray
- PLS RBP10 NiMH rechargeable battery tray with BC20 universal charging cord
- PLS XLD rotary laser detector
- PLS XLD clamp
- PLS R/GRT4 red/Green reflective target
- PLS TPOD500 elevator tripod
- PLS GR16 grade rod



PLS HV2R/G SYS, Manual Slope Red/Green Rotary Laser System

- PLS HV2R/G rotary laser level
- PLS BP10 alkaline battery tray
- PLS RBP10 NiMH rechargeable battery tray with BC20 universal charging cord
- PLS RC2 Remote Control
- PLS XLD Rotary Laser Detector
- PLS XLD Clamp
- PLS WCB10 Rotary Wall and Ceiling Mount
- PLS R/GRT4 Red/Green Reflective Target



PLS 6R/G SYS, Cross Line and Point Red/Green Laser System

- PLS 6R/G laser level
- PLS canvas pouch
- PLS BP5 alkaline battery pack
- PLS SLD Red/Green laser line detector
- PLS 60520 SLD clamp
- PLS UB9 universal ceiling and wall bracket
- PLS FS floor stand
- PLS MLB magnetic L-bracket,
- PLS R/GRT4 Red/Green reflective Target

Other Kits

Infrared Thermometer Kits



Fluke 62 MAX+/323/1AC IR Thermometer, Clamp Meter and Voltage Detector Kit

- Fluke 62 MAX+ IR Thermometer
- Fluke 323 True-rms Clamp Meter
- Fluke 1AC-II VoltAlert
- TL175 TwistGuard™ Test Leads
- C115 Softcase



Fluke 417D/62MAX+ Laser Distance Meter/Infrared Thermometer Combo Kit

- Fluke 417D Laser Distance Meter
- Fluke 62 MAX+ Infrared Thermometer

Indoor Air Quality Kits



Fluke 922 Airflow Meter/Micromanometer Kit

- Fluke 922 Airflow Meter
- 12 inch Pitot Tube
- Two Rubber Hoses
- TPAK Magnetic Strip
- TPAK Strap, 9 inches
- TPAK Latch Tab
- User Manual
- Hard Carrying Case

Process Calibration Kits



Fluke 700PTPK Pneumatic Test Pump Kit

- 700PTP-1 Pneumatic Hand Pump
- Hose Kit (1) and Adapters
- Hard Case



Fluke 700HTPK Hydraulic Test Pump Kit

- 700HTP-2 Hydraulic Hand Pump
- Hose Kit (1) and Adapters
- Hard Case



Fluke 700PTPK2 Premium Pneumatic Test Pump Kit

- 700PTP-1 Pneumatic Hand Pump
- Premium, 'no tools required' Gauge' Connector
- Premium Transmitter Test Hose Kit (1) and Adapters
- Hard Case



Fluke 700HTPK2 Premium Hydraulic Test Pump Kit

- 700HTP-2 Hydraulic Hand Pump
- Premium, 'no tools required' Gauge' Connector
- Premium Transmitter Test Hose Kit (1) and Adapters
- Hard Case



Fluke Connect® 789 ProcessMeter™ and Temperature Kit

- Fluke 789 ProcessMeter™
- Fluke t3000 FC Wireless K-Type



FLUKE
networks®

Cabling, copper or fiber optic, is a major cause of downtime on time sensitive industrial networks. Losing just a few data packets in a short time can cause a machine to shut down. This is especially true in industrial environments, where network cables are exposed to vibration, flexing, moisture, temperature changes and electromagnetic interference (EMI) from motor drives and other devices.

Featured Copper Cable Test Solutions



Pro3000™ Analog Tone and Probe

- Tone and trace on non-active networks
- Identify exact pair with SmartTone technology and five distinct tones
- Loud speaker on probe easy to hear through drywall, wood, and other material
- Clear - Innovative filter technology blocks interference ("buzz") that makes tracing difficult ("F" modes only)
- Clips allow easy access to individual pairs and RJ11 easily connects to telephone jacks—no need for adapters



IntelliTone™ Pro 200 LAN Tone and Probe

- Digital toning eliminates noise and false signals
- SmartTone™ analog toning isolates individual wire pairs
- Locates cables safely and effectively on active networks
- Visible end-to-end continuity test
- Built in wire mapper
- Works on twisted pair, audio, and video cabling



MicroMapper™

- Simple verification of wiremaps and identification of faults with LEDs
- Tests twisted pair cables for open circuits, shorts, crossed pairs, reversed pairs and split pairs
- Remote identifier enables one-person testing
- Built-in tone generator for tracing installed cables hidden in walls, floors and ceilings. Works with Pro3000™ Tone and Probe (sold separately)



Search for:
PR03000F50-KIT Tone and Probe Kit



Search for:
MT-8200-60-KIT



Search for:
MT-8200-49A



TS®100 Cable Fault Finder

- Measure cable length on
- Numeric distance display
- Identify pairs with SmartTone™ generation technology
- Identify and locate distance to opens and shorts
- Works on any two or more conductor cable up to 3,000 feet (915 metres)



MicroScanner2 Cable Verifier Series

- Displays cable length, wiremap, cable ID, and distance to fault
- Detects Ethernet, POTS and PoE
- Locates virtually any cable or wire pair with IntelliTone™ digital and analog toning
- Tests RJ11, RJ45, coax, with no adapters
- "Large" backlit LCD makes results crystal clear in any work environment



CableIQ™ Qualification Tester

- Works on live networks to provide Ethernet switch detection and link configuration
- Measure cabling performance (10/100/1000 Mbps)
- Diagnose opens, shorts, split pairs, insertion loss, crosstalk, noise issues
- Graphically maps wiring configuration and shows distance to faults
- Tests twisted-pair, coax, and audio
- Locate and trace cables with IntelliTone 200 Digital Probe (included with CIQ-KIT)



Search for:
26500000 TS100 with BNC to Alligator Clips



Search for:
MS2-100, MS2-KIT, MSPOE



Search for:
CIQ-100, CIQ-KIT

Featured Copper Cable Test Solutions



	Pro 3000	Intellitone Pro	Micro- Mapper	TS100	MS2-100	MS-POE	CIQ-100
Port Location ID							
Digital toning		3			3	3	3
Analog toning	3	3	3	3	3	3	3
Switch presence		3			3	3	3
VDV service detection					3	3	3
Cable Verification							
Cable wiremap		3	3		Graphical	Graphical	Graphical
Cable length				3	3	3	3
Qualified cabling speed (10/100/1000/VoIP)							3
Identify NBASE-T Capability						3	
Identify PoE Capability						3	
Cable Troubleshooting							
Identify open/short	3	3	3	3	3	3	3
Distance to open/short				3	3	3	3
Locate crosstalk fault							3
Identify and locate imped- ance fault							3



MS-POE-KIT

MicroScanner™ PoE

- PoE Switch Verification – Determine if a switch port can provide enough power by reporting PoE class (0-8).
- Powered Pairs – Graphically identifies powered pairs. Including Dual Signature where the switch port delivers power on 2 or 4 pairs (802.3bt or PoE ++).
- Active Switch Detection - Determine if a cable is connected to a switch port and port speed up to 10G.
- Cable Testing – Identify any shorted, open or crossed wires at both ends, length of each pair, and send tones to find cables.
- Validate and troubleshoot your Industrial Ethernet copper cabling
- PoE Injector verification - Display injector voltage level



Search for:
MS-POE, MS-POE-KIT

Termination Tools and Adapters

Ergonomic design, high-quality materials and Fluke Networks quality for separating, stripping and cutting wire. Perfect tools for your every job.



SKU	Modular Crimper	Need-L-Lock™ Crimping Pliers	D-Snips™	Cable Strippers	Probe Pic	Can Wrenches
	11212530	11294000	44300000	44210015	44600000	44007000



Pro-Tool™ Kits

- Ergonomically designed Dur-a-Grip™ pouch for convenient tool storage on belt
- D914™ and D814™ industry standard punch-down tools make for solid terminations
- Easy to use cable stripper quickly rings and slits many types of cable
- Probe Pic checks for loose or damaged connections
- Cut and strip wire with Electricians' D-Snips™
- Three kit combinations available



Search for:
11293000



JackRapid™ Punchdown Tool

- Terminate jacks eight times faster than traditional impact tools. The patented design seats and terminates all wires simultaneously. Built-in blade cuts off the excess wire eliminating the need for a secondary trim step
- High-quality, consistent terminations
- Ergonomic design reduces hand fatigue
- Convenient, built-in stripper
- Multiple versions support several jack manufacturers



D914™ Series Impact Tools

- Hook, spudger and blade storage tools are built into the handle
- Select low impact for 24/26 gauge wire or high impact for 22-gauge wire
- Optional Phillips-head or flat screwdriver blade
- Supports a variety of torque tool bits and sockets
- Easy blade insertion, locks in place
- D914S features soft touch rubber handle and ergonomic design



Search for:
10061501 D914S impact tool with EverSharp 110, EverSharp 66 blade and free blade

Punchdown Blades

Model	Description
10176500	EverSharp 110 blade
10178600	EverSharp 110/66 cut blade
10056500	EverSharp 66 blade
10565000	Krone blade
10565110	Krone/110 cut blade
10176000	110 blade
10436001	Centerpunch blade
10465001	3M System D blade
10645001	Wood screw starter punch
10665000	BIX blade
10056000	66 blade
10057000	630 blade
10979002	Blade storage case

JackRapid™

Model	Description
JR-PAN-2	For Panduit NK6X88M, NK688M, NKP5E88M
JR-ADC-2	For ADC C6a CopperTen® UTP RJ45 jack and C6 TrueNet® KM8 UTP RJ45
JR-ORT-2	For Ortronics® TJ5E00, TJ600, TJ610
JR-SYS-2	For Systimax® MGS400, MGS600, MFP420, MFP520 and Commscope® UNJ10G
JR-LEV-2	For Leviton® 61110, 5G110, 6110G
JR-SYS-UNI-1	For Systimax MPS100E, C5, M1BH and Commscope UNJ600/500/300
JR-LEV-1	For Leviton 41106, 41108, 5G108

Telephone Test Set Comparison



	TS®54 TDR	TS®52 PRO	TS®22A	TS®22	TS®25D	TS®30	TS®19
TDR to detect shorts, opens, and distance to open	3						
Built-in toner	3						
Display—back lit LCD and glow-in-the-dark keypad	3	3			LCD only		
Extended range high-impedance DataSafe operation in monitor mode	3	3			3		
Data lockout protection Data lockout override	3	3			3		
DSL/POTS filtering technology	3	3			3		
Low/high voltage indication	3	3			3		
Low current (mA) indication	3	3			3		
Over voltage protection Over current protection	3	3	3	3	3	3	
Two-way speakerphone for true hands-free conversations	3	3	3				
One-way amplified speaker for hands-free monitoring	3	3	3	3	3		
Waterproof—exceeds American Military Spec. MIL-STD-810E	3	3					
DropSafe—passes 20 foot (6 metre) drop test onto concrete	3	3	3	3		3	
Polarity indication in talk mode	3	3	3	3	3	3	3
Stores nine 18-digit numbers in repertory dialer (speed dialing)	3	3	3	3	3		

4 and 8 Wire Modular Adapters

- Easily complete testing and obtain circuit access on working lines without disrupting service
- Clear circuit markings on the sides and bottom of the unit
- Test line status with the 4-wire modular adapter



Model	Description
10113000	4 wire
10210100	4-wire in-line
10210101	4-wire in-line with K-Plug
10220100	6-wire in-line
10220101	6-wire in-line with K-Plug
10230100	8-wire in-line
10230101	8-wire in-line with K-Plug

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