

FLUKE®

FLUKE®

TEST TOOLS CATALOGUE

VOLUME 42, 2012

Join the conversation

We design our products with you in mind. Yeah, we have guys in lab coats, developing and testing our tools in rooms we dare not enter. But our ideas, the things that drive our intense development process, come straight from the job site—from pros like you. You are the voice of innovation. Tell us what you think. Visit our social media sites, and get the conversation started.

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www.fluke.com.au

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Keeping your world
up and running.

Featured products

750 Series Documenting Process Calibrators (DPC)

The new Fluke 750 Series DPCs improve on the popular 740 Series DPCs. Improvements include:

- Vastly improved display for easy viewing in dark, bright lighting and extreme angles
- Improved accuracy, especially for RTD source and measure, replaces the need for a decade box
- Improved connectability for both USB and HART
- A great new field softcase
- Near identical user interface to 74X, easy to pick up and use
- Multifunction and documenting
- CAT II 300 V rating makes these DPCs electrically rugged
- Three-sigma confidence on specifications means you can depend on the measurements these Fluke DPCs make

For information on the new 750 Series Documenting Process Calibrators see page 36.

Easy Hart
Transmitter
Calibration



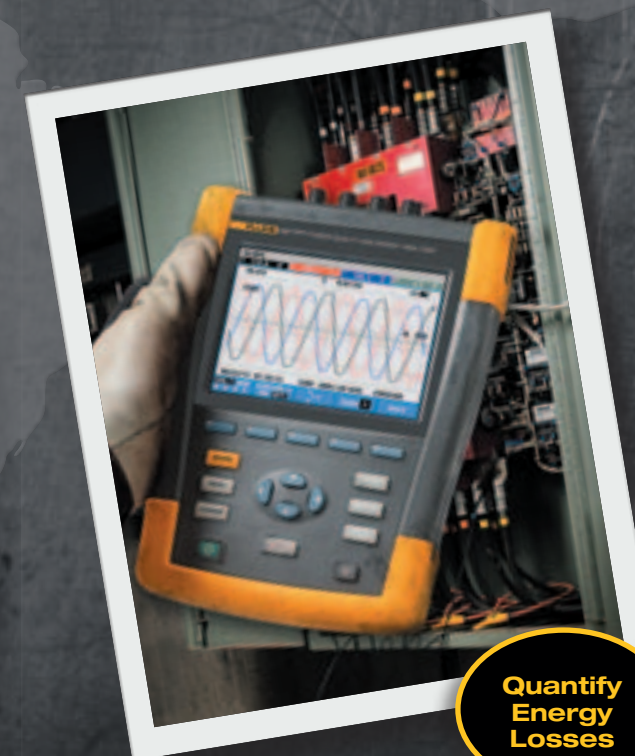
430 Series II Three-Phase Power Quality and Energy Analyzers

Best in power quality. First in energy monetization.

- Energy loss calculator: Classic active and reactive power measurements, unbalance and harmonic power are quantified to pinpoint true system energy losses in dollars
- Optimized power quality analyzers: 435 and 437 Series II analyzers conduct tests according to the stringent international IEC 61000-4-30 Class-A
- PowerWave data capture: 435 and 437 Series II analyzers capture fast RMS data, show half-cycle and waveforms to characterize electrical system dynamics (generator start-ups, UPS switching etc.)
- Waveform capture: 435 and 437 Series II models capture 100/120 cycles (50 Hz/60 Hz) of each event that is detected in all modes without setup

For information on the new 430 Series II Power Quality Analyzers see page 28.

Quantify
Energy
Losses



Fluke tools for facilities maintenance

365 Clamp Meter with Detachable Jaw

The Fluke 365 offers a small, detachable jaw—with four feet of coil—that allows you to take current measurements in tight or hard-to-reach places.

- Small jaw with detachable head
- 200 A ac and dc current measurement
- 600 V ac and dc voltage measurement
- True-rms ac voltage and current
- 6000 Ω resistance measurement
- CAT III 600 V safety rating
- Three-year warranty

For information on the 365 Clamp Meter see page 4.

TL175 TwistGuard™ Test Leads

Adjustable tip lengths allow users to work in different CAT rated environments.

- TwistGuard™ test leads have adjustable tip length provides versatility to perform electrical measurements safely in CAT II, III and IV environments
- WearGuard™ insulation: two layers of silicone insulation, red or black on the outside and white on the inside. When the white insulation is visible, the user has a visual warning that the test leads need to be replaced
- Extra-heavy duty strain relief built into both the probe-end and the plug-end withstood over 30,000 bends without failure
- Screw threads at the base of the probes accept threaded Fluke alligator clips
- Universal input plugs are compatible with any test instrument that accepts 4 mm shrouded banana plugs

For information on the new TL175 TwistGuard™ Test Leads see page 59.

Fluke Ti125, Ti110 and TiR125, TiR110

- IR-OptiFlex focus system – focus-free from 1.2 m (4 ft) and beyond, manual focus for closer distances.
- IR-Fusion® technology with Fluke exclusive AutoBlend™ mode
- Electronic compass
- IR-PhotoNotes™ annotation system
- Voice annotation
- Multi-mode video recording
- One-touch laser and torch
- True one-handed operation
- Lightweight .726 kg (1.63 lb)
- Ultra-rugged: 2 m (6.5 ft) drop test
- Color alarms

For information on the new Ti125, Ti110 and TiR125, TiR110 Thermal Imagers see page 46-47.

190 Series II ScopeMeter® Portable Oscilloscopes

Scopes built tough to keep up with you, ScopeMeter® test tool now takes you into CAT IV environments.

- 60 MHz, 100 MHz, 200 MHz bandwidth and sample rates up to 2.5 GS/s
- Oscilloscope, paperless recorder and multimeter with isolated inputs
- CAT III 1000 V/CAT IV 600 V safety rated
- Sealed case, IP 51 rated according to IEC529
- Easy access battery door and Li-ion battery

For information on the new 190 Series II ScopeMeter see page 43.



Applications

- 1 Rooftop Units**
Digital multimeter, power quality analyzer, AirMeter™, thermal imager, infrared thermometer and distance meter.
- 2 Building Envelope**
Thermal imager, infrared thermometer and distance meter.
- 3 Building Controls**
Milliamp clamp, ScopeMeter test tool and digital multimeter.
- 4 Electrical Cabinets**
Digital multimeter, thermal imager, infrared thermometer, clamp meter and power quality analyzer.
- 5 Drives/Motor Controls**
Digital multimeter, power quality analyzer, ScopeMeter test tool, thermal imager and infrared thermometer.
- 6 Motors/Pumps/Fans**
Digital multimeter, power quality analyzer, clamp meter, thermal imager, insulation multimeter and infrared thermometer.
- 7 Furnace/Boilers/Chillers**
Power quality analyzer, AirMeter and thermal imager.
- 8 Ventilation/Air Supply**
Air Meter, electrical tester, digital multimeter and infrared thermometer.
- 9 Switchgear/Transformers**
Power quality analyzer and thermal imager.
- 10 UPS/Generators**
Power quality analyzer, thermal imager and ScopeMeter test tool.

FLUKE TEST TOOLS CATALOGUE

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Fluke Corporation is the world leader in compact, professional electronic test tools.

From industrial maintenance to commercial building operations, Fluke tools deliver the testing and troubleshooting capabilities to keep global commerce and industry up and running.



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



The world’s most advanced clamp meter

The Fluke 381 Clamp Meter combines iFlex flexibility with remote reading capability for the ultimate in innovation and safety.

- Remote display reads measurements up to 30 feet away
- iFlex Flexible Current Probe included, 18 inch circumference
- 2500 A ac current measurement with iFlex
- 1000 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

See specifications chart on page 7.

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



Where rugged meets reliable

The Fluke 365 Clamp Meter offers a small, detachable jaw—with four feet of coil—that makes it easy to take and read measurements in tight or hard-to-reach places.

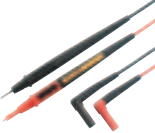
- 200 A ac and dc current measurement
- 600 V ac and dc voltage measurement
- 6000 Ω resistance measurement
- Built-in flashlight
- Large, easy-to-read backlight display
- Three-year warranty

See specifications chart on page 7.

Ordering information

Included accessories	Models	
18-inch iFlex™ Flexible Current Probe, test leads, soft carrying case, instruction card, safety information sheet, five AA alkaline batteries.	FLUKE-381	Remote Display True-rms AC/DC Clamp Meter with iFlex™
Test leads, soft carrying case, instruction card, safety information sheet, five AA alkaline batteries.	FLUKE-365	Detachable Jaw True-rms AC/DC Clamp Meter

Recommended accessories Fluke 381



TL175
TwistGuard™
Test Leads
See page 59



TLK289
Industrial Master
Test Lead Set
See page 57



C345
Large Soft Case
See page 56



FTP-1
SureGrip™ Fused
Test Probe Set
See page 59



i2500-10
10 inch iFlex® Flexible
Current Probe



AC87
Heavy Duty Bus Bar
Clip Set

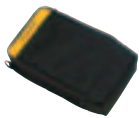
Recommended accessories Fluke 365



FTPL-1
SureGrip™ Fused Test
Probe and Lead Set
See page 59



TL71
Premium
Test Lead Set
See page 59



C43
Small Soft Case
See page 56



TL220
SureGrip™ Industrial
Test Lead Set
See page 57



AC285
SureGrip™ Alligator
Clips
See page 59



TL224
SureGrip™ Silicone
Insulated Test Leads
See page 59

Contact your local distributor for price and availability.
www.fluke.com/au/wtb

Fluke 370 Series Clamp Meters



Fluke 376 with iFlex

Be ready for anything

Our new family 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 new 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, 375 and 374 are compatible with the iFlex® Flexible Current Probe (included with the 376, sold separately for the 375 and 374), and provide increased measurement readings to 1000 A and 1000 V ac and dc.

See specifications chart on page 7 for details per model.



Quick reference guide conversion table

Old model	New model	Feature changes
Fluke 337	Fluke 381	Includes all 337 features plus: <ul style="list-style-type: none"> • Detachable display • CAT IV 600 V, CAT III 1000 V • iFlex 2500 A ac • 1000 V ac/dc • 60 kΩ • Min/Max/Avg
Fluke 337	Fluke 376	Includes all 337 features plus: <ul style="list-style-type: none"> • CAT IV 600 V, CAT III 1000 V • iFlex 2500 A ac • 1000 V ac/dc • mV dc • 60 kΩ • 1000 μF
Fluke 336	Fluke 375	Includes all 336 features plus: <ul style="list-style-type: none"> • CAT IV 600 V, CAT III 1000 V • Optional iFlex 2500 A ac • mV dc • 60 kΩ • 1000 μF • Min/Max/Avg
	Fluke 374	Includes all 336 features (except low pass filter) plus: <ul style="list-style-type: none"> • CAT IV 600 V, CAT III 1000 V • Optional iFlex 2500 A ac • 1000 μF • Min/Max/Avg
Fluke 335	Fluke 374	Includes all 335 features plus: <ul style="list-style-type: none"> • CAT IV 600 V, CAT III 1000 V • Optional iFlex 2500 A ac • 600 A ac/dc • 1000 μF • Min/Max/Avg
	Fluke 373	Includes all 335 features (except inrush) plus: <ul style="list-style-type: none"> • CAT IV 300 V, CAT III 600 V • 1000 μF
Fluke 334	Fluke 374	Includes all 334 features plus: <ul style="list-style-type: none"> • CAT IV 600 V, CAT III 1000 V • Optional iFlex 2500 A ac • True-rms • 600 A ac/dc • 1000 μF • Min/Max/Avg
	Fluke 373	Includes all 334 features (except inrush) plus: <ul style="list-style-type: none"> • CAT IV 300 V, CAT III 600 V • True-rms • 1000 μF
Fluke 333	Fluke 373	Includes all 333 features plus: <ul style="list-style-type: none"> • CAT IV 300 V, CAT III 600 V • True-rms • 600 A ac • 6000 Ω • 1000 μF

Ordering information

Included accessories	Models	
18 inch iFlex™ flexible current probe, test leads, soft carrying case, instruction card, safety information sheet, two AA alkaline batteries.	FLUKE-376	True-rms AC/DC Clamp Meter with iFlex™
Test leads, soft carrying case, instruction card, safety information sheet, two AA alkaline batteries.	FLUKE-375	True-rms AC/DC Clamp Meter
Test leads, soft carrying case, instruction card, safety information sheet, two AA alkaline batteries.	FLUKE-374	True-rms AC/DC Clamp Meter
Test leads, soft carrying case, instruction card, safety information sheet, two AA alkaline batteries.	FLUKE-373	True-rms AC Clamp Meter

iFlex® Flexible Current Probe



Unprecedented measurement flexibility

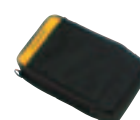
The new iFlex Flexible Current Probe expands the measurement range of select Fluke clamp meters to 2500 A ac while providing increased display flexibility, improved wire access and the ability to measure awkward-sized conductors.

Available in 18 inch and 10 inch coil sizes. Visit www.fluke.com.au for additional specs.

Recommended accessories



TL223
SureGrip™ Electrical
Test Lead Set
See page 59



C43
Small Soft Case
See page 56



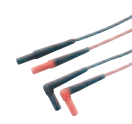
TL175
TwistGuard™ Test Leads
See page 59
For use with the



i2500-18
18 inch iFlex™ Flexible
Current Probe
Models 375 and 376



AC285
SureGrip™ Alligator
Clips
See page 59



TL224
SureGrip™ Silicone
Insulated Test Leads
See page 59

Contact your local distributor
for price and availability.
www.fluke.com/au/wtb

Fluke 320 Series Clamp Meters



Fluke 322

Fluke 321



Get more done

The Fluke 321 and 322 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 environments.

- Precise measurements with 1.8 % basic accuracy
- Resolution up to 0.01 A and 0.1 V
- Measures ac current 40.00 A/400.0 A
- Measures ac and dc volts to 600 V
- Resistance measurement to 400 Ω
- Continuity for quick checking of shorts

See specifications chart on page 7 for details per model.

Fluke 902 True-rms HVAC Clamp Meter



Just for our HVAC pros

HVAC (heating, ventilation, air conditioning) technicians require a service tool that can consistently keep up with their demands. The Fluke 902 expands the existing line of quality Fluke clamp meters by delivering the features necessary to diagnose and repair HVAC systems. Combined with true-rms technology and a CAT III 600 V rating, the Fluke 902 helps technicians do their jobs safely and accurately.

- Designed for HVAC applications with capacitance, dc current (μA) and temperature measurements
- Small body and jaws fit perfectly in your hand and into tight places
- Handy “Display Hold” button keeps measurements on the display
- Meter controls are positioned so current measurements can be done with one hand (index finger on clamp opening lever and thumb on rotary switch)
- Three-year warranty

See specifications chart on page 7.



Ordering information		
Included accessories	Models	
Test leads, soft carrying case, instruction card, safety information sheet, two AA alkaline batteries.	FLUKE-321	Clamp Meter
	FLUKE-322	Clamp Meter
Test leads, temperature probe, soft carrying case, users manual, two AA alkaline batteries.	FLUKE-902	True-rms HVAC Clamp Meter
Soft carrying case, users manual.	FLUKE-360	AC Leakage Current Clamp Meter
Soft carrying case, instruction card, safety information sheet, five AA alkaline batteries.	FLUKE-353	AC/DC True-rms Clamp Meter, 2000 A, amps only
1.5 m silicone rubber test leads, test probes, alligator clips, soft carrying case, six AA batteries, users manual.	FLUKE-355	AC/DC True-rms Clamp Meter, 2000 A

Specialty models

Fluke 360 AC Leakage Current Clamp Meter

The unique jaw design of the Fluke 360 eliminates the influence of adjacent current conductors and measures leakage current down to 1 μA for monitoring of insulation. The ergonomic design of the Fluke 360 ensures easy measuring. The measuring clamp fits into tight spaces and the wide display angle clearly shows the measurement result. The Data Hold button keeps the measured value on the display after removing the clamp for the measured conductor.



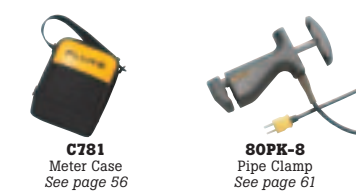
Current measurement

- Automatic ranging within the manually selected mA or A range
- Ranges 3/30 mA and 30/60 A
- Current resolution 1 μA/0.01 mA and 0.01 A/0.1 A
- Frequency range 50 and 60 Hz
- Jaw size: 40 mm (1.55 in) maximum conductor diameter
- Auto power off

Recommended accessories Fluke 320 Series



Recommended accessories Fluke 902



Contact your local distributor for price and availability.
www.fluke.com/au/wtb

Fluke 353/355 AC/DC True-rms Clamp Meters



Fluke 355

Versatile, professional, accurate

Confidently take reliable readings with the true-rms Fluke 355 and 353 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 (2.3 in) 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

Ordering information on page 6.



Fluke 353

Recommended accessories Fluke 355



TL175
TwistGuard™
Test Leads
See page 59



80TK
Thermocouple Module
See page 61



C345
Large Soft Case
See page 56











C1600
Gear Tool Box
See page 56

Specifications – Clamp meters

	Residential/commercial electrical		General purpose				Industrial electrical		HVAC/R	High-end industrial, utility		iFlex accessory	Leakage
	321	322	365	373	374	375	376	381	902	353	355	12500-10/ 12500-18	360
Measurements													
AC current	•	•	•	•	•	•	•	•	•	•	•	•	•
AC voltage	•	•	•	•	•	•	•	•	•	•	•	•	•
Resistance	•	•	•	•	•	•	•	•	•	•	•	•	•
Continuity	•	•	•	•	•	•	•	•	•	•	•	•	•
DC volts		•	•	•	•	•	•	•	•	•	•	•	•
DC current			•	•	•	•	•	•	•	•	•	•	•
True-rms			•	•	•	•	•	•	•	•	•	•	•
Frequency						•	•	•		•	•	•	•
AC + DC voltage											•		
AC + DC current										•	•		
Min/Max/Avg					•	•	•	•	•	•	•	•	•
Temperature									•				
Capacitance				•	•	•	•	•	•				
Special features													
Inrush current mode					•	•	•	•		•	•	•	
Low-pass filter						•	•	•		•	•		
18 inch iFlex Flexible Current Probe					Optional	Optional	Included	Included					
10 inch iFlex Flexible Current Probe					Optional	Optional	Optional	Optional					
Remote display								•					
Flashlight/torch			•										•
Display													
Display hold	•	•	•	•	•	•	•	•	•	•	•		•
Backlight			•	•	•	•	•	•	•	•	•		
Specifications													
Jaw opening	1 in		0.7 in	1.3 in	1.3 in				1.2 in	2.3 in		5.7 in/3.2 in	1.5 in
Max wire size	500 MCM		17 mm (0.67 in)	750 MCM						750 MCM or three 500 MCM			1250 MCM
Current range ac rms	0 to 400.0 A		0 to 200.0 A	0 to 600.0 A				0 to 999.9 A	0 to 600.0 A	0 to 1400 A		0 to 2500 A	0 to 60 A
Accuracy ac current (50/60 Hz)	1.8 % \pm 5 counts		2 % \pm 5 counts								1.5 % \pm 5 counts	3 % \pm 5 counts	1 % \pm 5 counts
AC response	Averaging		True-rms	True-rms	True-rms	True-rms	True-rms	True-rms	True-rms	True-rms	True-rms	True-rms	Averaging
Current range dc			0 to 200 A	0 to 600.0 A				0 to 999.9 A	0 to 200 μ A	0 to 2000 A			
Accuracy dc current			2 % \pm 5 counts	2 % \pm 5 counts					1 % \pm 5 counts	1.5 % \pm 5 counts			
Voltage range ac			0 to 600.0 V				0 to 1000 V				600.0 V	0 to 600.0 V	
Accuracy ac voltage	1.2 % \pm 5 counts		2 % \pm 5 counts	1 % \pm 5 counts	1.5 % \pm 5 counts				1 % \pm 5 counts	1 % \pm 5 counts			
Voltage range dc			0 to 600.0 V				0 to 1000 V				0 to 600.0 V	0 to 1000 V	
Accuracy dc voltage			1 % \pm 5 counts	2 % \pm 5 counts	1 % \pm 5 counts							1 % \pm 5 counts	
Resistance range	0 to 400 Ω		0 to 6000 Ω				0 to 60 k Ω				0 to 9999 Ω	0 to 400 K Ω	
Frequency measurement range							500 Hz				5 to 1000 Hz	500 Hz	

Pick the right digital multimeter for you

Digital multimeter selection guide

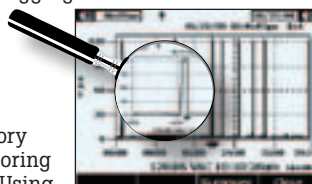
								
Models	Highest accuracy 289	Industrial troubleshooting 87V	IP 67 Industrial 28 II	Built-in thermometer 179	Remote Display 233	Building maintenance 117	HVAC/R 116	Insulation Multimeter 1582
Best for	Data logging	Variable speed drives	Harsh environments	Everyday use	Perform two-man jobs alone	Wide variety of electrical work	HVAC troubleshooting	Troubleshooting and preventive maintenance
Basic features								
True-rms readings	AC+DC	AC	AC	AC	AC	AC	AC	AC
Basic dc accuracy	0.025 %	0.05 %	0.05 %	0.09 %	0.25 %	0.5 %	0.5 %	0.09 %
Wide bandwidth	100 kHz	20 kHz	20 kHz					
Auto/manual ranging	•	•	•	•	•	•	•	•
Digits	4-1/2	4-1/2	4-1/2	3-1/2	3-1/2	3-1/2	3-1/2	
Counts	50000	20000	20000	6000	6000	6000	6000	6000
Measurements								
Voltage ac/dc	1000 V	1000 V	1000 V	1000 V	1000 V	600 V	600 V	1000 V
Current ac/dc	10 A	10 A	10 A	10 A	10 A	10 A	600 µA	400 mA
Resistance	500 MΩ	50 MΩ	50 MΩ	50 MΩ	40 MΩ	40 MΩ	40 MΩ	50 MΩ
Frequency	1 MHz	200 kHz	200 kHz	100 kHz	50 kHz	50 kHz	50 kHz	100 kHz
Capacitance	100 mF	10 mF	10 mF	10 mF	10 mF	10 mF	10 mF	10 mF
Temperature	+1350 °C	+1090 °C	+1090 °C	+400 °C	+400 °C		+400 °C	+500 °C
dB	60 dB							
Conductance	50 nS	60 nS	60 nS					
Duty cycle/pulse width	•	•/-	•/-					
Motor drive measurements/low pass filter	•	•	•					•
Continuity with beeper/diode test	•	•	•	•	•	•	•	•
Low ohms (50 Ω)	•							
Display								
Dual display	•							
Analog bargraph	•	•	•	•		•	•	
Backlight	•	•	•	•	•	•	•	•
Remote display					•			
Data storage and exchange								
Min/Max recording	Time stamp	•	•	•	•	•	•	•
Fast Min/Max	250 µs	250 µs	250 µs					
Display Hold/Auto (Touch) Hold	•	•	•	•	•	•	•	
Relative reference	•	•	•					
PC interface	•							
Data logging	•							
Readings memory	10,000							
Other features								
Automatic selection, LoZ	•					•	•	
Insulation test range								0.01 MΩ to 2 GΩ
Non-contact ac voltage detector						•		
Real-time clock	•							
Overmolded case, integrated holster	•			•	•			
Removable holster		•	•			•	•	•
ToolPak compatibility	•	•	•	•	•	•	•	
Closed case calibration/separate battery door	•	•	•	•	•	•	•	•
Completely sealed/watertight			•					
Automatic power off	•	•	•	•	•	•	•	•
Low battery indication	•	•	•	•	•	•	•	•
Operating temperature ranges	-20 °C, +55 °C	-20 °C, +55 °C	-40 °C, +55 °C	-10 °C, +50 °C	-10 °C, +50 °C	-10 °C, +50 °C	-10 °C, +50 °C	
IP rating	IP 42	IP 30	IP 67			IP 42	IP 42	IP 30
Warranty and electrical safety								
Warranty	Limited lifetime	Limited lifetime	Limited lifetime	Limited lifetime	Three-years	Three-years	Three-years	Three-years
Input alert	•	•	•					
Dangerous voltage indication	•	•	•	•	•	•	•	•
CAT III measurements	1000 V	1000 V	1000 V	1000 V	1000 V	600 V	600 V	1000 V
CAT IV measurements	600 V	600 V	600 V	600 V	600 V			600 V
See page	11	12	10	13	9	14	15	17

Fluke 289 and 287 True-rms Logging Multimeters



Find little problems before they become big ones
The Fluke 289 and 287 are the next generation in high performance industrial logging multimeters.

- 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 before PC download is necessary
- Save, name, and recall multiple logging sessions
- Zoom on trend, provides unprecedented ability to view and analyze TrendCapture data; zoom in up to 14 times
- 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)
- Low-pass filter for accurate voltage and frequency measurements on adjustable speed motor drives and other electrically noisy equipment (289)



TrendCapture displays V dc logged data.



Features

	287	289
Multiple on screen displays	•	•
True-rms ac bandwidth	100 kHz	100 kHz
dBV/dBm	•	•
DC mV resolution	1 μ V	1 μ V
Megohm range up to	500 M Ω	500 M Ω
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	—	•
Lo Z volts	—	•
Lo Pass Filter	—	•
Limited lifetime warranty	•	•

Specifications

Functions	Range and resolution	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 μ A, 5000.0 μ A, 50.000 mA, 400.00 mA, 5.0000 A, 10.000 A	0.15 % 0.7 % (true-rms)
Temperature (excluding probe)	-200.0 $^{\circ}$ C to 1350.0 $^{\circ}$ C (-328.0 $^{\circ}$ F to 2462.0 $^{\circ}$ F)	1.0 %
Resistance	50.000 Ω , 500.00 Ω , 5.0000 k Ω , 50.000 k Ω , 500.00 k Ω , 5.0000 M Ω , 50.00 M Ω , 500.0 M Ω	0.05 %
Capacitance	1.000 nF, 10.00 nF, 100.0 nF, 1.000 μ F, 10.00 μ F, 100.0 μ F, 1000 μ F, 10.00 mF, 100 mF	1.0 %
Frequency	99.999 Hz, 999.99 Hz, 9.9999 kHz, 99.999 kHz, 999.99 kHz	.005 %

Ordering information

Included accessories	Models
Test leads, alligator clips, holster, 9 V battery (installed), users manual on CD, getting started guide.	FLUKE-289 True-rms Industrial Logging Multimeter with TrendCapture
	FLUKE-287 True-rms Electronics Logging Multimeter with TrendCapture
	FLUKE-289/FVF True-rms Industrial Logging Multimeter Combo Kit with TrendCapture
	FLUKE-287/FVF True-rms Electronics Logging Multimeter Combo Kit with TrendCapture

Recommended accessories



TLK289
Industrial
Test Lead Set
See page 57



TLK287
Electronic
Test Lead Set
See page 57



TPAK
Magnetic Meter Hanger
See page 64



i410
AC/DC Current Clamp
See page 63



TL175
TwistGuard™ Test Leads
See page 59



C280
Soft Case
See page 56

Recommended kits



289/FVF kit includes:

- True-rms industrial logging multimeter with TrendCapture
- FlukeView Forms Software and cable
- Temperature probe
- Silicone test lead set
- Alligator clips
- Meter hanging accessory
- Soft case



287/FVF kit includes:

- True-rms electronic logging multimeter with TrendCapture
- FlukeView Forms Software and cable
- Temperature probe
- Modular test leads (red, black)
- Modular test probes (red, black)
- Alligator clips (red, black)
- Soft case

Contact your local distributor for price and availability.
www.fluke.com/au/wtb

Fluke 87V Industrial Multimeter

For industrial productivity



The Fluke 87V has measurement functions, trouble-shooting features, resolution and accuracy to solve problems on motor drives, in-plant automation, power distribution and electro-mechanical equipment.

- Unique function for accurate voltage and frequency measurements on adjustable speed motor drives and electrically noisy equipment (87V and 28 II Ex)
- Large digit display with bright two level backlight makes the 87V significantly easier to read
- Measure 20 A for up to 30 seconds, 10 A continuously
- Optional magnetic hanger for easy setup and viewing while freeing your hands for other tasks (TPAK)
- Expanded capacitance range to 10,000 μ F

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.

Available in intrinsically safe version as the Fluke 28 II Ex (28 II Ex will be available mid 2012).

Also available as 83V average responding multimeter, see below for specifications.



Features

Features	28 II Ex	87V	83V
Peak capture to record transients as fast as 250 μ s	•	•	
Measure up to 1000 V ac and dc	•	•	•
Auto and manual ranging for maximum flexibility	•	•	•
Analog bargraph	•	•	•
Frequency to 200 kHz and % duty cycle	•	•	•
Min/Max and average recording to capture variations automatically	•	•	•
Relative mode to remove test lead resistance from low ohms measurements	•	•	•
Access door for fast battery changes without breaking the calibration seal	•	•	•
Limited lifetime warranty	Three-year	•	•

Specifications

Functions	Range and resolution	Basic accuracy	
		87V	83V
DC volts	600.0 mV, 6.000 V, 60.00 V, 600.0 V, 1000 V	0.05 %	0.1 %
AC volts	600.0 mV, 6.000 V, 60.00 V, 600.0 V, 1000 V	0.7 % (true-rms)	0.5 %
DC current	600.0 μ A, 6000 μ A, 60.00 μ A, 600.0 mA, 6.000 A, 10.00 A	0.2 %	0.4 %
AC current	600.0 μ A, 6000 μ A, 60.00 μ A, 600.0 mA, 6.000 A, 10.00 A	1.0 % (true-rms)	1.2 %
Temperature (excl. probe)	-200 °C to 1090 °C (-328 °F to 1994 °F)	1.0 %	—
80BK Temperature Probe	-40 °C to 260 °C (-40 °F to 500 °F)	2.2 °C or 2 %	—
Resistance	600.0 Ω , 6.000 k Ω , 60.00 k Ω , 600.0 k Ω , 6.000 M Ω , 50.00 M Ω	0.2 %	0.4 %
Capacitance	10.00 nF, 100.0 nF, 1.000 μ F, 10.00 μ F, 100.0 μ F, 9.999 μ F	1.0 %	1.0 %
Frequency	199.99 Hz, 1.9999 kHz, 19.999 kHz, 199.99 kHz	0.005 %	0.005 %

Battery life: 400 hours typical with backlight off. **Size (LxWxD):** 201 mm x 98 mm x 52 mm (7.9 in x 3.8 in x 2 in). **Weight:** 355 g (22 oz).

Ordering information

Included accessories	Models	
Test leads, alligator clips, holster, batteries (installed), temperature probe (87V only), users manual on CD, operator's guide.	FLUKE-87-5	Industrial True-rms Multimeter with Temperature
	FLUKE-83-5	Industrial Multimeter
	FLUKE-28 II Ex	Intrinsically Safe True-rms Multimeter
	FLUKE-87-5/E2	Industrial Electrician's Combo Kit

Recommended accessories



TPAK
Magnetic
Meter Hanger
See page 64



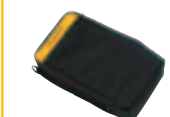
TL220
SureGrip™ Industrial
Test Lead Set
See page 57



TL175
TwistGuard™ Test Leads
See page 56



i400
AC Current Clamp
See page 62



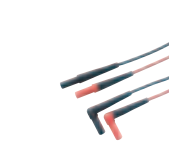
C43
Small Soft Case
See page 56



CXT80
Extreme Case
See page 56



AC285
SureGrip™ Alligator
Clips
See page 59



TL224
SureGrip™ Silicone
Insulated Test Leads
See page 59

Recommended kits



Fluke 87V/E2 Industrial Electrician's Combo Kit

- Industrial multimeter
- 1.5 m silicone test leads
- Removable probes with 4 mm of exposed metal for use on industrial circuits
- Retractable long reach alligator clips
- Meter hanging accessory
- Type K temperature probe
- Soft case

Contact your local distributor for price and availability.
www.fluke.com/au/wtb

Fluke 27 II/28 II Industrial IP 67 Digital Multimeters



The 27 II and 28 II Digital Multimeters are designed for tough work environments. Both meters have IP 67 waterproof and dustproof rating. They both have an extended operating temperature range of -15 °C to + 55 °C (5 °F to 131 °F) and 95 % humidity.

- Unique function for accurate voltage and frequency measurements on adjustable speed motor drives and other electrically noisy equipment (28 II)
- Built-in thermometer conveniently allows you to take temperature readings without having to carry a separate instrument (28 II)
- Hi-resolution 20,000 count display mode (28 II)
- 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
- U.S. Mine Safety and Health Administration (MSHA) approved



Features

	27 II	28 II
Tested to withstand a 3 m (10 ft) drop	•	•
Wide 1000 V measurement range	•	•
True-rms ac voltage and current for accurate measurements on non-linear signals	—	•
Lo 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

Specification		27 II	28 II
DC voltage	Range	0.1 mV to 1000 V	
	Accuracy	0.05 % + 1	0.05 % + 1
AC voltage	Range	0.1 mV to 1000 V	
	Accuracy	0.5 % + 3	0.7 % + 4
DC current	Range	0.1 µA to 10 A	
	Accuracy	0.2 % + 4	0.2 % + 4
AC current	Range	0.1 µA to 10 A	
	Accuracy	1.5 % + 2	1.0 % + 2
Resistance	Range	0.1 Ω to 50 MΩ	
Display counts		6000	6000/19,999
Capacitance		1 nF to 9999 µF	
Frequency		0.5 Hz to 199.99 kHz	
Temperature		-200 °C to +1090 °C	
Low pass filter (measurement on VSD's)		Yes	
Compliance		CAT IV 600 V, CAT III 1000 V	
Measurement method		Avg. responding	True-rms
Power		Three AA batteries	
Battery life		800 hours	
Dimensions (DxWxH)		2.5 in x 3.93 in x 7.8 in	
Weight with holster		698.5 g (1.54 lb)	

Ordering information

Included accessories	Models
Test leads, temperature probe, alligator clips, batteries, holster, users manual.	FLUKE-27-II Industrial Multimeter
	FLUKE-28-II Industrial Multimeter

Specialty models

Fluke 28 II Ex Intrinsically Safe True-rms Multimeter

See page 40 for more information.



Recommended accessories



TPAK
Magnetic
Meter Hanger
See page 64



TLK-225
SureGrip™ Master
Accessory Set
See page 87



PV350
Pressure-Vacuum Module
See page 65



i410
AC/DC Current Clamp
See page 62



CXT80
Extreme Hard Case
See page 56



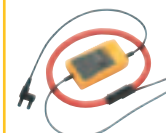
C550
Tool Bag
See page 56



TL175
TwistGuard™
Test Leads
See page 59



TL225
Stray Voltage Adapter
Test Lead Kit



i2000 FLEX
AC Current Clamp
See page 62



C25
Meter Case
See page 56

Contact your local distributor for price and availability.
www.fluke.com/au/wtb

Fluke 179 Digital Multimeter

For maintenance and field service



- The Fluke 179 True-rms Multimeter has the features needed to find most electrical and HVAC problems. Simple to use with significant improvements over the original Fluke 70 Series.
- Wide 1000 V measurement range
 - True-rms for precise measurement of non-linear signals
 - Capacitance, resistance, continuity and frequency
 - Built-in thermometer (Fluke 179 only)
 - Large, easy-to-read display
 - Backlight for work in dimly lit areas (Fluke 177 and 179 only)
 - Min/Max/Avg to record signal fluctuations
 - Display hold and auto hold
 - Manual and automatic ranging

Electrical safety

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

Also available the 175 and 177 multimeters, see below for specifications.



Features			
Features	179	177	175
Max voltage	1000	1000	1000
True-rms	•	•	•
Temperature	•	—	—
Basic dc accuracy	0.09 %	0.09 %	0.15 %
Backlight	•	•	—
Min/Max/Avg	•	•	•
ToolPak meter hanging kit with magnet	Opt	Opt	Opt
Limited lifetime warranty	•	•	•

Specifications		
Functions	Range and resolution	Best accuracy
DC voltage	600.0 mV, 6.000 V, 60.00 V, 600.0 V, 1000 V	± 0.09 % (Models 177 and 179) ± 0.15 % (Model 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 Hz, 99.99 kHz	± 0.1 % of reading
Temperature (Model 179)	–40 °C to +400 °C (–40 °F to +752 °F)	1.0 % of reading

¹All ac voltage and ac current ranges are specified from 5 % of range to 100 % of range.
²10 A continuous, 20 A for up to 30 seconds.
³Voltage frequency is specified from 2 Hz to 100 kHz. Current frequency is specified from 2 Hz to 30 kHz.
Battery life: 200 hours typical for alkaline.
Size (HxWxL): 4.3 cm x 9.0 cm x 18.5 cm (1.7 in x 3.5 in x 7.3 in).

Ordering information		
Included accessories	Models	
Test leads, 9 V battery (installed) and manual. The Fluke 179 comes with an additional temperature probe.	FLUKE-179	Digital Multimeter
	FLUKE-175	Digital Multimeter
	FLUKE-177	Digital Multimeter
	FLUKE-179/1AC-II	Electricians Combo Kit
	FLUKE-179/EDA2	Electronics Combo Kit

Recommended accessories

TPAK
Magnetic Meter Hanger
See page 64

TL81A
Deluxe Electronic Test Lead Set
See page 57

TL175
TwistGuard™ Test Leads
See page 59

I410
AC/DC Current Clamp
See page 62

CXT170
Extreme Hard Case
See page 56

C25
Meter Case
See page 56

Recommended kits

179/EDA2 Electronics Multimeter and Deluxe Accessory Combo Kit

- True-rms digital multimeter
- Electronic test probes
- SureGrip™ silicone test leads
- SureGrip™ heavy duty hook clips
- Type K temperature probe
- Meter hanging accessory
- Soft case

179/1AC-II Electrician's Multimeter and Voltage Tester Combo Kit

- True-rms digital multimeter
- Non-contact voltage detector
- Alligator clips
- SureGrip™ test probes
- Silicone test leads, 1.5 m
- Type K temperature probe
- Meter hanging accessory
- Soft case

Contact your local distributor for price and availability.
www.fluke.com/au/wtb

Fluke 233 Remote Display Digital Multimeter



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 30 feet 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 maximizes 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



Features

Features	
Measure up to 1000 V ac and dc	
Measure up to 10 A (20 A for 30 seconds)	
10,000 μ F capacitance range	
Frequency to 50 kHz	
Resistance, continuity and diode test	
Min/Max and average recording to capture variations automatically	
Three-year warranty	

Specifications

Functions	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	0.1 mA to 10 A
	Accuracy	1.0 % + 3
AC current	Range	0.1 mA to 10 A
	Accuracy	1.5 % + 3
Resistance	Range	0.1 Ω to 40 M Ω
Capacitance		1000 nF to 9999 μ F
Frequency		0.1 Hz to 50.00 kHz
Temperature		-40 °C to +400 °C (-40 °F to 752 °F)
Power		Three AA batteries main body, two AA batteries display module
Battery life		400 hours
Compliance		CAT IV 600 V, CAT III 1000 V
Size (HxWxD)		5.3 cm x 5.3 cm x 19.3 cm (2.08 in x 2.08 in x 7.6 in)
Weight		604 g (1.3 lb)

Ordering information

Included accessories	Models
Test leads, temperature probe, alligator clips, batteries, users manual.	FLUKE-233 Remote Display Multimeter

Recommended accessories



TPAK
Magnetic
Meter Hanger
See page 64



TL220
SureGrip Industrial
Test Lead Set
See page 57



80PK-22
SureGrip™ Immersion
Temperature Probe
See page 60



i400s
AC Current
Clamp
See page 62



80AK-A
Thermocouple Adapter
See page 60



AC285
SureGrip™ Alligator Clips
See page 59



TL175
TwistGuard™ Test Leads
Meter Hanger
See page 59



TLK289
SureGrip Industrial
Test Lead Set
See page 57



TP175
TwistGuard™
Test Probes
See page 59



FTP-1
SureGrip™ Fused
Test Probe Set
See page 59



TL224
SureGrip™ Silicone
Insulated Test Leads
See page 59



C35
Soft Carrying Case
See page 56



C101
Hard Case
See page 56



C781
Meter Case
See page 56

Contact your local distributor for price and availability.
www.fluke.com/au/wtb

Fluke 117 and 115 True-rms Digital Multimeters



Fluke 117

The Fluke 117 Digital Multimeter includes integrated non-contact voltage detection to help get the job done faster. The Fluke 115 Digital Multimeter is the solution for a wide variety of electrical and electronic testing applications.

- VoltAlert™ technology for integrated non-contact voltage detection (117)
- AutoVolt feature for automatic ac/dc voltage selection (117)
- LoZ: Low input impedance prevents false readings due to “ghost voltage” (117)
- Large display and white LED backlight to work in poorly lit areas more effectively
- Compact ergonomic design for one-handed operation
- Min/Max/Avg to record signal fluctuations
- Compatible with optional magnetic hanger (TPAK) for hands free operation
- Current measurement 20 A (30 seconds momentary; 10 A continuous)
- Resistance, continuity, frequency and capacitance



Fluke 115



Features

Features	117	115	113
VoltAlert™ detector	•	—	—
AutoVolt/LoZ	•	—	LoZ
Analog bargraph	•	•	•
Large backlit digital display	•	•	•
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	•	•	•
Three-year warranty	•	•	•

Specifications

Functions	117	115	113	Accuracy
Volts ac/dc	600 V	600 V	600 V	0.5 % + 2
Current ac/dc	10 A	10 A	—	1.0 % + 3
Resistance	40 MΩ	40 MΩ	60 kΩ	0.9 % + 2
Capacitance	1 nF to 9,999 μF	1 nF to 9,999 μF	—	1.9 % + 2
Diode test	Yes	Yes	Yes	—
Frequency	5 Hz to 50 kHz	5 Hz to 50 kHz	—	0.1 % + 2

Ordering information

Included accessories	Models
Test leads, holster, users manual and 9 V battery (installed).	FLUKE-117 Multimeter with Non-Contact Voltage
	FLUKE-115 Multimeter
	FLUKE-113 Utility Meter
	FLUKE-117/322 Electrician's Combo Kit

Specialty model

Fluke 113

- Basic electrical and utility multimeter
- VCHEK™ LoZ low impedance measurement function to simultaneously test for voltage or continuity
- True-rms for accurate ac measurements on non-linear loads
- Record signal fluctuations using the Min/Max function
- Diode and capacitance measurements
- Integral holster with probe holders for easy storage
- Auto and manual ranging for added user functionality
- Meets CAT IV 600 V standards for a higher level of safety



Recommended accessories



TPAK
Magnetic
Meter Hanger
See page 64



TL220
SureGrip Industrial
Test Lead Set
See page 57



TL175
TwistGuard™ Test Leads
See page 59



C115
Soft Carrying Case
See page 56

Recommended kits



117/322 Electrician's Combo Kit

- True-rms digital multimeter with non-contact voltage detection
- Compact clamp meter
- Test lead set
- Magnetic meter hanging strap
- Deluxe carrying case with shoulder strap

Contact your local distributor for price and availability.
www.fluke.com/au/wtb

Fluke 116 and 114 Digital Multimeters

HVAC/R and electrical troubleshooting



Fluke 116



Fluke 114



The Fluke 116 Digital Multimeter was specifically designed for the HVAC professional. The Fluke 114 Digital Multimeter is the best troubleshooting tool for “go/no-go” testing.

- Built in thermometer for HVAC applications (116)
- Microamps to test flame sensors (116)
- AutoVolt: Automatic ac/dc voltage selection (114)
- LoZ: Helps prevent false readings due to ghost voltage
- Min/Max/Avg to record signal fluctuations
- Resistance, continuity, frequency and capacitance
- Large white LED backlight to work in poorly lit areas
- Compact ergonomic design for one-handed operation
- Compatible with optional magnetic hanger (TPAK)

Recommended accessories Fluke 116



80AK-A
DMM Adapter
See page 60



80PK-22
SureGrip™ Immersion
Temperature Probe
See page 60



80PK-8
Pipe Clamp
Temperature Probe
See page 61



80PK-27
SureGrip™ Industrial
Surface Probe
See page 60

Recommended kits



116/322 HVAC Combo Kit

- HVAC multimeter with temperature and microamps
- Compact clamp meter
- Test lead set
- Pipe wrap thermocouple
- Thermocouple adapter
- Thermocouple bead probe
- Meter hanging accessory
- Deluxe carrying case with shoulder strap



116/62 HVAC Combo Kit

- HVAC multimeter with temperature and microamps
- Infrared thermometer
- Test lead set
- Pipe wrap thermocouple
- Thermocouple adapter
- Type K integrated temperature probe
- Magnetic meter hanging strap
- Deluxe carrying case with shoulder strap

Features

Features	116	114
Temperature	•	—
Microamps	•	—
Frequency	•	—
Capacitance	•	—
Diode test	•	—
AutoVolt/LoZ	•	•
Analog bargraph	•	•
Large backlit digital display	•	•
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	•	•
Three-year warranty	•	•

Specifications

Functions	Range and resolution	Best accuracy
Volts ac/dc	600 V	0.5 % + 2
Current ac/dc (116 only)	600.0 µA	1.0 % + 2
Temperature (116 only)	+400 °C	1.0 % + 18
Resistance	40 MΩ	0.9 % + 2
Capacitance (116 only)	1 nF to 9,999 µF	1.9 % + 2
Frequency (116 only)	5 Hz to 50 kHz	0.1 % + 2

Ordering information

Included accessories	Models
Test leads, integrated temperature probe (116 only), holster, users manual and 9 V battery (installed).	FLUKE-116 HVAC Multimeter with Temperature and Microamps
	FLUKE-114 Electrical Multimeter
	FLUKE-116/62 HVAC Combo Kit
	FLUKE-116/322 HVAC Combo Kit

Contact your local distributor for price and availability.
www.fluke.com/au/wtb

Fluke 88V and 77 IV Digital Multimeters

For automotive, field service or bench repair



Fluke 88V Automotive Multimeter

The Fluke 88V Automotive Multimeter is designed to help automotive professionals solve problems faster. This DMM has the measurement functions, troubleshooting features and accuracy to solve virtually any problem with conventional and hybrid vehicles.

- Automotive test functions include dc and ac voltage, resistance and current
- Min/Max recording for logging the highest and lowest readings over time
- Frequency measurements for magnetic sensors and ac/dc frequency signals
- Duty cycle for variable duty cycle signals with selectable trigger, slope and level
- Pulse width for fuel injector on-time measurements
- Conductance testing for secondary ignition coils
- RPM measurements for DIS and conventional ignition systems
- Built-in thermometer



Fluke 77 IV Digital Multimeter

The Fluke 77 IV 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



Specifications

	88V	77IV
V dc	1000 V	1000 V
V ac	100 V	100 V
A dc	10 A	10 A
A ac	10 A	10 A
Resistance	50 MΩ	50 MΩ
Capacitance	9,999 μF	9,999 μF
Frequency	200.00 kHz	99.99 kHz
Duty Cycle	99.9 %	—
Temperature	1994.0 °F (1090 °C)	—
Conductance	60.00 nS	—

Ordering information

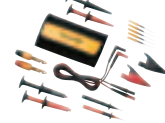
Included accessories	Models
Test leads, users manual and 9 V battery (installed).	FLUKE-88-5 Automotive Multimeter
	FLUKE-77-4 Digital Multimeter
	FLUKE-88-5/A KIT Automotive Multimeter Combo Kit

Recommended accessories

Fluke 88V



TLK281
Automotive
Test Lead Kit
See page 57



TLK282
Deluxe Automotive
Test Lead Kit
See page 57

Fluke 77 IV



TPAK
Magnetic Meter Hanger
See page 64



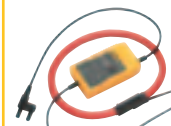
i400
AC Current Clamp
See page 62



TL175
TwistGuard™
Test Leads
See page 59



TLK-225
SureGrip™ Master
Accessory Kit
See page 57



i2000 Flex
AC Current Clamp
See page 62



C35
Soft Carrying Case
See page 56

Recommended kits



88V/A Combo Kit

- Automotive multimeter
- Heat resistant silicone test leads
- Removable sharp point test probes
- Large jaw alligator clips
- Temperature probe
- Inductive pick-up
- Automotive backprobe pins
- Insulation piercing probe
- Meter hanging accessory
- Durable carrying case

Contact your local distributor for price and availability.
www.fluke.com/au/wtb

Fluke 1587 and 1577 Insulation Multimeters



Fluke 1587

Two powerful tools in one

The Fluke 1587 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: 0.01 MΩ to 2 GΩ) (1577: 0.1 MΩ to 600 MΩ)
- Insulation test voltages (1587: 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 only)
- AC/DC voltage, dc millivolts, ac/dc milliamps, resistance (Ω), and continuity
- Capacitance, diode test, temperature, Min/Max, and frequency (Hz) (1587 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 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



Fluke 1577



Specifications

Features	1587	1577	1507	1503
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	0.01 MΩ to 10 GΩ	0.1 MΩ to 2 GΩ
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	0.1 Ω to 20.00 KΩ	0.1 Ω to 20.00 KΩ
Continuity	•	•	—	—
Warranty	Three-year	Three-year	One-year	One-year
Remote probe, test leads, alligator clips	•	•	•	•
Type K thermocouple	•	—	—	—
Rugged, utility hard case	•	•	•	•
Auto power off	•	•	•	•
Page number	17	17	24	24

Ordering information

Included accessories	Models
Remote probe, test leads, alligator clips, Type K thermocouple (1587 only), hard case and users manual.	FLUKE-1577 Insulation Multimeter
	FLUKE-1587 Insulation Multimeter
	FLUKE-1587/ET Advanced Electrical Troubleshooting Kit
	FLUKE-1587/MDT Advanced Motor and Drive Troubleshooting Kit

Recommended accessories



TPAK
Magnetic Meter Hanger
See page 64



i400
AC Current Clamp
See page 62



C100
Universal Carrying Case
See page 56



TL27
Heavy Duty
Test Leads

Recommended kits

Get more value and productivity

Establishing a preventive maintenance program is becoming critical to maintaining the uptime of electrical equipment and can significantly reduce both planned and unplanned downtime. Unplanned downtime costs are difficult to calculate, but are often significant. For some industries, it can represent 1 % to 3 % of revenue (potentially 30 % to 40 % of profits) annually. These kits can help you be proactive and efficient with your maintenance and can save you up to 10 % off the individual price of the tools.



Fluke 1587/ET Advanced Electrical Troubleshooting Kit includes:

- Fluke 1587 Insulation Multimeter
- Fluke i400 Current Clamp
- Fluke 62 Mini Infrared Thermometer



Fluke 1587/MDT Advanced Motor and Drive Troubleshooting Kit includes:

- Fluke 1587 Insulation Multimeter
- Fluke i400 Current Clamp
- Fluke 9040 Phase Rotation Indicator

Contact your local distributor for price and availability.
www.fluke.com/au/wtb

Fluke 1507/1503 Insulation Resistance Testers



Fluke 1507



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

Features

- Automatic calculation of polarization 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



Fluke 1503

Selection guide

Features	1555	1550C	1507	1503	1587	1577
Insulation test voltages 50 V, 100 V, 250 V, 500 V, 1000 V	—	—	•	—	•	—
Insulation test voltages 500 V, 1000 V	—	—	—	•	—	•
Insulation test voltages: User selectable 250 V to 5000 V	—	•	—	—	—	—
Insulation test voltages: User selectable 250 V to 10,000 V	•	—	—	—	—	—
Insulation resistance	2 TΩ	1 TΩ	0.01 MΩ to 10 GΩ	0.1 MΩ to 2 GΩ	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 20.00 KΩ	0.1 Ω to 20.00 KΩ	0.1 Ω to 50 MΩ	0.1 Ω to 50 MΩ
Continuity	—	—	—	—	•	•
Warranty (years)	3	3	1	1	3	3
Remote probe, test leads, alligator clips	•	•	•	•	•	•
Type K thermocouple	—	—	—	—	•	—
Rugged, utility hard case	•	•	•	•	•	•
Auto power off	•	•	•	•	•	•
Page number	25	25	24	24	17	17

Ordering information

Included accessories	Models
Remote probe, silicone test leads, test probes, large alligator clips, holster, users manual.	FLUKE-1507 Insulation Tester
	FLUKE-1503 Insulation Tester
Soft carrying pouch, users manual.	FLUKE-360 AC Leakage Current Clamp Meter

Recommended accessories



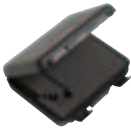
TPAK
Magnetic Meter Hanger
See page 64



TL27
Heavy Duty Test Lead Set



C116
Soft Carrying Case
See page 56



C101
Hard Case
See page 56



360
AC Leakage Current
Clamp Meter
See page 6

1555 and 1550C Insulation Resistance Testers



Powerful troubleshooting and predictive maintenance tools

The new 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.

- Test voltages up to 5 kV (1550C) and 10 kV (1555) provide solutions for all applications
- 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, user-defined label for easy recall
- Long battery life gives the user over 750 tests between changes
- Automatic calculation of Dielectric Absorption (DAR) and Polarization Index (PI) with no additional setup
- Guard system eliminates the effect of surface leakage current on high-resistance measurements
- Large digital/analog LCD for easy viewing
- Capacitance and leakage current measurement
- Ramp function for breakdown testing
- Three-year warranty



Specifications

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	< 200 kΩ	unspecified
	200 kΩ to 5 GΩ	5 %
	5 GΩ to 50 GΩ	20 %
	> 50 GΩ	unspecified
500 V	< 200 kΩ	unspecified
	200 kΩ to 10 GΩ	5 %
	10 GΩ to 100 GΩ	20 %
	> 100 GΩ	unspecified
1000 V	< 200 kΩ	unspecified
	200 kΩ to 20 GΩ	5 %
	20 GΩ to 200 GΩ	20 %
	> 200 GΩ	unspecified
2500 V	< 200 kΩ	unspecified
	200 kΩ to 50 GΩ	5 %
	50 GΩ to 500 GΩ	20 %
	> 500 GΩ	unspecified
5000 V	< 200 kΩ	unspecified
	200 kΩ to 100 GΩ	5 %
	100 GΩ to 1 TΩ	20 %
	> 1 TΩ	unspecified
10000 V (1555 only)	< 200 kΩ	unspecified
	200 kΩ 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 uF to 15.00 uF	± (15 % rdg + 0.03 uF)
Live circuit indicator	30 V to 600 V ac/dc, 50/60 Hz	± (5 % + 2 V)

Ordering information

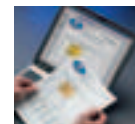
Included accessories	Models
Test leads with alligator clips, ruggedized alligator clips (kits and 1555 only), infrared adapter with interface cable, FlukeView Forms software, ac power cord, soft carrying case, quick reference guide, users manual.	FLUKE-1550C
	FLUKE-1550C/Kit
	FLUKE-1555
	FLUKE-1555/Kit

Recommended accessories

Fluke 1550C



TLK1550-RTLC
Integral Test Lead
and 10 kV Clamp



FVF-Basic
FlukeView Forms Software
See page 65



IR189USB
USB-IR Cable
See page 65



CXT1555
Pelican Carrying Case

Recommended kits

1550C/Kit includes:

- 5 kV insulation resistance tester
- Ruggedized 10 kV alligator clips with integral silicone, dual extruded leads
- Test leads with large alligator clips
- IP67 hard carrying case
- USB-IR cable
- NIST traceable certificate of calibration



1555/Kit includes:

- 10 kV insulation resistance tester
- Ruggedized 10 kV alligator clips with integral silicone, dual extruded leads
- Test leads with large alligator clips
- IP67 hard carrying case
- Logging software
- USB-IR cable
- NIST traceable certificate of calibration



Contact your local distributor for price and availability.
www.fluke.com/au/wtb

Fluke 8846A/8845A/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

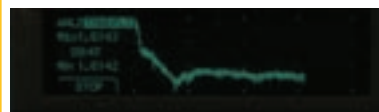
Fluke 8808A 5.5 Digit Multimeter

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

Sample screens

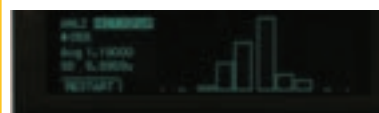
Fluke 8846A/8845A



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



Critical measurement statistics are conveniently displayed together.



Histogram mode can reveal stability or noise problems.



Perform two interrelated measurements like volts and amps, or volts ac and frequency (and 8808A).



Measure sensitive dc currents accurately using unique design that minimizes measurement error due to shunt burden voltages (8808A only).

Specifications

	Fluke 8808A	Fluke 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	

Ordering information

Included accessories	Models
Power cord, test lead set, programmers manual/users manual on CD, FVF-BASIC, FlukeView Forms Software Basic Version.	FLUKE-8846A 6.5 Digit Precision Multimeter, 24 ppm USB memory
	FLUKE-8845A 6.5 Digit Precision Multimeter, 35 ppm
Test leads, line cord, getting started guide, users manual on CD.	FLUKE-8808A 5.5 Digit Multimeter

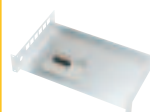
Recommended accessories



TL2X4W-TWZ
2x4-Wire Ohms
Tweezers Test Leads



TL2X4W-PTH
2x4-Wire Ohms
Test Lead



Y8846D
Rack Mount Kit,
Dual

Contact your local distributor for price and availability.
www.fluke.com/au/wtb

Fluke 421D, 416D and 411D Laser Distance Meters



Fluke 421D

Fluke laser distance meters offer the most advanced measuring technology available. Unlike ultrasonic distance meters with laser pointers, these meters use a precision narrow laser beam that helps avoid the common errors caused by extraneous objects near measurement targets.

- Eliminate estimation errors, saving both time and money
- Instant measurement with one-button operation
- Easy targeting with bright laser
- Quick calculation of area (square footage) and volume
- Easy addition and subtraction of measurements
- Two-year warranty



Fluke 416D



Fluke 411D

Specifications

Features	Fluke 421D	Fluke 416D	Fluke 411D
Range (for extended distances, use a target plate)*	0.05 m to 100 m (0.16 ft to 330 ft)	0.05 m to 60 m (0.16 ft to 200 ft)	0.1 m to 30 m (0.33 ft to 100 ft)
Measuring accuracy**	± 1.5 mm (± 0.059 in)	± 1.5 mm (± 0.059 in)	± 3 mm (0.118 in)
Laser class	II	II	II
Laser type	635 nm, < 1 mW	635 nm, < 1 mW	635 nm, < 1 mW
Automatic power off	After 180 seconds	after 180 seconds	after 180 seconds
Continuous measurement	•	•	•
Addition/subtraction	•	•	•
Battery life	up to 5,000 measurements	up to 3,000 measurements	up to 3,000 measurements
LCD illumination	•	•	—
Data locations	20	10	—
Min/Max	•	•	—
Audible feedback	•	•	—
Pythagoras (Indirect measurement)	Full	Full	Simple
Room angle and stakeout	•	—	—
± 45° Tilt sensor/indirect measure	•	—	—
Ingress protection	IP54	IP54	IP40
Dimensions	127 mm x 52 mm x 29 mm (5.00 in x 2.06 in x 1.13 in)	135 mm x 46 mm x 31 mm (5.31 in x 1.81 in x 1.22 in)	123 mm x 50 mm x 26 mm (4.84 in x 1.97 in x 1.02 in)
Weight	125 g (4.40 oz)	110 g (3.88 oz)	150 g (5.29 oz)
Temperature range	Storage	Storage	Storage
	Operation	Operation	Operation
Operating altitude (ISO 9022)	up to 3500 m	up to 3500 m	up to 3500 m
Storage humidity (at 35 °C)	maximum 85 % for 24 h	maximum 85 % for 24 h	maximum 85 % for 24 h
Batteries	AAA (2)	AAA (2)	AAA (2)

- * In favorable conditions (optimal target surface, room temperature) up to 10 m (33 ft). In unfavorable conditions, such as intensive sunshine, very weak reflecting target surface, or large temperature fluctuations, measuring accuracy may deteriorate to approx. ± 0.25 mm/m (± 0.003 in/ft) for distances above 10 m (33 ft).
- ** In favorable conditions (optimal target surface, room temperature) up to 10 m (33 ft). In unfavorable conditions, such as intensive sunshine, very weak reflecting target surface, or large temperature fluctuations, the deviation over distances 10 m (33 ft) can increase by approx. ± 0.15 mm/m (± 0.0018 in/ft).

Ordering information

Included accessories	Models
Two AAA batteries, users manual on CD, quick start guide, nylon carrying case.	FLUKE-421D Laser Distance Meter
	FLUKE-416D Laser Distance Meter
	FLUKE-411D Laser Distance Meter
	FLUKE-411D/62 411D Laser Distance Meter and 62 IR Thermometer Kit
Three self-retaining test probes (black), alligator clip, users manual.	FLUKE-9040 Rotary Field Indicator

Recommended kits



- 411D/62 Kit**
- Fluke 411D Laser Distance Meter
 - Fluke 62 Mini Thermometer
 - Soft pouch for each model

Other products

Fluke 9040 Rotary Field Indicator

The Fluke 9040 is a premium phase rotation tester with a CAT III 600 V rating. The frequency range is from 15 Hz to 400 Hz for demanding applications. The clear liquid crystal display and the holster make it suitable for rough outdoor applications. This instrument is supplied with three unique, expandable test probes that fit most sockets. Includes a two-year warranty.

For more information, go to www.fluke.com.au

Recommended accessories



- AC90**
Replacement Alligator Clip Set for Fluke 9040 and 9062
wide 2.5 cm (1 in) jaw opening

Contact your local distributor for price and availability.
www.fluke.com/au/wtb

Fluke 1625 and 1623

Geo Earth Ground Testers



Fluke 1625



Fluke 1623

The Fluke 1625 and 1623 Earth Ground Testers not only measure ground resistance using the classic “fall of potential test,” but also enable time saving testing using “selective” and “stakeless” methods. “Selective” testing does not require the electrode under test to be disconnected during the measurement, thus increasing safety. The simple “stakeless” method quickly checks ground connections using two current transformers (probes) clamped around the ground conductor under test. Offering “one-button” simplicity, the 1623 is an all-in-one earth ground tester, while the 1625 has extra versatility for more demanding applications.

The 1623 is perfect for performing predictive maintenance checks of commercial and industrial applications. The 1625 is intended for electrical utility or other electrically noisy environments.

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.

Specifications

Features	1625	1623	1621
One-button measurement concept	—	•	•
3-pole earth ground measurement	•	•	•
4-pole earth ground measurement	•	•	—
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 Hz to 128 Hz	•	—	—
Measuring voltage switchable 20 V/48 V	•	—	—
Programmable limits, settings	•	—	•
Continuity with buzzer	•	—	—
Dust/water resistance	IP 56	IP 56	IP 40
Safety rating	CAT II 300 V	CAT II 300 V	CAT II 600 V
Two-year warranty	•	•	•

* In favorable conditions (optimal target surface, room temperature) up to 10 m (33 ft). In unfavorable conditions, such as intensive sunshine, very weak reflecting target surface, or large temperature fluctuations, measuring accuracy may deteriorate to approx. ± 0.25 mm/m (± 0.003 in/ft) for distances above 10 m (33 ft).

** In favorable conditions (optimal target surface, room temperature) up to 10 m (33 ft). In unfavorable conditions, such as intensive sunshine, very weak reflecting target surface, or large temperature fluctuations, the deviation over distances 10 m (33 ft) can increase by approx. ± 0.15 mm/m (± 0.0018 in/ft).

Ordering information

Included accessories	Models
Test leads, alligator clips, users manual.	FLUKE-1625 Advanced GEO Earth Ground Tester
	FLUKE-1623 Basic GEO Earth Ground Tester
Test leads, alligator clips, stake/reel set 4-pole, selective/stakeless clamp set, rugged carrying case, users manual.	FLUKE-1625 KIT Advanced GEO Earth Ground Tester Kit
	FLUKE-1623 KIT Basic GEO Earth Ground Tester Kit

These products are for unpowered installations measuring grounding connections.

Recommended accessories

EI-1623
Selective/stakeless clamp set for 1623

EI-1625
Selective/stakeless clamp set for 1625

ES-162P3
Stake/reel set for 3-pole measurements

ES-162P4
Stake/reel set for 4-pole measurements

EI-162BN
Split Core Transformer for use with Fluke 1625

Recommended kits

Fluke 1625 Kit

- Fluke 1625 tester
- Two test leads
- Four earth ground stakes
- Three cable reels with wire (2-25 m, 1-50 m)
- Two clamps (one inducing, one sensing)
- Rugged carrying case

Fluke 1623 Kit

- Fluke 1623 tester
- Two test leads
- Four earth ground stakes (2 m to 25 m)
- Three cable reels with wire (2 m to 25 m, 1 m to 50 m)
- Two clamps (one inducing, one sensing)
- Rugged carrying case

Contact your local distributor for price and availability.
www.fluke.com/au/wtb

Fluke 1621 Basic Earth Ground Tester

Earth ground tester for resistance measurement



The Fluke 1621 Earth Ground Tester is a rugged, easy-to-use tester for three-pole ground resistance measurements and two-pole ac resistance measurements.

Earth ground resistance is measured by installing earth ground test electrodes, and testing with the Fluke 1621. Earth ground resistance measurements are used to ensure safe operation and reduce power quality problems. With a simple user interface and intuitive functionality, the large, clear LCD display provides high visibility results in daylight or poor lighting conditions. The 1621 is lightweight making it ideal to test for lightning protection levels and periodic check-ups during routine maintenance.

- Three-pole earth resistance measurements
- Two-pole ac resistance measurements
- AC/DC voltage measurement
- Large dual backlit display
- Limit settings for automatic measurement evaluation
- CAT II 600 V
- Two-year warranty

Feature comparison on page 22.

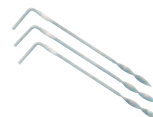
Recommended accessories



Cable Reel 50 m
Ground/earth wire
(162.5 ft)



Cable Reel 25 m
Ground/earth wire
(81.25 ft)



ES-162P3
Stake/reel set for
3-pole measurements



Ground/earth
stake

Recommended kits



Fluke 1621 Tester

- Two cable reels with wire (1-50 m, 1-25 m)
- Three earth ground stakes
- One test lead (red and black 2 m)
- Two alligator clips
- Hard carrying case

Fluke 1630 Earth Ground Clamp Meter



The Fluke 1630 Earth Ground Clamp Meter is able to measure ground loop resistances—using the stakeless testing method. 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 ground stakes. You can also perform earth ground tests in places you have not considered before: inside buildings, on power pylons or anywhere you don't have access to soil.

With the stakeless testing method, the Fluke 1630 Earth Ground Clamp Meter is placed around the earth ground rod or the connecting cable. No earth ground stakes are used at all. A known voltage is induced by one half of the clamp and the current is measured by the other half. The tester automatically determines the ground loop resistance at this grounding connection. Gone are the days of spending time placing and connecting stakes for each earth ground rod on your system—a major time saver.

- Quick and easy use—no earth ground stakes are necessary
- Large, 35 mm (1.35 in) jaw opening
- Measures ground resistance from 0.025 Ω to 1500 Ω
- Measures ground leakage current from 0.2 mA to 30 A
- High and low alarming
- Automatic self calibration
- Rugged carrying case and resistance check loop included
- Two-year warranty

Ordering information

Included accessories	Models
Two measuring leads with alligator clips, 2 m (6 ft), yellow protective holster, 9 V alkaline battery (LR61), users manual, CD.	FLUKE-1621 Basic Earth Ground Tester
1-50 m cable reel, 1-25 m cable reel, 3 earth stakes, 2 test leads, 2 alligator clips, carrying case, yellow protective holster, 9 V alkaline battery (LR61), users manual, CD.	FLUKE-1621 KIT Basic Earth Ground Tester Kit
Rugged carrying case with belt, resistance test loop, 9 V battery, users manual.	FLUKE-1630 Earth Ground Clamp Meter

These products are for unpowered installations measuring grounding connections.

Contact your local distributor for price and availability.
www.fluke.com/au/wtb

Fluke T5 Electrical Testers and VoltAlert™



Fluke T5-1000

Fluke T5 Voltage, Continuity and Current Testers

- 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

Fluke VoltAlert™ Family

The next generation VoltAlert™ ac non-contact voltage testers from Fluke are easy to use. Electricians, maintenance, service and safety personnel, and homeowners can quickly test for energized circuits in the workplace or at home. Certified up to CAT IV 1000 V.



Fluke LVD2

Fluke 1AC-II

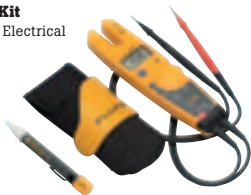
Recommended accessories



Recommended kits

T5-1000 Tester Kit

- T5-1000 Voltage Electrical Tester
- 2AC VoltAlert™ Voltage Detector
- H5 Holster



Specifications

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
Digital display	Yes	Yes
Safety rating	1000 V Overvoltage CAT III	600 V Overvoltage CAT III
Warranty	Two-year	Two-year

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

Functions	1AC-II	1LAC-II	LVD2
Voltage range	90 V ac to 1000 V ac	20 V ac to 90 V ac	90 V ac to 600 V ac
Audible alert	•	•	•
Flashlight	—	—	•
On/Off	•	•	•
Safety rating	CAT IV 1000 V	CAT IV 1000 V	CAT IV 600 V

Ordering information

Included accessories	Models
The T5-1000 and T5-600 come with detachable probes and instruction sheet.	T5-1000 1000 V Voltage, Continuity and Current Tester
	T5-600 600 V Voltage, Continuity and Current Tester
	T5-H5-1AC KIT Voltage, Continuity and Current Tester Kit
	1AC-II VoltAlert™ Voltage Detector
	1AC-II SPK VoltAlert™ Voltage Detector 5 Pack
	1LAC-II VoltAlert™ Voltage Detector
	LVD2 Volt Light

Contact your local distributor for price and availability.
www.fluke.com/au/wtb

Fluke T100 Series Voltage and Continuity Testers



The fast and easy solution to voltage, continuity and resistance measurements

Ideal for site conditions the T100 Series 2-pole testers have a rugged construction and ergonomically formed housing for perfect handling. All models offer a patented three-phase rotation detection system providing quick phase rotation indication. Moreover they have a special electrical torch function for working in low light level environments and have an ingress protection rating of IP65. The T100 Series are compliant with EN 61010-1 and EN61243-3 requirements.

- Resistance measurement (T140)
- Backlight (T140)
- LED Bargraph (T120, T140)
- Display:
 - Fluke T100: 12 LED's
 - Fluke T120: 3½ digit LCD
 - Fluke T140: 3½ digit LCD
- Voltage test
- Optical and acoustical continuity test
- Rotary field indication
- Single pole test for phase detection
- Indication of polarity
- Electrical torch function

Recommended accessories



C33
Soft Carrying Case
See page 56

Specifications

Features	T100	T120	T140
Display		LCD	LCD
Led Bargraph	12 LED's	12 LED's	12 LED's
Backlight			•
Resistance measurement			•
Switchable load			•
Voltage test	•	•	•
Optical and acoustical continuity test	•	•	•
Rotary field indication	•	•	•
Single pole test for phase detection	•	•	•
Indication of polarity	•	•	•
Electrical torch function	•	•	•
Probe tip protection	•	•	•
The voltage display also functions when using discharged – or 0 batteries	•	•	•

	T100	T120	T140
Technical specifications			
Voltage AC/DC	12 V to 690 V	12 V to 690 V	12 V to 690 V
Continuity	0 to 400 kΩ	0 to 400 kΩ	0 to 400 kΩ
Frequency	0 to 400 Hz	0 to 400 Hz	0 to 400 Hz
Phase rotation	100 V to 690 V	100 V to 690 V	100 V to 690 V
Resistance measurement	–	–	Up to 1999 Ω
Response time	< 0.1 s	< 0.1 s	< 0.1 s
Safety specifications			
Electrical safety	EN 61010-1	EN 61010-1	EN 61010-1
Protection type	2	2	2
Overvoltage category	CAT IV 600 V	2	2
General specifications			
Batteries	2 x 1.5 V Micro, IEC LR03	2 x 1.5 V Micro, IEC LR03	2 x 1.5 V Micro, IEC LR03
Case	IP65 (water-jet and dust tight protection)		
Size (HxWxD)	240 mm x 56 mm x 24 mm	240 mm x 56 mm x 24 mm	240 mm x 56 mm x 24 mm
Weight	180 g	180 g	180 g
Warranty	Two-year	Two-year	Two-year

Ordering information

Included accessories	Models
Two 1.5 V batteries and instruction sheet.	T100 Voltage and Continuity Tester UK version GS38 compliant
	T120 Voltage and Continuity Tester UK version GS38 compliant
	T140 Voltage and Continuity Tester UK version GS38 compliant

Contact your local distributor for price and availability.
www.fluke.com/au/wtb

Indoor Air Quality Tools

Tools to help you maintain good IAQ



Fluke 971 Temperature Humidity Meter
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. The Fluke 971 is invaluable for facility maintenance and utility technicians, HVAC-service contractors, and specialists who assess indoor air quality (IAQ). Lightweight and easy to hold, the Fluke 971 is 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.

- Features:**
- 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 (6.6 oz)
 - Temperature range from -20 °C to 60 °C (-4 °F to 140 °F)
 - Relative humidity from 5 % to 95 %
 - Min/Max/Avg/Hold functions
 - Low battery indicator
 - One-year warranty



Fluke 983 Particle Counter
The Fluke 983 Particle Counter measures and displays six channels of particle size distribution. The Fluke 983 holds 5,000 logged samples including date, time, counts, sample volume, temperature and relative humidity. Data is easily downloaded using the included Windows® compatible utility software. The Fluke 983 is invaluable for IAQ investigations, allowing you to determine size distribution of airborne particles or track down a particle source.

- Features:**
- Compact and easy to operate
 - Graphic liquid crystal display with backlight
 - Simple connection to computer or printer
 - Selectable sample time, count data and programmable delay
 - Set sample size to cubic feet or liters, set temperature measurements to °C or °F
 - Data displayed in totalize or concentration modes
 - Automatic turn-off when battery voltage drops below safe operating level
 - Meets JISB9921:1997 and CE standards
 - Battery or ac operation with internal rechargeable battery
 - Protective holster
 - Rugged, hard shell carrying case
 - One-year warranty

Ordering information		
Included accessories	Models	
Certificate of Calibration (NIST), Windows compatible software download utility, DB9 to RS-232 adapter and cable, isokinetic probe, high purity tubing, 1/8 inch hose barb adapter, power supply, zero count filter, protective holster and hard molded plastic case, users manual.	FLUKE-983	Particle Counter
Four AAA alkaline batteries, users manual.	FLUKE-971	Temperature Humidity Meter
	FLUKE-983TPK 220	Thermal Printer Kit, 220 V
	FLUKE-983TPK 120	Thermal Printer Kit, 120 V
	FLUKE-CO-205	Aspirator Kit
	FLUKE-CO-220	Carbon Monoxide Meter
	FLUKE-RLD2	Refrigerant Leak Detector Flashlight

Specialty models

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 center of the UV field for accuracy
- Three LED flashlight with 100,000 hour LED life
- Operating temperature 0 °C to 50 °C
- Four operating modes: flashlight, UV light, laser light, UV/laser light combination
- Convenient detachable key chain carabiner and AAA battery included

CO-220 Carbon Monoxide Meter

- Stand-alone CO meter that does not require a digital multimeter
- Large backlit LCD displays CO levels from 0 ppm to 999 ppm
- 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









CO-205 Aspirator Kit
The CO-205 flue gas sampling accessory kit includes:

- Stainless steel sampling tube
- Aspirator to draw flue sample
- Replaceable particulate filter
- Nose cap for connection to the Fluke CO-210/CO-220

Contact your local distributor for price and availability.
www.fluke.com/au/wtb

Power quality tools

For industrial and commercial applications

									
Basic measurements	Application use	Single-Phase			Three-Phase				
		VR1710	345	43B	1735	1740	430-II	1750	1760
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			•	•	•	•	•	•	•
10 day logging				•	•	•	•	•	•
Waste energy monetization							•		
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 25 for V & I		•	•	•	•	•	•	•	•
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		•		•			•	•	•
Flicker		•				•	•	•	•

Fluke 1735 Three-Phase Power Logger



The Fluke 1735 Three-Phase Power Logger is the ideal electrician or technician's tool for conducting energy studies and basic power quality logging. Set up the 1735 in seconds, with the included flexible current probes and color display. The 1735 logs most electrical power parameters and harmonics and captures voltage events.

- **Ideal for field operation:** Compact, rugged instrument; easy to use, quickly confirm instrument setup with color display of waveforms and trends
- **Full system electrical measurement capability:** Three phases and neutral with included four flexible current probes
- **Prove the benefit of efficiency improvements:** Record power and associated parameters for up to 45 days. Monitor maximum power demand over user-defined averaging periods
- **Check the power quality effects energy saving devices:** Measure harmonics and distortion caused by loads and improve reliability by capturing voltage dips and swells from load switching
- **Easy PC connectivity and operation:** USB interface for plug and play operation; download, view graphs and automatically generate reports with included Power Log software
- **Reliable operation:** Two-year warranty

Recommended accessories

Fluke 1735



I 1A/10A
Mini Current Clamp, PQ4



I 5A/50A
Mini Current Clamp, PQ4



I 20A/200A
Mini Current Clamp, PQ4



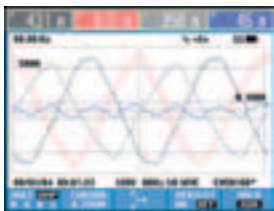
FS3000A/6000A TF-4
36 in, 4 phase Thin Flex

Ordering information

Included accessories	Models
Four flexible current probes (15 A/150 A/3000 A), Power Log software, voltage leads and clips, color localization set, PC interface cable, international ac adapter (115 V/230 V, 50 Hz/60 Hz), soft carrying case, users manual and multi-language manual on CD.	FLUKE-1735 Three-Phase Power Logger

Contact your local distributor for price and availability.
www.fluke.com/au/wtb

Fluke 430-II Series Three-Phase Power Quality Analyzers



The new Fluke 434-II, 435-II and 437-II help locate, predict, prevent and troubleshoot power quality problems in three- and single-phase power distribution systems. Additionally, the Fluke-patented energy loss algorithm, Unified Power Measurement, measures, quantifies and monetizes energy losses due to harmonics and unbalance issues, allowing the user to pinpoint the origin of energy waste within a system.

- **Patented energy loss management:** Classic active and reactive power measurements unbalance and harmonic power and energy are quantified to pinpoint true system energy losses.
- **Realtime PowerWave data capture:** Capture fast rms data, show single cycle rms value to characterize electrical system dynamics (generator start-ups, UPS switching etc.).
- **Highest safety rating in the industry:** CAT IV 600 V/ CAT III 1000 V rated for use at the service entrance
- **Automatic transient mode:** Capture 200 kHz waveform data on all phases simultaneously up to 6 kV
- **Fully Class-A compliant:** Conduct tests according to the stringent international IEC 61000-4-30 Class-A standard intervals for 435-II and 437-II
- **Troubleshoot real-time:** Analyze the trends using the cursors and zoom tools—even while background recording continues
- **Measure all three phases and neutral:** With included four iFlex flexible current probes
- **Monitize energy loss caused by power quality issues**

Recommended accessories



ISsPQ3
3 pack of 5 A precision current clamps



i430-FLEXI-TF-4pk
4 pack of 3000 A thin flexible current probes



C435-II
Water-tight hard case with rollers



GPS430
GPS time synchronization module

Contact Fluke Australia at +61 2 8850 3333 for more information regarding our hands-on training program for the 43X II Three-Phase Power Quality Analyzers.

Energy loss calculator

Useful kilowatts (power available) – Effective kW
Reactive (unusable) power – Reactive kvar
Kilowatts made unusable by unbalance issues – Unbalance kVA
Kilowatts made unusable by harmonics – Distortion kVA
Neutral Current – Neutral
Total cost of wasted kilowatt hours

Energy Loss Calculator			
	Total	Loss	Cost
Effective kW	25.9	U 483	\$ 48.83 /hr
Reactive kvar	21.5	U 175	\$ 17.48 /hr
Unbalance kVA	2.52	U 1.5	\$ 1.15 /hr
Distortion kVA	7.17	U 57.2	\$ 5.72 /hr
Neutral A	29.3	U 57.7	\$ 5.77 /hr
Total			\$ 85.95 /hr

Features

Features	434-II	435-II	437-II
Measures voltage, current, dips, swells, interruptions, harmonics, power, energy loss monetization, frequency, inrush and power inverter efficiency	•	•	•
Fllicker	—	•	•
Transients	—	•	•
Mains signaling	—	•	•
Power wave	—	•	•
Event waveform capture	—	•	•
400 Hz	—	—	•
C1740 Soft Case	•	•	—
C437-II Hard Case with rollers	—	—	•
SD card (Max 32 GB)	8 GB	8 GB	8 GB

Coming autumn 2012

Ordering information (basic versions do not include current probes)

Included accessories	Models
Four thin flexible current probes (i430-TF), five test leads and clips, battery charger, FlukeView software, optical USB cable, color localization set, soft carrying case, 8 GB SD memory card, users manual on CD.	FLUKE-434-II Three-Phase Energy Analyzer
Four thin flexible current probes (i430-TF), five test leads and clips, battery charger, FlukeView software, Power Log software, optical USB cable, color localization set, soft carrying case, 8 GB SD memory card, users manual on CD.	FLUKE-435-II Three-Phase Power Quality and Energy Analyzer
Four thin flexible current probes (i430-TF), five test leads and clips, battery charger, FlukeView software, USB cable, color localization kit, hard carrying case with wheels, 8GB SD memory card, users manual on CD.	FLUKE-437-II 400 Hz Three-Phase Power Quality and Energy Analyzer

Contact your local distributor for price and availability.
www.fluke.com/au/wtb

Fluke 345 Power Quality Clamp Meter

The ideal meter to troubleshoot modern electrical loads



The Fluke 345 is more than a power meter. Combining the functions of a clamp meter, oscilloscope, data logger and digital power meter into one handy device. The Fluke 345 is ideal for working with variable frequency motor drives, high efficiency lighting and other loads using switching electronics.

- **AC/DC current:** Clamp-on measurement of ac current up to 1400 A rms and dc current up to 2000 A without breaking the circuit
- **Highest safety rating:** CAT IV 600 V power analyzer is rated for use at the service entrance
- **Accurate in noisy environments:** Clamp meter performs even with distorted waveforms present on electronic loads with low-pass filter
- **Data logging:** Identify intermittent faults by logging any power quality parameter for minutes, or over a month, including harmonics
- **Troubleshoot harmonics:** Analyze and log harmonics digitally or graphically
- **Inrush current:** Capture and analyze nuisance tripping from 3 seconds to 300 seconds
- **View graphs and generate reports:** Use power analyzer with included Power Log software

Recommended accessories Fluke 345



TP220
Industrial Test Probes
See page 59



AC220
Alligator Clips
See page 59



TLK291
Fused Test Probe Set



C550
Tool Bag
See page 56

Fluke 43B Power Quality Analyzer



The Fluke 43B Power Quality Analyzer performs the measurements you need to maintain power systems, troubleshoot power problems, and diagnose equipment failures. The 43B has 20 storage locations and can store data as well as screens.

- **Basic measurements:** Voltage, current and power harmonics up to 51st, THD
- **Oscilloscope function:** View voltage and current waveforms
- **Transients:** Capture up to 40 voltage transients and waveform events
- **Detailed event capture:** Cursors give time and date of sags and swells
- **FlukeView® software:** Analysis and reporting, supplied with USB connection lead
- **Warranty:** Three-years for analyzer, one-year for accessories



- **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 µs) 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

Ordering information

Included accessories	Models
Test leads, alligator clips, test probes, Power Log software, USB cable, international ac adapter/battery eliminator, soft carrying case, users manual, multi-language manual on CD.	FLUKE-345 Clamp-On Power Meter
Voltage and current probes, FlukeView® software, power quality instructional CD, USB interface cable, line voltage adapter/battery charger, hard case, users manual.	FLUKE-43B Power Quality Analyzer
USB cable, Power Log software CD, universal power cord adapters.	FLUKE-VR1710 Voltage Quality Recorder



Contact your local distributor for price and availability.
www.fluke.com/au/wtb

Fluke Norma 4000 and 5000 Precision Power Analyzers



Fluke Norma 4000

Fluke Norma 4000 and 5000 are ideal for field and laboratory testing

Fluke Norma Analyzers offer easy and straightforward operation with unmatched price performance. Features include: 1 to 6 power phases, 144 mm (5.7 in) color display, harmonic analysis, scope mode, vector diagram display, recorder function, Fluke NormaView PC software and 4 MB RAM data memory.



Fluke Norma 5000

- Choose the right model for your application:** A variety of standard configurations allows users to choose the exact functionality required for their unique application
- Electrical measurement integrity and safety:** Inputs are galvanically isolated to avoid short circuits in all applications, and simultaneous parallel acquisition of all phases allows for accurate viewing of dynamic events dc to 3 MHz/10 MHz bandwidth for reliable measurement precision
- Voltage, current and power harmonics FFT analysis:** To the 40th harmonic, vector diagram, and Digital Oscilloscope (DSO) mode included in the base unit for complete analysis capability
- Complete electrical and mechanical analysis:** PI1 process interface to measure torque and speed with external sensors, plus four analog outputs for easy use on motor and drive applications
- Data download, analysis and report writing with:** Supplied Fluke NormaView PC software

Specifications

Features	1743/1744	1745	1750
Measures common power parameters: V, A, W, VA, VAR, PF, energy, flicker, voltage events, and THD	•	•	•
Measures voltage and current harmonics to the 50 th , unbalance, and mains signaling	•	•	•
Transient capture	—	—	•
PDA support	—	—	•
GPS clock synchronization	—	—	—
UPS ride through	3s	>5 hours	5 min per interruption, 60 min total
Dimensions	170 mm x 125 mm x 55 mm (6.9 in x 5.1 in x 2.2 in)	282 mm x 216 mm x 74 mm (11.5 in x 8.8 in x 3 in)	215 mm x 310 mm x 35 mm (8.5 in x 12.2 in x 3.5 in)
Weight (approx.)	0.9 kg (2 lb)	1.4 kg (3 lb)	6.3 kg (14 lb)

Ordering information

Included accessories	Models
Power supply cable, NormaView PC software, test certificate, calibration values, users manual.	Norma 4000 High Precision Power Analyzer Norma 5000 High Precision Power Analyzer
Four flexible probes 15/150/1500/3000 A with 2 m cable, PQ Log software, RS-232 interface cable and USB adapter, four dolphin clips, test leads for voltages and power supply, color localization kit, carrying bag, test certificate with measurement values, users manual, multi-language manual CD.	FLUKE-1745 Power Quality Logger – Memobox FLUKE-1744 Power Quality Logger – Memobox FLUKE-1743 Power Quality Logger – Memobox

These power quality recorders are sold exclusively through selected power quality representatives. To request a demonstration, or to order, call +61 2 8850 3333 or email questions to sales@fluke.com.au.

Recommended accessories

i5s
AC Current Clamp

32 A
Planar Shunt
(Norma 4000/5000)

150 A
Shunt with Cables
(Norma 4000/5000)

100 A
Shunt with Cables
(Norma 4000/5000)

Fluke 1740 Series Three-Phase PQ Loggers Memobox

The Fluke 1740 Series Three-Phase Power Quality Loggers are instruments for technicians who troubleshoot and analyze power distribution systems. The included PQ Log software quickly assesses the quality of power at the service entrance, substation, or at the load, according to the latest EN50160 standard.

- Plug and play:** Setup in minutes with automatic current probe detection and powering
- Installs inside the cabinet:** Compact, fully-insulated housing and accessories fit easily in tight spaces, next to live power
- Determines the root cause:** Included PQ Log software quickly analyzes trends, creates statistical summaries, and generates detailed graphs and tables
- Measure voltage with premium accuracy:** IEC61000-4-30 Class-A compliant voltage accuracy (0.1 %)



Fluke 1744/1743

Fluke 1745

Contact your local distributor for price and availability.
www.fluke.com/au/wtb

Fluke 1750 Three-Phase Power Recorder

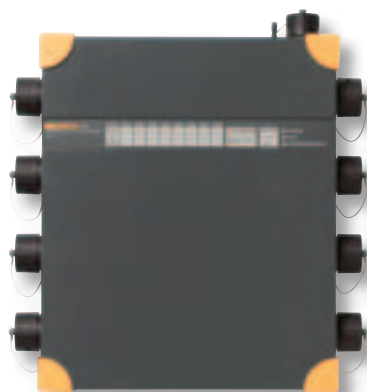
Never miss capturing a disturbance



- **Power quality that meets the standard:** All measurements comply with IEC61000-4-30 standards for correct evaluation of all measured values including voltage, current, power, harmonics, flicker etc.
- **Quick and reliable configuration:** PDA wireless “front panel interface” provides a window into what the instrument is recording, enabling quick and reliable configuration even in awkward test locations
- **Threshold-free set up:** Apply thresholds after data is collected with Fluke Power Analyze Software—no need to worry about missed information due to incorrect setups
- **Captures everything:** Cross-channel and current triggering capture every measurement, on every channel, every time
- **Intuitive PC software:** Easily analyze data and generate reports with automated EN50160 reporting and compliance
- **Measure every parameter:** Voltage and current on three phases, neutral and ground

Contact Fluke Australia at +61 2 8850 3333 for more information regarding our hands-on training program for the Fluke 1750 Three Phase Power Recorder.

Fluke 1760 Three-Phase Power Quality Recorder



- **Fully Class-A compliant:** Conduct tests according to the stringent international IEC 61000-4-30 Class-A standard
- **GPS time synchronization:** 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

Specifications

Features	1760TR	1760	1760TR BASIC	1760 BASIC
Online mode (oscilloscope, transients and events)	•	•	•	•
Fast transient analysis up to 10 MHz	•	—	•	—
Four 600 V voltage probes	•	•	—	—
Four dual-range flexible current probes (1000 A/200 A ac)	•	•	—	—
GPS time sync receiver	•	•	—	—

Ordering information

Included accessories	Models
Acquisition unit, PDA and charger, power plug adapters, four 400 A current probes, five test leads and clips, SD memory card, Fluke Power View and Fluke Power Analyze software, power cord with international plug set, ethernet cable, color localization set, users manual and CD.	FLUKE-1750 Three-Phase Power Recorder
Acquisition unit, voltage and current probes (depending on model orders) Fluke PQ Analyze software, power cord with international plug set, ethernet cable, color localization set, users manual and CD.	FLUKE-1760 Three-Phase Power Recorder
	FLUKE-1760TR Three-Phase Power Recorder
	FLUKE-1760 BASIC Three-Phase Power Recorder
	FLUKE-1760TR BASIC Three-Phase Power Recorder

These power quality recorders are sold exclusively through selected power quality representatives. To request a demonstration, or to order, call +61 2 8850 3333 or email questions to sales@fluke.com.au.

Recommended accessories



3210-PR-TF
1000 A Thin Flexi Clamp



3310-PR-TF
5000 A Thin Flexi Clamp



TPS Flex 24-TF



TPS Clamp 10 A/1 A



TPS VoltProbe 600 V










1750/Case
Soft Carry Bag

Contact your local distributor for price and availability.
www.fluke.com/au/wtb

Pick the right process tool for you

Process Tools Selection Guide

								
	Process mA Clamp Meter	ProcessMeter® Test Tool	Loop Calibrator	Pressure Calibrator	Temperature Calibrator	Precision Multifunction Process Calibrator	Intrinsically Safe Calibrator	Documenting Process Calibrator
Models	773	789	715	719	724	726	725Ex	754
Measure								
V dc	30 V	1000 V	25 V	—	30 V	30 V	30 V	300 V
V ac (true-rms)	—	1000 V	—	—	—	—	—	300 V
Resistance	—	40 MΩ	—	—	3200 Ω	4000 Ω	3200 Ω	11 kΩ
A dc	20.99, 99.9 mA	30 mA, 1 A	24 mA	24 mA	24 mA	24 mA	24 mA	110 mA
A ac	—	•	—	—	—	—	—	—
Frequency	—	20 kHz	—	—	—	15 kHz	10 kHz	50 kHz
Pressure	—	—	—	30 psi, 100 psi	—	• ¹	• ⁵	• ¹
Temperature: RTDs	—	—	—	—	7 types	8 types	7 types	8 types
Temperature: TCs	—	—	—	—	12 types	13 types	12 types	13 types
Source/Simulate								
V dc	10 V	—	20 V	—	10 V	20 V	10 V	15 V
Resistance	—	—	—	—	3200 Ω	4000 Ω	3200 Ω	11 kΩ
mA dc	24 mA	24 mA	24 mA	24 mA	—	24 mA	24 mA	22 mA
mA source; auto step, auto ramp	•	•	•	•	—	•	•	•
Frequency	—	—	—	—	—	15 kHz	10 kHz	50 kHz
Temperature: RTDs	—	—	—	—	7 types	8 types	7 types	8 types
Temperature: TCs	—	—	—	—	12 types	13 types	12 types	13 types
Record								
Min/Max	—	•	—	•	—	—	—	•
Hold	•	•	—	•	—	—	—	•
As found/As left results	—	—	—	—	—	—	—	•
Log data	—	—	—	—	—	—	—	•
Upload data to PC	—	—	—	—	—	—	—	•
Remote operation	—	•	—	—	—	•	—	—
Features								
24 V loop supply	•	•	•	•	•	•	12 V	•
Non-contact mA measurement	•	—	—	—	—	—	—	—
HART communication	—	—	—	—	—	—	—	•
Integrated hand pressure pump	—	—	—	Electric	—	—	—	—
Intrinsically safe (ATEX)	—	—	—	—	—	—	•	—
Warranty	Three-year	Three-year	Three-year	One-year	Three-year	Three-year	Three-year	Three-year
NIST traceable certification	—	—	•	•	•	•	•	•
Accessories³	—	A/B	A/B	C	A/B	A/B	—	—
Pressure enabled ⁴	—	—	—	•	—	•	•	•
See page	33	34	35	39	38	37	40	36

¹Fluke 700 Pressure Modules required.

²Either the internal sensor or a Fluke 700 Pressure Module may be used.

³Accessories: A. Compatible with LockPak B. Compatible with TPAK C. Accepts hanging straps from TPAK D. Optional accessories.

⁴Fluke Process Calibrators in this guide displaying the Pressure Enabled symbol display readings from the 700 Series Pressure Modules.

⁵Fluke 700PEX Pressure Module required.

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Fluke 771, 772 and 773 mA Process Clamp Meters



Fluke 771

Fluke 772

Fluke 773



Use the Fluke 771, 772 and 773 to:

- Measure 4–20 mA signals without “breaking the loop,” save time and money troubleshooting 4–20 mA signals

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

Fluke 771, 772 and 773 mA Process Clamp Meters pay for themselves.

- The more you use them the more money you save
- Measuring 4 to 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

Recommended accessories



TL220
SureGrip Industrial
Test Lead Set
See page 57



C550
Tool Bag
See page 56

Features

	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 mA to 20.99 mA	0.2 % + 5 counts	Measured by clamp
		21.0 mA to 100.0 mA	1 % + 5 counts	—
772 and 773	mA measurement	0 mA to 24.00 mA	0.2 % + 2 counts	Measured in series with test jacks
772 and 773	mA source	0 mA to 24.00 mA	0.2 % + 2 counts	Maximum mA drive: 24 mA into 1,000 ohms
772 and 773	mA simulate	0 mA to 24.00 mA	0.2 % + 2 counts	Maximum voltage 50 V dc
773	Voltage source	0 V dc to 10.00 V dc	0.2 % + 2 counts	2 mA maximum drive current
773	Voltage measure	0 V dc to 30.00 V dc	0.2 % + 2 counts	—

General specifications	771	772	773
Battery	Two 1.5 V, Alkaline, IEC LR6	Four 1.5 V, Alkaline, IEC LR6	
Working hours	20 hours typical	12 hours @ 12 mA source into 500 ohms	
Size (HxWxL)	59 mm x 38 mm x 212 mm (2.32 in x 1.5 in x 8.35 in)	41.3 mm x 76 mm x 248 mm (1.625 in x 3 in x 9.75 in)	
Weight	260 g (9.1 oz)	415 g (14 oz)	
Operating temperature	–10 °C to 50 °C		
IP rating	IP 40		
Warranty	Three-year, one-year on mA clamp assembly and cable		

Ordering information

Included accessories	Models
Soft carrying case, users manual.	FLUKE-771 Milliamp Process Clamp Meter
Test leads, alligator clips and hanging strap, soft carrying case, users manual.	FLUKE-772 Milliamp Process Clamp Meter
	FLUKE-773 Milliamp Process Clamp Meter

Contact your local distributor for price and availability.
www.fluke.com/au/wtb

Fluke 789 and 787 ProcessMeter™ Test Tools



Fluke 789



(Fluke 789 only)

Fluke 789 ProcessMeter

With the Fluke 789 ProcessMeter, process technicians can do a lot more while carrying a lot less.

- 24 V loop power supply
- CAT IV 600V rating
- HART mode setting with loop power (adds 250 ohm resistor)
- Double-sized, dual display
- 20 mA drive into 1200 ohms
- Backlight with two brightness settings
- 0 % to 100 % mA Span Check buttons to toggle between 4-20 mA
- Infrared I/O serial port compatible with FlukeView® Forms Software
- Improved battery power with four AA batteries
- Plus all the proven 787 features

Fluke 787 ProcessMeter

- Simultaneous mA and % of scale readout on mA output
- 25 % Manual Step plus Auto Step and Auto Ramp on mA output
- Min/Max/Avg/Hold/Relative modes
- Externally accessible battery for easy changes



Fluke 787

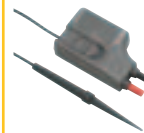
Recommended accessories



TPAK
Magnetic
Meter Hanger
See page 64



TL220
SureGrip Industrial
Test Lead Set
See page 57



80T-150UA
Universal
Temperature Probe
See page 61



TL175
TwistGuard™
Test Leads
See page 59



C115
Soft Carrying Case
See page 56



80PK-8
Pipe Clamp
Temperature Probe
See page 61

Specifications

Measurement function	Best accuracy range and resolution	(% of reading + LSD)	
V dc	400.0 mV, 4.000 V, 40.00 V, 400.0 V, 1000 V	0.1 % + 1	
V dc (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 Ω, 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 test	789: 2.000 V (shows diode voltage drop) 787: 2.400 V (shows diode voltage drop)	2 % + 1 2 % + 1	
Continuity	Beeps for resistance < approx. 100 ohms		
Output function	Range and resolution	Drive capability	Accuracy (% of span)
DC current output (internal battery operation)	0.000 mA to 20.000 mA or 4.000 mA to 20.000 mA (selectable at power-up) Over-range to 24.000 mA	789: 24 V compliance or, 1,200 ohms, @ 20 mA 787: 12 V compliance or, 500 ohms, @ 20 mA	.05 %
DC current simulate (external 24 V loop supply, up to 48 V on 789 only)	0.000 mA to 20.000 mA or 4.000 mA to 20.000 mA, (selectable at power-up) Over-range to 24.000 mA	1000 ohms, @ 20 mA	.05 %
24 V loop supply	789: Minimum 24 V 787: Not available	250 ohms @ 20 mA	> 24 V
Current adjustment modes	Manual: coarse, fine, 25 % and 100 % step (100 % step 789 only) Automatic: slow ramp, fast ramp, 25 % step		

Temperature range of 18 °C to 28 °C, for one year after calibration.

Maximum voltage applied between any jack and earth ground: 1000 V rms. Storage temperature: -40 °C to 60 °C.

Operating temperature: -20 °C to 55 °C. Relative humidity: 95 % up to 30 °C; 75 % up to 40 °C; 45 % up to 50 °C; 35 % up to 55 °C.

Safety: Designed in accordance with EN61010, ANSI/ISA S82.01-1994 and CAN/CSA C22.2 No. 61010.1-92 Over-voltage CAT III.

Size (HxWxL)/weight (787 with holster): 52 mm x 98 mm x 201 mm (2.06 in x 3.86 in x 7.93 in)/638 g (1.4 lb).

Size (HxWxL)/weight (789): 50 mm x 100 mm x 203 mm (1.97 in x 3.94 in x 8.00 in)/600 g (1.3 lb).

Warranty: Three-year.

Ordering information

Included accessories	Models
Test leads, alligator clips, 4 AA alkaline batteries (installed), quick reference guide, users manual, multi-language manual CD.	FLUKE-789 ProcessMeter
Test leads, alligator clips, holster with test lead storage, one 9 V alkaline battery (installed), quick reference guide, users manual, multi-language manual CD.	FLUKE-787 ProcessMeter

Contact your local distributor for price and availability.
www.fluke.com/au/wtb

Fluke 715, 707 and 705 Loop Calibrators

Complete family of volt/mA calibrators



Fluke 715



- 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
- 0-20 mA or 4-20 mA default start up modes

Fluke 715 Volt/mA Calibrator

- Source voltage to 200 mV or 20 V
- Measure loop current (0-20 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

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



Fluke 707

Specifications

Functions	Fluke 705 and 707	Fluke 715
Voltage measurement		
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
Current measurement		
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
Current sourcing		
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	24 V
Voltage sourcing		
Display current and % of span	Yes	mA or %
Auto step, auto ramp	Yes	Yes
Span Check	Yes	Yes
Battery life	18 hours typical, at 12 mA	18 hours typical, at 12 mA
Warranty	Three-year	

Ordering information

Included accessories	Models
Test leads, alligator clips, holster with test lead storage, NIST-traceable calibration report and data, single 9 V alkaline battery, instruction sheet (14 languages).	FLUKE-715 Volt/mA Calibrator
	FLUKE-707 Loop Calibrator
	FLUKE-707 Ex Intrinsically Safe Loop Calibrator
	FLUKE-705 Loop Calibrator

Specialty models

Fluke 707 Ex Intrinsically Safe Loop Calibrator

See page 40 for more information.



Recommended accessories



TL28A
Heavy Duty
Test Lead Set



TL220
SureGrip Industrial
Test Lead Set
See page 67



C550
Tool Bag
See page 56



PV350
Pressure Vacuum
Module
See page 65

Contact your local distributor for price and availability.
www.fluke.com/au/wtb

Fluke 753 and 754 Calibrators

Calibrate/troubleshoot process control instrumentation



Fluke 754

New



753: A complete documenting calibrator

The 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.

- Calibrate temperature, pressure, voltage, current, resistance and frequency instruments
- Built-in procedures for transmitters, square root transmitters, pressure and temperature switches
- Simultaneously measure and source
- Automatically capture calibration results
- Document procedures and results to meet ISO 9000, EPA, FDA, OSHA and other requirements
- Measure/simulate 13 types of thermocouples and eight RTDs
- Store up to 8,000 readings in data logging mode
- Protected against dirt, dust and moisture; unaffected by vibration
- Includes a USB interface
- Operate in English, French, German, Italian and Spanish
- One- and two-year calibration cycles and a three-year warranty (one-year for pressure modules)

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.



Fluke 753

Recommended software

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

Recommended accessories



700Pxx
Pressure Modules
See page 39



750SW
DPC/TRACK2 Software



700PTP-1
Pneumatic Test Pump
See page 61



C799
Field Soft Case
See page 56

Specifications

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	

Summary specifications: best case, mid-range, one year.

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 (2.7 lb)

Size (HxWxD): 245 mm x 136 mm x 63 mm

(9.6 in x 5.4 in x 2.5 in)

Ordering information

Included accessories	Models	
Three sets of stackable test leads, three sets of test probes with three sets of “extended tooth” alligator clips, two sets of hook clips, Li-ion battery pack, battery charger, field soft case, USB communication cable, getting started guide, instruction manual on CD, NIST traceable certificate of calibration, DPC/TRACK2 sample software that enables upload and printing of calibration records. Model Fluke-754 includes HART communication cable.	FLUKE-754	Documenting Process Calibrator-HART
	FLUKE-753	Documenting Process Calibrator
Software media, instruction manual, USB cable.	FLUKE-750SW	DPC/TRACK2 Software

Contact your local distributor for price and availability.
www.fluke.com/au/wtb

Fluke 726 and 725 Multifunction Process Calibrators



Fluke 726 Precision Multifunction Process Calibrator

The Fluke 726 measures and sources nearly all process parameters and can calibrate almost anything. Interpret results without the help of a calculator and store measurement data for later analysis.

- Precise measurement and calibration source performance, accuracies of 0.01 %
- Transmitter error % calculation, interpret calibration results without a calculator
- Memory storage for up to eight calibration results, return stored calibration data from the field for later analysis
- Frequency totalizer and frequency pulse train source mode for enhanced flowmeter testing
- HART mode inserts 250 ohm resistor in mA measure and source for compatibility with HART instrumentation
- Integrated pressure switch test allows you to capture the set, reset and deadband of a switch
- Custom RTD curves, add calibration constants for certified RTD probes for temperature measurement
- Voltage input protection design for improved reliability



Specifications

Measure and source

Functions	Range or type	Resolution	Accuracy	Notes
Voltage	0 to 100 mV 0 to 10 V (source) 0 to 20 V (source) 0 to 30 V (measure)	0.01 mV 0.01 V 0.01 V 0.01 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, 1000 Ω
mV (TC terminals)	-10.00 mV to +75.00 mV	.01 mV	0.01 % , 0.02 % of range + 1 LSD	—
Ohms	15 Ω to 3,200 Ω 5 Ω to 4,000 Ω	0.01 Ω to 0.1 Ω	0.10 Ω to 1.0 Ω 0.015 %	—
Hz - CPM	2.0 to 1,000 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; 5 V p-p 1 V to 20 V p-p squarewave, -0.1 V offset
Loop supply	24 V dc	N/A	10 %	—
T/C	J, K, T, E, L, N, U, XK	0.1 °C, 0.1 °F	to 0.7 °C to 0.2 °C	—
T/C	B, R, S, BP	1 °C, 1 °F	to 1.7 °C to 1.2 °C	—
RTDs	Cu (10) , Ni120 (672) Pt 100, 200, 500, 1000 (385) Pt 100 (3916), Pt 100 (3926)	0.01 °C , 0.01 °F 0.1 °C, 0.1 °F	to 0.15 °C to 0.2 °C	—

Unique 726 specifications are bolded.

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 Ohms to 3200 Ohms (725); 5 Ohms 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 700PXX Modules)	M	M used as S
Frequency; 10 kHz; (15 kHz 726)	—	M or S

M = Measure, S = Source/Simulate

Ordering information

Included accessories	Models
Test leads, test clips, one pair of stackable test leads, product overview manual, users manual in 14 languages on CD.	FLUKE-726 Precision Multifunction Process Calibrator
	FLUKE-726 Ex Intrinsically Safe Precision Multifunction Process Calibrator
	FLUKE-725 Multifunction Process Calibrator

Fluke 725 Multifunction Process Calibrator

- Measure volts, mA, RTDs, thermocouples, frequency and ohms to test sensors and transmitters
- Source/simulate volts, mA, thermocouples, RTDs, frequency, ohms and pressure to calibrate transmitters
- Measure/source pressure using any of 29 Fluke 700Pxx Pressure Modules
- Source mA with simultaneous pressure measurement to conduct valve and I/P tests
- Support flow meter testing with frequency and counts per minute (CPM) functions
- Perform fast linearity tests with auto step and auto ramp features



Intrinsically safe version available (see page 40)

Recommended accessories



TPAK
Magnetic
Meter Hanger
See page 64

80PK-27
Industrial Surface
Temperature Probe
See page 60



700Pxx
Pressure Modules
See page 39



C125
Soft Carrying Case
See page 56

Fluke 712, 714 and 724 Temperature Calibrators



The Fluke 710 Series temperature calibrators deliver outstanding performance, durability and reliability. And with a push-button interface, similar to the multifunction Fluke 750 Series Documenting Process Calibrators, the 710 Series are easy to use. Each calibrator is EMI tolerant, dust- and splash-resistant, and features a removable battery door for quick battery changes.

Fluke 714 Thermocouple Calibrator

- Measure temperature from TC probes
- Simulate TC output
- Operable with nine types of thermocouples
- Calibrate linear TC transmitter with mV source function
- Selectable °F or °C
- 25 % stepping, auto-step and auto-ramp
- Available as accessories: Fluke 700TC1 and TC2 Thermocouple Mini-plug Kits
- Ramp and Step Ramp output functions

Fluke 712 RTD Calibrator

- Compatible with pulsed current transmitters
- Measure temperature from an RTD probe
- Simulate RTD output
- Operates with seven types of RTD
- Measure additional RTDs using ohms measurement function
- Simulate additional RTDs using ohms source function
- °F or °C selectable
- 25 % stepping, auto-step and auto-ramp
- Ramp and Step Ramp output functions



Specifications

Models	Functions	Range	Resolution	Accuracy	Notes
Fluke 712	Measure/simulate RTD	-200 °C to 800 °C (Pt 100-385)	0.1 °C, 0.1 °F	0.2 °C, 0.4 °F (Pt 100-385)	Pt: 100 200 500 1000 (385); Pt 100 (392); Pt 100 (392) JIS; Ni 120 (672)
	Measure/simulate resistance	5 Ω to 4000 Ω	0.1 Ω	0.025 %	—
Fluke 714	Measure/simulate thermocouple	-200 °C to 1800 °C, depending on type (K, -200 °C to 1370 °C)	0.1 °C or °F (1 °C or °F; BRS)	0.5 °C, 0.8 °F (Type K)	9 TC types; J K T E R S B per NIST 175 and ITS-90 L U per DIN 43710 and PTS-68
	Measure/simulate mV	-10 mV to 75 mV	0.01 mV	0.015 % +10 μV	—

General specifications for all Fluke 712 through 718 calibrators.

Maximum voltage: 30 V. Non-operating temperature: -40 °C to 60 °C. Operating temperature: -10 °C to 55 °C. Relative humidity: 95 % (10 °C to 30 °C); 75 % (30 °C to 40 °C); 45 % (40 °C to 50 °C); 35 % (50 °C to 55 °C).

Operating altitude: 3,000 m max. Shock: 1 m drop test. Vibration: Random, 2 g, 5-500 Hz.

Safety: CSA C22.2 No. 1010.1:1992. EMC: EN50082-1:1992 and EN55022:1994 Class B.

Size/weight (HxWxD) (712-717): 187 mm x 87 mm x 32 mm (7.35 in x 3.41 in x 1.25 in) 330 g (12 oz).

Size/weight (HxWxD) (712-717 with holster): 201 mm x 98 mm x 52 mm (7.93 in x 3.86 in x 2.06 in) 600 g (21 oz).

Size/weight (HxWxD) (718): 210 mm x 83 mm x 62 mm (8.25 in x 3.27 in x 2.44 in) 737 g (26 oz).

Size/weight (HxWxD) (718 with holster): 216 mm x 94 mm x 66 mm (8.50 in x 3.72 in x 2.60 in) 992 g (35 oz).

Power: 9 V battery ANSI/NEDA 1604A or IEC 6LR619V alkaline; two batteries in 718.

Battery life: 4 to 20 hours, typical, depending on functions used.

Warranty: Three-year (one-year on pressure pump in Fluke 718).

Ordering information

Included accessories	Models
Test leads, test clips, one pair of stackable test leads, product overview manual, users manual in 14 languages on CD.	FLUKE-724 Temperature Calibrator
Test leads, alligator clips (excluding model 714), holster with test lead storage, single 9 V alkaline battery and instruction sheet (14 languages).	FLUKE-714 Thermocouple Calibrator
	FLUKE-712 RTD Calibrator

Specialty model

Fluke 724 Temperature Calibrator

- Source/measure TCs, RTDs, volts and ohms
- Measure mA while supplying loop power
- 25 % and 100 % stepping, auto-step and auto ramp



Recommended accessories



TL175 (712/724)
TwistGuard™ Test Leads
See page 59



TL220 (712/724)
SureGrip Industrial Test Lead Set
See page 57



80PK-24 (714/724)
SureGrip Air Temperature Probe
See page 60



80PK-3A (712/724)
Surface Probe
See page 60



TPAK
Magnetic Meter Hanger
See page 64



AC220
SureGrip Alligator Clips
See page 59



C101 (724)
Meter Hard Case
See page 56



C25 (712/714)
Large Soft Case
See page 56

Contact your local distributor for price and availability.
www.fluke.com/au/wtb

Fluke 717, 718 and 719 Pressure Calibrators

Accurate and rugged, temperature calibration tools



Fluke 719



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-pressurization—set 'pump to' pressure values
- Two ranges, 30 psi and 100 psi

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 717 Pressure Calibrators

- Measure up to 10,000 psi/690 bar sensor (10000G model)
- Compatible with non-corrosive gases and liquids

718 and 719

- Precision vernier for fine pressure adjustment
- Variable release rate bleed valve for controlled pressure release



Fluke 718



Fluke 717

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

Specifications

Models	Range	Resolution	Comment
717-1	+/- 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
718-1G	-12 to 15 psi, -83 to 103 kPa	0.001 psi, 0.01 kPa, 0.01 in H ₂ O	—
717-30G	-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
718-30G* and 719-30G	-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
717-100G	-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
718-100G* and 719-100G	0-500 psi, 0-3450 kPa	0.01 psi, 0.1 kPa	Compatible with non-corrosive gases and fluids
717-500G	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 39. **Warranty:** Three-year on calibrator, one-year on pump.

Ordering information

Included accessories	Models
Test leads, alligator clips, holster, test hose (719), one 9 V alkaline battery (two 9 V batteries in 718 and 719), safety sheet.	FLUKE-719 30G Electric Pressure Calibrator
	FLUKE-718 1G Pressure Calibrator
	FLUKE-718 100US Pressure Calibrator
	FLUKE-717 1G Pressure Calibrator
	FLUKE-717 15G Pressure Calibrator
	FLUKE-717 100G Pressure Calibrator
	FLUKE-717 500G Pressure Calibrator
	FLUKE-717 1500G Pressure Calibrator
	FLUKE-717 5000G Pressure Calibrator
	FLUKE-717 10000G Pressure Calibrator
	FLUKE-719-100G Electric Pressure Calibrator
	FLUKE-718 30US Pressure Calibrator
	FLUKE-718 300G Pressure Calibrator
	FLUKE-717 30G Pressure Calibrator
	FLUKE-717 300G Pressure Calibrator
	FLUKE-717 1000G Pressure Calibrator
	FLUKE-717 3000G Pressure Calibrator
	FLUKE-717 10000G Pressure Calibrator

For a full list of Fluke 700 Pressure Modules, visit www.fluke.com.au

For more information, go to www.fluke.com.au

Pressure modules

Fluke 700 Series Pressure Modules

- 29 pressure modules
- 8 intrinsically safe pressure modules*
- Ranges from 1.000 in H₂O (0.2491 kPa) to 10,000 psi (68.948 MPa)
- Gage, differential, dual (compound), absolute and vacuum modules
- Rugged cases protect the modules from harsh environments
- Full-accuracy performance from 0 °C to 50 °C



*For use with 718Ex and 725Ex only



Fluke Process Calibrators in this catalog displaying the Pressure Enabled symbol display readings from the 700 Series Pressure Modules.

Recommended accessories



700ILF
In-Line Filter
See page 61



700LTP-1
Low Pressure
Test Pump
See page 61



700HTP-2
Hydraulic Test Pump
See page 61



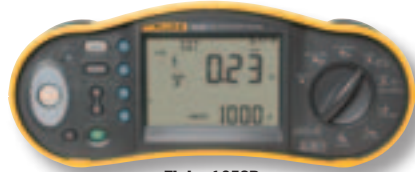
C116
Large Soft Case
See page 56

Contact your local distributor for price and availability.
www.fluke.com/au/wtb

Fluke 1652C, 1653B and 1654B Installation Testers



Fluke 1654B



Fluke 1653B



Fluke 1652C

Safer, easier installation testing

These 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, HD 384 and all relevant local standards.

- Fast high current loop test
- Variable RCD current mode for customized settings
- PASS/FAIL indication for RCD tests
- Select voltage measurement between L-N, L-PE and N-PE
- Zero adapter for easy test lead compensation, available as new accessory and also included with standard scope of supply
- Extended documentation mode (UK only)
- Extended Memory (1653B, 1654B)
- Loop and Line Resistance – mΩ resolution (1654B)
- Test smooth dc sensitive RCDs {Type B} (1654B)

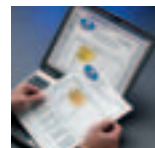
Recommended accessories

2061380
Australian 3 pin test lead
(image not available)

2040349
165X fuse part number
(image not available)



ES165X
Earth Spike Test Kit
(1653 only)



FVF-SC2
FlukeView Software
(1653 only)

Specifications

	Fluke 1652C	Fluke 1653B	Fluke 1654B
Measurement functions			
Voltage and frequency	•	•	•
Wiring polarity checker	•	•	•
Insulation resistance	250 V, 500 V, 1000 V	50 V, 100 V, 250 V, 500 V, 1000 V	50 V, 100 V, 250 V, 500 V, 1000 V
Continuity			
Loop and line resistance	•	•	•
Loop and line resistance-mΩ resolution	•	•	•
PEFC/PSC (fault/short-circuit current)	•	•	•
RCD tripping time	•	•	•
RCD tripping current level	•	•	•
Ramp test	•	•	•
Automatic ROD test sequence	•	•	•
Test dc-sensitive RCDs (type A)	•	•	•
Test dc-sensitive RCDs (type B)	•	•	•
Earth resistance	•	•	•
Phase sequence indicator	•	•	•
Other features			
Self-test	•	•	•
EN 61557/VDE 0413 compliant	•	•	•
Illuminated display	•	•	•
Live voltage indicator	•	•	•
Battery indicator and battery test function	•	•	•
Memory, interface			
Memory	•	•	•
Extended memory	•	•	•
Computer interface	•	•	•
Time stamp (software enabled)	•	•	•
Software (optional)	•	•	•

Ordering information

Included accessories	Models
TL165X/STD Standard Test Lead Set, TP165X Remote Control Probe and Lead ¹ , Zero Adapter, mains test cord, 6 AA cell batteries, C1600 Hard Carrying Case, padded carrying strap, quick reference guide, users manual on CD-ROM.	1652C Multifunction Installation Tester
	1653B Multifunction Installation Tester
	1654B Multifunction Installation Tester

Contact your local distributor for price and availability.
www.fluke.com/au/wtb

Fluke ScopeMeter® Test Tools

Handheld oscilloscopes for industrial, instrumentation and electronic applications



Fluke 190-204

Fluke 190-202



Fluke 124

ScopeMeter test tools are the rugged, safe choice for a wide variety of field service installation and maintenance applications. These handheld battery-powered oscilloscopes are easy to use, with a built-in multimeter, paperless recording and analysis capabilities. They are rugged and IP 51 dust- and drip-proof rated to IEC529 standards to withstand harsh environments.

The new 190 Series II, with two and four isolated input channels and 60 MHz, 100 MHz or 200 MHz bandwidth, are ideal for industrial electronics, automation, process control, and industrial machinery applications measuring three-phase power electronic circuits, or three-axis control systems comparing and contrasting multiple signals simultaneously. These tools are safety rated at CAT III 1000 V/CAT IV 600 V with longer battery life and up-to-date USB interface technology.

The 120 series with 20 MHz or 40 MHz bandwidth, dual DMMs and paperless recording is the optimal choice for electrical and electro-mechanical applications, safety rated to IEC EN61010-1 CAT III 600 V.

For Industrial network applications, Fluke 125 or 225C add industrial network physical layer analog measurement algorithms to validate the network bus health.

**Connect
and
View™**

Selection guide

	120 Series		ScopeMeter with Bus Health		190 Series II				
	123	124	125	225C	190-062	190-102	190-202	190-104	190-204
Bandwidth									
20 MHz	•	—	—	—	—	—	—	—	—
40 MHz	—	•	•	—	—	—	—	—	—
60 MHz	—	—	—	—	•	—	—	—	—
100 MHz	—	—	—	—	—	•	—	•	—
200 MHz	—	—	—	•	—	—	•	—	•
Input channels									
2Ch + 2 DMM	•	•	•	—	—	—	—	—	—
2Ch + DMM	—	—	—	•	•	•	•	—	—
4Ch	—	—	—	—	—	—	—	•	•
Isolated inputs	—	—	—	•	•	•	•	•	•
Triggering									
Connect-and-View	•	•	•	•	•	•	•	•	•
Advanced triggering	—	—	—	•	•	•	•	•	•
Advanced measurement function									
Cursors	—	•	•	•	•	•	•	•	•
TrendPlot	•	•	•	•	•	•	•	•	•
ScopeRecord	—	—	—	•	•	•	•	•	•
100 screen replay	—	—	—	•	•	•	•	•	•
Industrial BusHealth	—	—	•	•	—	—	—	—	—
Harmonics	—	—	•	—	—	—	—	—	—
FFT	—	—	—	•	•	•	•	•	•
Power measurements	—	—	•	•	•	•	•	•	•
Waveform mathematics	—	—	•	•	•	•	•	•	•
EN61010-1 safety									
CAT II 1000 V	—	—	—	•	•	•	•	•	•
CAT III 600 V	•	•	•	•	•	•	•	•	•
CAT III 1000 V	—	—	—	•	•	•	•	•	•
CAT IV 600 V	—	—	—	—	•	•	•	•	•
Interface									
Optical RS-232	•	•	•	•	—	—	—	—	—
USB PC interface	Opt	Opt	Opt	Opt	•	•	•	•	•
USB memory port	—	—	—	—	•	•	•	•	•
Power									
Ni-MH	•	•	•	•	—	—	—	—	—
Li-Ion	—	—	—	—	•	•	•	•	•
Battery (hours)	7	7	7	4	4 (opt 8)	4 (opt 8)	4 (opt 8)	7	7
General specifications									
Size (HxWxD)	232 mm x 115 mm x 50 mm (9.2 in x 4.5 in x 2 in)				270 mm x 190 mm x 70 mm (10.5 in x 7.5 in x 2.8 in)				
Weight	1.2 kg (2.6 lb)				2.2 kg (4.8 lb)				

Fluke 123 and 124 ScopeMeter® Test Tools



Three-in-one simplicity

The compact ScopeMeter 123 and 124 are the rugged solution for industrial troubleshooting and installation applications. Each is a truly integrated test tool, with oscilloscope, multimeter and “paperless” recorder in one affordable, easy-to-use instrument. Find fast answers to problems in machinery, instrumentation, control and power systems.

- Dual-input 40 MHz or 20 MHz digital oscilloscope
- Two 5,000-count true-rms digital multimeters
- A dual-input TrendPlot™ recorder
- Connect-and-View™ trigger simplicity for hands-off operation
- Shielded test leads for oscilloscope, resistance and continuity measurements
- Up to seven hours battery operation
- CAT III 600 V safety certified
- Optically isolated RS-232 interface
- IP 51 rated, rugged compact case

Connect-and-View™ triggering for an instant, stable display

Scope users know how difficult triggering can be. Incorrect settings show unstable and sometimes incorrect results. Fluke’s unique Connect-and-View recognizes signal patterns and automatically and continuously sets up correct triggering. It provides a stable, reliable and repeatable display of virtually any signal.

Use TrendPlot™ to help find intermittents

The toughest faults to find are those that happen only once in a while—intermittents. They can be caused by bad connections, dust, dirt, corrosion or simply broken wiring or connectors. Other factors, like line outages and sags, can also cause a machine to stop. You may not be around to see it—your Fluke ScopeMeter will. In this “paperless recorder” mode, you can plot the minimum and maximum peak values and average over time—up to 16 days.

Battery powered mobility

Up to seven hours of battery operation frees you from mains outlets for true on-the-move working. The rugged and drip proof case assures long life and reliable operation in the harshest industrial environments.

Safety rated

The ScopeMeter 123 and 124 are safety rated for measurements on CAT III 600 V rms industrial power systems with the included test leads.

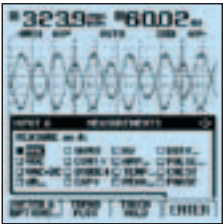
Connect-and-View captures even the most complex motor drive signals.



Use TrendPlot to help find intermittents, fast.



Dual input oscilloscope, meter and paperless recorder.



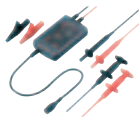
Recommended accessories



AC120
Alligator Clip Set



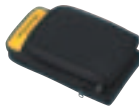
i30s
AC/DC Current Clamp
See page 63



DP120
Differential Probe Kit



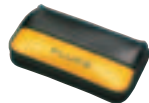
i410
AC/DC Current Clamp
See page 62



C125
Soft Carrying Case
See page 56



C195
Tool Bag
See page 56



C75
Accessory Case
See page 56



i5s
AC Current Clamp

Recommended kit



- SCC 120 Kit**
- Software
 - Cable
 - Hard carrying case

Ordering information

Included accessories	Models
Test lead set, alligator clips, hook clips, battery pack, battery charger/line voltage adapter, BNC adapter, getting started guide, users manual on CD.	FLUKE-124S Industrial ScopeMeter, 40 MHz, with SCC120 kit
	FLUKE-124 Industrial ScopeMeter, 40 MHz
	FLUKE-123S Industrial ScopeMeter, 20 MHz, with SCC120 kit
	FLUKE-123 Industrial ScopeMeter, 20 MHz
Test lead set, alligator clips, hook clips, battery pack, battery charger/line voltage adapter, BNC adapter, OCAUSB optically isolated RS-232 adapter/cable, FlukeView for ScopeMeter Windows® software, hard carrying case, getting started guide, users manual on CD.	SCC120 Kit containing FlukeView software for Windows, USB interface adapter/cable and hard case

Contact your local distributor for price and availability.
www.fluke.com/au/wtb

Fluke 190 Series II ScopeMeter® Test Tools

See more, fix more, in harsh industrial environments



Fluke 190-204



- 5,000 count multimeter 2 channel models or 999 count volt meter 4 channel models
- Li-Ion battery and easy-access battery door for extended usage
- Isolated USB host port for direct data storage to a USB memory
- USB-B-device port for PC connectivity
- Sealed compact case weighing only 2.2 kg (4.8 lb)

Goes where ordinary scopes can't go

Safety rated for industrial applications, the 190 Series ScopeMeter portable oscilloscopes combine rugged portability with high performance to take you all the way from troubleshooting microelectronics to power electronic applications.

The first high-performance four-channel scopes built for harsh industrial environments

For the first time, plant maintenance engineers and technicians can take a high-performance four-channel scope into the harsh world of industrial electronics. The new Fluke 190 Series II is the only portable oscilloscope with two or four independent isolated input channels, a CAT III 1000 V/CAT IV 600 V safety rating, and sealed case IP 51 dust-proof and drip-proof rated.

- 60 MHz, 100 MHz or 200 MHz bandwidth
- 2 or 4 independent isolated inputs, up to 1000 V
- High-speed sampling: Up to 2.5 GS/sec
- Deep memory: 10,000 points per trace waveform capture
- CAT III 1000 V/CAT IV 600 V safety rated for high voltage environments

Automatic capture and replay of 100 screens

ScopeMeter users know how frustrating it is to see a one-time anomaly flash by—never to be seen again. Not with the ScopeMeter 190 Series II. Now you can look back in time with a touch of the replay button. In normal use, the instrument continuously memorizes the last 100 screens, on a first in—first out basis. At any moment you can “freeze” the last 100 screens and scroll through picture-by-picture or replay as a “live” animation. Cursors can be used for further analysis.

ScopeRecord™ mode for high-resolution waveform recording up to 48 hours

ScopeRecord memory stores up to 27,000 data points per channel, capturing fast intermittents and glitches as short as 8ns.

- Stores events like motion profiles, UPS, power supply and motor start-ups

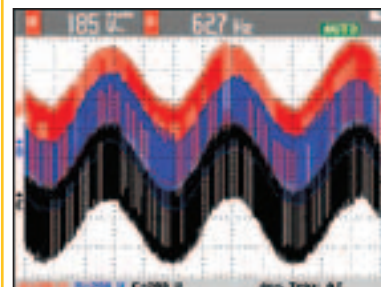
- In Stop On Trigger mode, ScopeMeter automatically recognizes a power failure and stores the waveform data
- With the waveform zoom (up to 100x) you can look at the smallest details, like individual power cycles

TrendPlot™ Paperless Recorder

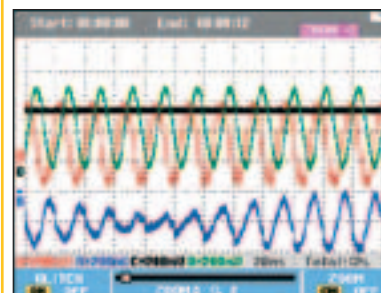
The toughest faults to find are those that happen once in a while. These intermittents can be caused by bad connections, dust, dirt, corrosion, or simple broken wiring or connectors. Line outages, sags or starting and stopping of a motor can also cause a machine to stop. You may not be around when it happens, but the Fluke ScopeMeter will.

- Plot minimum and maximum plot values and average over time up to 16 days
- Plot any combination of voltages, amps, temperature, frequency and phase for all four inputs, all with time and date stamp to pinpoint faults

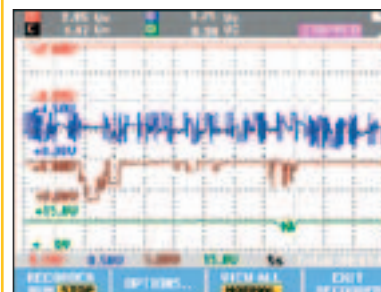
Sample screens



Connect-and-View™ captures even the most complex motor drive signals.



Use the 27,000 points memory of ScopeRecord and zoom in for maximum detail.



Cursors and zoom features of the Fluke 190 Series II help you to analyze the captured TrendPlot.



5,000 count dedicated digital multimeter on 2 channel models.

Ordering information

Included accessories	Models
Battery charger/main adapter, Li-Ion battery pack, voltage probe sets (each set includes ground lead, hook clip, ground spring and probe tip insulation sleeve, test leads, handstrap affixed to instrument, handstrap (user selectable for left- or righthand use), multi-language users manuals on CD-ROM, FlukeView® demo package (with restricted functionality), USB interface cable for PC connectivity.	FLUKE-190-204 Color ScopeMeter, 200 MHz, 4 channels
	FLUKE-190-204/S Color ScopeMeter, 200 MHz, 4 channels, with SCC-290 kit included
	FLUKE-190-104 Color ScopeMeter, 100 MHz, 4 channels
	FLUKE-190-104/S Color ScopeMeter, 100 MHz, 4 channels, with SCC-290 kit included
	FLUKE-190-202 Color ScopeMeter, 200 MHz, 2 channels plus DMM/Ext.input
	FLUKE-190-202/S Color ScopeMeter, 200 MHz, 2 channels plus DMM/Ext.input, with SCC-290 kit included
	FLUKE-190-102 Color ScopeMeter, 100 MHz, 2 channels plus DMM/Ext.input
	FLUKE-190-102/S Color ScopeMeter, 100 MHz, 2 channels plus DMM/Ext.input, with SCC-290 kit included
	FLUKE-190-062 Color ScopeMeter, 60 MHz, 2 channels plus DMM/Ext.input
	FLUKE-190-062/S Color ScopeMeter, 60 MHz, 2 channels plus DMM/Ext.input, with SCC-290 kit included

Fluke 225C and 125 ScopeMeter® Test Tools



Fluke 225C



Fluke 125

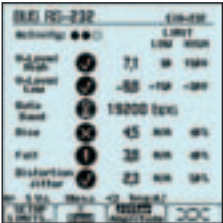
The Fluke 225C and 125 are the instruments of choice for maintenance specialists who deal with industrial buses and networks as well as general electronics. You can verify the electrical integrity of your bus and network physical layer, performing tests and getting answers to digital signalling issues quickly and easily.

These instruments offer all the functions found in the 120 or 190C Series, plus added measurement capabilities for industrial networks such as Profi®, Foundation™, Modbus®, CAN-bus, AS-i bus, RS-485 and more.

Bus Health physical layer application measures critical digital signal amplitude, time and noise or distortion characteristics. Find errors like signal attenuation and distortion caused by improper cable connections, bad contacts, incorrect grounding, and missing or superfluous terminators. Signal integ-

egrity analysis is extended with the eye-pattern mode. A waveform display is built over successive signal passes to give you a visual indication of overall signal quality, noise levels, and signal jitter.

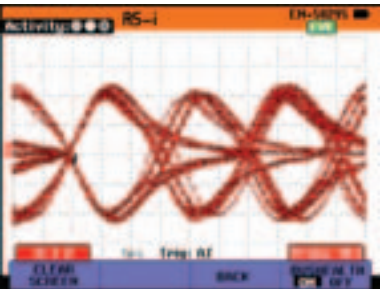
- Critical bus physical layer amplitude, time and noise or distortion measurements
- Compare measurement results to limits defined by the industry standard
- Display clear “good”, “weak” or “bad” indicators.
- Eye pattern mode to visually inspect waveforms quality of transmitted data packets
- The Fluke 225C with isolated inputs perform floating differential measurements on balanced two wire bus systems
- 125 dual input measurements performed relative to common reference point
- BHT190 breakout adapter set DB9, RJ45 and M12 simplify probing onto bus signal connectors



Sample screens



Measure critical signal characteristics, compare to industry standard.



Use “eye” diagrams to inspect for issues like signal noise, distortion and other common disturbances.

Recommended accessories

BHT190
Bus Health Test Adapter,
DB-9 and M-12

i30S
AC/DC
Current Clamp
See page 63

i410
AC/DC Current Clamp
See page 62

i5s
AC Current Clamp

AS400
Probe Accessory Set

VPS420-R
Voltage Probe Set

Specifications

	Fluke 225C (200 MHz 199C)	Fluke 125 (40 MHz 124)
Dual isolated inputs for differential bus system probing	•	
On screen bus system probe connection diagrams	•	
Bus Health Physical Layer Standards	•	•
AS-i	•	•
CAN-bus (ISO-11898) (DeviceNet)	•	•
Interbus S (EIA-485)		•
ControlNet (61158 type 2)		•
Modbus (EIA-232, EIA-485)	•	•
Foundation Fieldbus H1 (61158 type 1)	•	•
Profibus DP (EIA-485), PA (61158 type 1)	•	•
Ethernet 10Base2 (coax), 10BaseT (UTP)		•
Ethernet 100BaseT (100 Mb/s)	•	
RS-232 (EIA-232), RS-485 (EIA-485)	•	•
Measured parameters	Bias Voltage Level, signal amplitude, pulse width or baud rate, rise/ fall time, jitter, signal distortion, noise HF, noise LF, in-band noise	Baud rate, rise/fall time, high level, low level, distortion, amplitude, jitter
Eye diagram “qualitative” waveform analysis	•	
BusHealth breakout adapter set	BHT190 included	BHT190 optional

Ordering information

Included accessories	Models
Test lead set, battery charger/line voltage adapter, battery pack (installed), getting started guide, multi-lingual users manual on CD.	FLUKE-225C/003 Color ScopeMeter (200 MHz, 2.5 GS/s) with Bus Health test capabilities built-in
	FLUKE-225C/003S Color ScopeMeter (200 MHz, 2.5 GS/s) with Bus Health test capabilities built-in, with SCC190 kit
	FLUKE-125 Industrial ScopeMeter, Bus Health, Power and Harmonics
	FLUKE-125S Industrial ScopeMeter, Bus Health, Power and Harmonics with SCC-Kit

Contact your local distributor for price and availability.
www.fluke.com/au/wtb

Ti Series Industrial Thermal Imagers

The ultimate tools for troubleshooting and maintenance



Ti32 shown with optional telephoto lens

The perfect tools to add to your problem solving arsenal. Built for tough work environments, these high-performance, fully radiometric imagers are ideal for troubleshooting electrical systems, electro-mechanical equipment, process equipment, HVAC/R equipment and others.

- Enhanced problem detection and analysis capabilities with patent-pending IR-Fusion® Technology—only available from Fluke
- Optimized for field use in harsh work environments
 - Engineered and tested to withstand a 2 m (6.5 ft) drop
 - Withstands dust and water—tested to an IP 54 rating
 - Innovative protective lens cover protects the lens when not in use
- Delivers the clear, crisp images needed to find problems fast
 - Identify even small temperature differences that could indicate problems with excellent thermal sensitivity (NETD)
 - Even the smallest details become visible with the large, widescreen full color LCD display
- Intuitive, three-button menu is easy to use... simply navigate with the push of a thumb

See page 48 recommended accessories—only available from Fluke.

Fluke Ti9 – price and performance for the cost conscious user

Just point and shoot to find the hotspots that warn of imminent equipment failure. 160 x 120 resolution shows all the essential details and increases the speed of inspecting, repairing electrical and (electro) mechanical equipment.



Fluke Ti9

Specifications

Features	Ti32	Ti29	Ti27	Ti25	Ti10	Ti9
Temperature measurement range (not calibrated below -10 °C)	-20 °C to +600 °C (-4 °F to +1112 °F)			-20 °C to +350 °C (-4 °F to +662 °F)	-20 °C to +250 °C (-4 °F to +482 °F)	
Temperature measurement accuracy	± 2 °C or 2 % (at 25 °C nominal, whichever is greater)					± 5 °C or 5 % (at 25 °C nominal, whichever is greater)
On-screen emissivity correction	Yes				In software only	
On-screen reflected background temperature compensation	Yes				In software only	
On-screen transmission correction	Yes			—		
Image capture frequency	9 Hz refresh rate or 60 Hz refresh rate depending upon model variation			9 Hz refresh rate		
Detector type	320 X 240 Focal Plane Array, uncooled microbolometer	280 x 210 Focal Plane Array, uncooled microbolometer	240 x 180 Focal Plane Array, uncooled microbolometer	160 X 120 Focal Plane Array, uncooled microbolometer		
Thermal sensitivity (NETD)	≤ 0.45 °C at 30 °C target temp. (45 mK)	≤ 0.05 °C at 30 °C target temp. (50 mK)		≤ 0.09 °C at 30 °C target temp. (90 mK)	≤ 0.13 °C at 30 °C target temp. (130 mK)	≤ 0.20 °C at 30 °C target temp. (200 mK)
Field of view (standard lens)	23 ° x 17 °					
Spatial resolution (IFOV)	1.25 mRad	1.43 mRad	1.67 mRad	2.50 mRad		
Optional telephoto infrared lens	Yes			—		
Optional wide-angle infrared lens	Yes			—		
Standard palettes	Ironbow, Blue-Red, High Contrast, Amber, Amber Inverted, Hot Metal, Grayscale, Grayscale Inverted			Ironbow, Blue-Red, High Contrast, Amber, Hot Metal, Grayscale	Ironbow, Blue-Red, High Contrast, Grayscale	
Ultra Contrast™ palettes	Ironbow Ultra, Blue-Red Ultra, High Contrast Ultra, Amber Ultra, Amber Inverted Ultra, Hot Metal Ultra, Grayscale Ultra, Grayscale Inverted Ultra			—		
IR-Fusion®	Yes					No IR-Fusion
Color alarms (user-selectable)	High-temperature alarm			—		
Voice annotation	60 seconds maximum recording time per image; reviewable playback on imager				—	
Storage medium	SD Memory Card (2 GB memory card will store at least 1200 fully radiometric (.is2) IR and linked visual images each with 60 seconds voice annotations, or 3000 basic bitmap (.bmp) images, or 3000 jpeg (.jpeg) images; transferrable to PC via included multi-format USB card reader					
Export file formats w/SmartView® software	BMP, DIB, GIF, JPEG, JFIF, JPEG, JPG, PNG, TIFF, and TIFF			BMP, EMF, EXIF, GIF, JPEG, PNG, TIFF, and WMF		
Batteries	Two Lithium Ion rechargeable smart battery packs with 5-segment LED Display to show charge level. Battery life: 4+ hours; Battery charge: 2.5 hours to full charge			Internal rechargeable battery pack (included). Battery life: 3-4 hours. Battery charge: 2.5 hours to full charge		
AC battery charging	Two-bay AC battery charger (110 V ac to 220 Vac, 50/60 Hz) (included), or in-imager charging, ac mains adapters included			AC adapter/charger (110 V ac to 220 V ac, 50/60 Hz) (included), charges battery while imager is operating or turned off, ac mains adapters included		
AC operation	AC operation with included power supply (110 V ac to 220 V ac, 50/60 Hz), ac mains adapters included					
Enclosure rating	IP54					
Drop tested	2 m (6.5 ft)					
Warranty	Two-year					

Ordering information

Included accessories	Models
AC power supply and battery charger (including mains adapters); SD memory card, multi format USB memory card reader for downloading images to your computer, SmartView® software with free upgrades for life, rugged, hard carrying case, soft transport bag, adjustable hand strap, printed users manual, warranty registration card. Ti32, Ti29, Ti27 also come with two, rugged lithium-ion smart battery packs.	FLK-Ti32 9 Hz Industrial-Commercial Thermal Imager
	FLK-Ti32 60 Hz Industrial-Commercial Thermal Imager
	FLK-Ti29 9 Hz Industrial-Commercial Thermal Imager
	FLK-Ti29 60 Hz Industrial-Commercial Thermal Imager
	FLK-Ti27 9 Hz Industrial-Commercial Thermal Imager
	FLK-Ti27 60 Hz Industrial-Commercial Thermal Imager
	FLK-Ti25 9 Hz Thermal Imager
	FLK-Ti10 9 Hz Thermal Imager
	FLK-Ti9 9 Hz Thermal Imager
	FLK-Ti50FT-20 IR FlexCam Thermal Imager
Heavy duty carrying case, 2 rechargeable battery packs, battery charger, ac adapter, video cable, 512 MB compact flash card, compact flash card reader and USB cable, neck strap, SmartView reporting and analysis software on CD, users manual on CD and calibration certificate.	FLK-Ti55FT-20 IR FlexCam Thermal Imager

Contact your local distributor for price and availability.
www.fluke.com/au/wtb

Fluke Ti125 and Ti110

Industrial-commercial thermal imagers



Fluke Ti125

Fluke Ti110

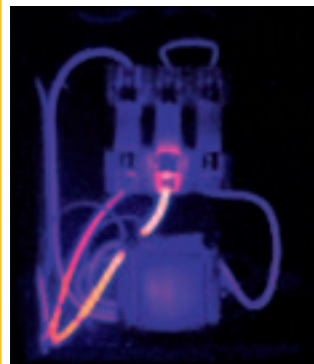
Perform infrared inspections faster and more efficiently, and thoroughly document problem areas with these new thermal imagers.

- Exclusive IR-OptiFlex™ focus system—ensures that images are in good focus from 1.2 meters (4 feet) and beyond. For shorter distances change to manual mode with the touch of a finger (Ti110 and Ti125).
- Always have references handy—IR-PhotoNotes™ annotation system (Ti110 and Ti125).
- Find problems faster and easier—IR-Fusion® with AutoBlend™ mode (Ti125 only).
- Multi-mode video recording—focus-free video in visible light and infrared with full IR-Fusion. (Ti110 and Ti125 only).
- Easily communicate the location of problems with the Electronic Compass—8-Point Cardinal (Ti110 and Ti125).

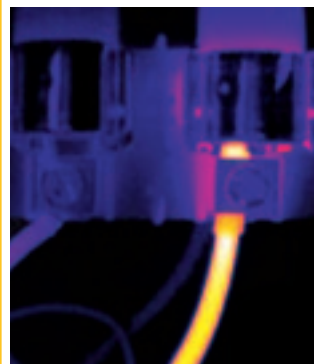
See recommended accessories on page 48.

New features – Ti1XX Series

The Fluke IR-OptiFlex™ focus system difference



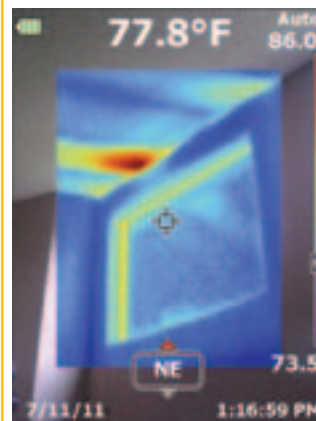
From 1.2 m (4 ft) and beyond, you're in clear focus.



Plus, you have the option to manually focus for closer views.

Electronic Compass

Make sure you and others know the location of the problem. Compass readings easily appear in images and reports.



Contact your local distributor for price and availability.
www.fluke.com/au/wtb

Fluke TiR125 and TiR110

Building diagnostic thermal imagers



Fluke TiR125

Fluke TiR110

Whether you're searching for air leaks, hidden moisture, construction defects, or other building issues, a Fluke thermal imager delivers a huge competitive advantage—it allows you to work faster and more efficiently, and document your findings.

- Exclusive IR-OptiFlex™ focus system (TiR110 and TiR125).
- IR-PhotoNotes™ annotation system—quickly identify and keep track of inspection locations (TiR110 and TiR125).
- Find problems faster and easier—IR-Fusion® with AutoBlend™ mode (AutoBlend only available on the TiR125).
- Multi-mode video recording—focus-free video (TiR110 and TiR125 only).
- Easily communicate the location of problems with the Electronic Compass—8-Point Cardinal (TiR125 and TiR110).

See recommended accessories on page 48.

Fluke TiR100

General use thermal imager

Perfect general use camera designed for value conscious professionals.

- Rugged, lightweight, point-and-shoot
- Focus-free infrared

See recommended accessories on page 48.



Fluke TiR100

Industrial-commercial thermal imagers

Specifications

Industrial-Commercial Models	Ti125		Ti110	Ti100
IR resolution (FPA size)	160 x 120 FPA uncooled microbolometer			
Capture or refresh rate	9 Hz or 30 Hz versions			9 Hz
NETD (Thermal sensitivity)	≤ 0.10 °C at 30 °C target temp (100 mK)			
FOV (Field of view)	22.5 °H x 31 °V			
I FOV (Spatial resolution)	3.39 mRad			
Temperature measurement range (not calibrated below -10 °C)	-20 °C to +350 °C (-4 °F to +662 °F)		-20 °C to +250 °C (-4 °F to +482 °F)	
Temperature measurement accuracy	± 2 °C or 2 % (at 25 °C nominal, whichever is greater)			
Focus mechanism	IR-OptiFlex™ focus system			Focus-free 1.2 m (4 ft) and beyond
IR-Fusion® technology	PIP, FULL IR, FULL VISIBLE, AutoBlend		PIP, FULL IR, FULL VISIBLE	No, full IR only
Memory storage	2 GB SD memory card			
Direct download capability	mini USB download direct to PC			
Operating temperature range	-10 °C to +50 °C (14 °F to 122 °F)			
Storage temperature range	-20 °C to +50 °C (-4 °F to 122 °F)			
Operating humidity	Operating and storage 10 % to 95 %, non-condensing			
Vibration and shock	2G, IEC 68-2-26 and 25G, IEC 68-2-29			
Drop tested	2 m (6.5 ft)			
Standard warranty period	Two-years			
Extended warranty and service plans	Yes			

Ordering information

Included accessories	Models
Thermal imagers are shipped with ac power adapter, lithium ion smart battery (Ti125 includes 2 each, other models 1 each), USB cable, SD memory card, hard carrying case, soft transport bag, adjustable hand strap (left- or right-handed use), printed users manual, all other manuals on CD, SmartView® software and warranty registration card. Ti125 models also include a two-bay charging base and a multi-format USB memory card reader.	FLK-Ti125 30 Hz Industrial-Commercial Thermal Imager FLK-Ti125 9 Hz Industrial-Commercial Thermal Imager FLK-Ti110 30 Hz Industrial-Commercial Thermal Imager FLK-Ti110 9 Hz Industrial-Commercial Thermal Imager FLK-Ti100 9 Hz General Use Thermal Imager

Building diagnostic thermal imagers

Specifications

Building Diagnostic Models	TiR125	TiR110	Ti100
IR resolution (FPA size)	160 x 120 FPA uncooled microbolometer		
Capture or refresh rate	9 Hz		
NETD (Thermal sensitivity)	≤ 0.08 °C at 30 °C target temp (80 mK)		≤ 0.10 °C at 30 °C target temp (100 mK)
FOV (Field of view)	22.5 °H x 31 °V		
I FOV (Spatial resolution)	3.39 mRad		
Temperature measurement range (not calibrated below -10 °C)	-20 °C to +150 °C (-4 °F to +302 °F)		-20 °C to + 250 °C (-14 °F to 482 °F)
Temperature measurement accuracy	± 2 °C or 2 % (at 25 °C nominal, whichever is greater)		
Focus mechanism	IR-OptiFlex™ focus system		Focus-free 1.2 m (4 ft) and beyond
IR-Fusion® technology	PIP, FULL IR, FULL VISIBLE, AutoBlend™	PIP, FULL IR, FULL VISIBLE	No, full IR only
Memory storage	2 GB SD memory card		
Direct download capability	mini USB direct download		
Operating temperature range	-10 °C to +50 °C (14 °F to 122 °F)		
Storage temperature range	-20 °C to +50 °C (-4 °F to 122 °F)		
Operating humidity	Operating and storage 10 % to 95 %, non-condensing		
Vibration and shock	2G, IEC 68-2-26 and 25G, IEC 68-2-29		
Drop tested	2 m (6.5 ft)		
Standard warranty period	Two-years		
Extended warranty and service plans	Yes		

Ordering information

Included accessories	Models
Thermal imagers are shipped with ac power adapter, lithium-ion smart battery (TiR125 includes 2 each, other models 1 each), USB cable, SD memory card, hard carrying case, soft transport bag, adjustable hand strap (left- or right-handed use), printed users manual, all other manuals on CD, SmartView® software and warranty registration card. TiR125 models also include a two-bay charging base and a multi-format USB memory card reader.	FLK-TiR125 9 Hz Building Diagnostic Thermal Imager FLK-TiR110 9 Hz Building Diagnostic Thermal Imager FLK-Ti100 9 Hz General Use Thermal Imager

New features cont.

IR-PhotoNotes™ annotation system



Add up to three digital photos per infrared image to precisely document and clarify potential problems.

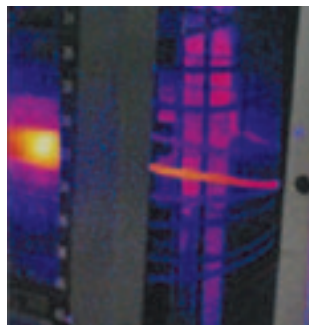


IR-Fusion® technology

The industry's first point-and-shoot IR-Fusion technology camera gives you aligned digital and infrared images every time.



Excellent alignment in Picture-in-Picture mode.

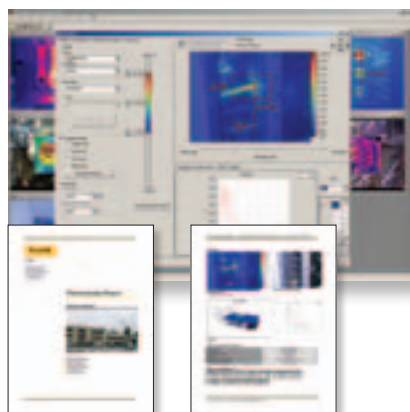


Exclusive AutoBlend™ mode aligns digital and infrared images into a single view.

Contact your local distributor for price and availability.
www.fluke.com/au/wtb

Fluke SmartView® Software

Analysis and reporting software



Powerful

Everything you need for analysis and reporting.

- Extensive annotation, editing and viewing options with full IR-Fusion® capabilities
- Multiple reporting options and templates and 3D-IR™ for unique 3D analysis

View, optimize and analyze infrared video recordings

- SmartView tools and controls allow easy access to editing functions and drag-and-drop text annotation feature
- Report Wizard guides you through automatic, professional report generation

Fluke Training Solutions

Getting started with Fluke Ti Thermal Imagers

Unsure where to begin with your new thermal imager?

Don't worry. Fluke utilizes an extensive network of industry experts to deliver a full portfolio of training solutions.

- Free online webinars
- Hands-on training seminars
- Advanced training

Visit www.fluke.com.au for training options and schedules.



Fluke Thermal Imager authorised training is provided by the University of Newcastle - Innovation Centre.

Fluke IR-Windows

Got switchgear



Why open enclosures and expose yourself to arc flash hazards when you don't have to?

NFPA 70E compliant infrared inspections are time consuming and painful without IR Windows. So skip the headache of lock-out/tag-out, live work permits and cumbersome PPE. IR Windows provide increased safety, speed and frequency of inspection.

Fluke IR Windows offer NFPA 70E compliance without having to compromise on product performance:

- **ClirVu® optic** – Gives you a clear, unobstructed view
- **AutoGround™** – Effortless compliance with grounding requirements
- **Ease of installation** – Installs quickly and easily to the front of the panel only



Specifications

	Outdoor			Indoor
	FLK-050-CLKT	FLK-075-CLKT	FLK-100-CLKT	FLK-075-CLKTO
Crystal insert diameter	50 mm (1.97 in)	73 mm (2.96 in)	100 mm (3.94 in)	75 mm (2.96 in)
Viewing aperture diameter	43 mm (1.7 in)	68 mm (2.7 in)	89 mm (3.5 in)	68 mm (2.7 in)
Viewing aperture area	1452 mm² (2.25 in²)	3632 mm² (5.63 in²)	6322 mm² (9.79 in²)	3632 mm² (5.63 in²)
Warranty	Lifetime replacement against manufacturing defects			

For more detailed specifications download datasheets at www.fluke.com.au

Ordering information

Included accessories	Models
Installation CD, self-adhesive drilling template, security access key, warranty statement.	FLK-075-CLKT 75 mm (3 in) C-Range IR Window, Kwik Twist
	FLK-050-CLKT 50 mm (2 in) C-Range IR Window, Kwik Twist
	FLK-100-CLKT 100 mm (4 in) C-Range IR Window, Kwik Twist
	FLK-075-CLKTO 75 mm (3 in) Kwik-twist aluminium cover KT

Recommended accessories



BOOK-ITP
Introduction to Thermography Principles Book



FLK-LENS/TELE1
Telephoto Infrared Lens (Ti32, TiR32, Ti29, TiR29, Ti27 and TiR27 only)



FLK-LENS/WIDE1
Wide-Angle Infrared Lens (Ti32, TiR32, Ti29, TiR29, Ti27 and TiR27 only)



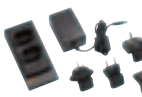
TI-CAR-CHARGER
Thermal Imager Car Charger (all models except FlexCam)



TI-VISOR
Thermal Imager Sun Visor (all models except FlexCam)



TI-SBP3
Smart Battery Pack (Ti32, TiR32, Ti29, TiR29, Ti27 and TiR27 only)



TI-SBC2
Charging Base (Ti32, TiR32, Ti29, TiR29, Ti27 and TiR27 only)



103232
Anti-Glare Hood (FlexCam models only)



104543
Car Charger (FlexCam models only)



TI-SBC
Battery Charger (FlexCam models only)



TI-SBP
Rechargeable Battery Pack (FlexCam models only)



TI-TRIPOD
Ti Tripod Mounting Base (all models except FlexCam)

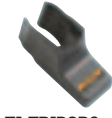
For models Ti125, TiR125, Ti110, TiR110, Ti100 only



TI-VISOR2
Sun Visor



TI-SBC3
External Charging Base and Power Supply



TI-TRIPOD2
Tripod Mounting Accessory

Contact your local distributor for price and availability.
www.fluke.com/au/wtb

Ti Series Buildings Thermal Imagers

Optimized for energy audits and moisture detection



TiR32 shown with optional wide angle lens

The ultimate tools for energy audits, building maintenance, restoration and remediation.

- Enhanced problem detection and analysis capabilities with patent-pending IR-Fusion® Technology—only available from Fluke
- Optimized for field use
 - Engineered and tested to withstand a 2 m (6.5 ft) drop
 - Withstands dust and water—tested to an IP 54 rating
 - Innovative protective lens cover protects the lens when not in use
- Delivers the clear, crisp images needed to find problems fast
 - Identify even small temperature differences that could indicate problems with excellent thermal sensitivity (NETD)
 - Even the smallest details become visible with the large, widescreen full color LCD display
- Intuitive, three-button menu is easy to use... simply navigate with the push of a thumb

See page 48 recommended accessories—only available from Fluke.

Specifications

Features	TiR32	TiR29	TiR27	TiR1	TiR
Temperature measurement range (not calibrated below -10 °C)	-20 °C to +150 °C (-4 °F to +302 °F)				
Temperature measurement accuracy	± 2 °C or 2 % (at 25 °C nominal, whichever is greater)				
On-screen emissivity correction	Yes				In software only
On-screen reflected background temperature compensation	Yes				In software only
On-screen transmission correction	Yes				—
Image capture frequency	9 Hz refresh rate or 60 Hz refresh rate depending upon model variation			9 Hz refresh rate	
Detector type	320 X 240 Focal Plane Array, uncooled microbolometer	280 x 210 Focal Plane Array, uncooled microbolometer	240 x 180 Focal Plane Array, uncooled microbolometer	160 X 120 Focal Plane Array, uncooled microbolometer	
Thermal sensitivity (NETD)	≤ 0.04 °C at 30 °C target temp. (40 mK)	≤ 0.045 °C at 30 °C target temp. (45 mK)		≤ 0.07 °C at 30 °C target temp. (70 mK)	≤ 0.09 °C at 30 °C target temp. (90 mK)
Field of view (standard lens)	23 ° x 17 °; Minimum focus distance: 15 cm (approx. 6 in)				
Spatial resolution (IFOV)	1.25 mRad	1.43 mRad	1.67 mRad	2.50 mRad	
Optional telephoto infrared lens	Yes			—	
Optional wide-angle infrared lens	Yes			—	
Standard palettes	Ironbow, Blue-Red, High Contrast, Amber, Amber Inverted, Hot Metal, Grayscale, Grayscale Inverted			Ironbow, Blue-Red, High Contrast, Amber, Hot Metal, Grayscale	Ironbow, Blue-Red, High Contrast, Grayscale
Ultra Contrast™ palettes	Ironbow Ultra, Blue-Red Ultra, High Contrast Ultra, Amber Ultra, Amber Inverted Ultra, Hot Metal Ultra, Grayscale Ultra, Grayscale Inverted Ultra			—	
IR-Fusion®	Yes				
Color alarms (user-selectable)	Dewpoint temperature alarm			—	
Voice annotation	60 seconds maximum recording time per image; reviewable playback on imager				—
Storage medium	SD Memory Card (2 GB memory card will store at least 1200 fully radiometric (.is2) IR and linked visual images each with 60 seconds voice annotations, or 3000 basic bitmap (.bmp) images, or 3000 jpeg (.jpeg) images; transferrable to PC via included multi-format USB card reader				
Export file formats w/SmartView® software	BMP, DIB, GIF, JPE, JFIF, JPEG, JPG, PNG, TIF, and TIFF				
Batteries	Two Lithium Ion rechargeable smart battery packs with 5-segment LED Display to show charge level. Battery life: 4+ hours; Battery charge: 2.5 hours to full charge			Internal rechargeable battery pack (included). Battery life: 3-4 hours. Battery charge: 2.5 hours to full charge	
AC battery charging	Two-bay AC battery charger (110 V ac to 220 Vac, 50/60 Hz) (included), or in-imager charging, ac mains adapters included			AC adapter/charger (110 V ac to 220 V ac, 50/60 Hz) (included), charges battery while imager is operating or turned off, ac mains adapters included	
AC operation	AC operation with included power supply (110 V ac to 220 V ac, 50/60 Hz), ac mains adapters included				
Enclosure rating	IP54				
Drop tested	2 m (6.5 ft)				
Warranty	Two-year				

Ordering information

Included accessories	Models
AC power supply and battery charger (including mains adapters), SD memory card, multi format USB memory card reader for downloading images to your computer, SmartView® software with free upgrades for life, hard carrying case, soft transport bag, adjustable hand strap, printed users manual, warranty registration card. Ti32, Ti29, Ti27 also come with two, rugged lithium-ion smart battery packs.	FLK-TiR32 9 Hz Building Diagnostics Thermal Imager
	FLK-TiR32 60 Hz Building Diagnostics Thermal Imager
	FLK-TiR29 9 Hz Building Diagnostics Thermal Imager
	FLK-TiR29 60 Hz Building Diagnostics Thermal Imager
	FLK-TiR27 9 Hz Building Diagnostics Thermal Imager
	FLK-TiR27 60 Hz Building Diagnostics Thermal Imager
	FLK-TiR1 9 Hz Thermal Imager
	FLK-TiR 9 Hz Thermal Imager
	FLK-TiR3/FT-20 IR FlexCam BD Thermal Imager
	FLK-TiR4/FT-20 IR FlexCam BD Thermal Imager
Heavy duty carrying case, two rechargeable battery packs, battery charger, ac adapter, video cable, 512 MB compact flash card, compact flash card reader and USB cable, neck strap, SmartView reporting and analysis software on CD, User manual on CD and calibration certificate.	

Contact your local distributor for price and availability.
www.fluke.com/au/wtb

Fluke 1523/1524 Reference Thermometers



Fluke 1524

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



Fluke 1523

1551A/1552A “Stik” Thermometers



1551A/1552A

Best substitute for precision mercury-filled glass thermometers

Finally, a digital substitute for your mercury-in-glass thermometers! Accurate and repeatable to $\pm 0.05\text{ }^{\circ}\text{C}$ over its full range, the 1551A/1552A “Stik” Thermometer is the new gold standard of industrial temperature calibration. Whether working outdoors in environments where potentially explosive gases may be present or on the floor of a processing plant, the intrinsically-safe, battery operated, portable reference thermometer is designed to go where you work.

- 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)
- Two models to choose from ($-50\text{ }^{\circ}\text{C}$ to $160\text{ }^{\circ}\text{C}$ or $-80\text{ }^{\circ}\text{C}$ to $300\text{ }^{\circ}\text{C}$)

Specifications

Temperature	Accuracy – 1523/1524 with 5616-12 PRT	Accuracy – 1523/1524 with 5610-9 Thermistor
$-200\text{ }^{\circ}\text{C}$ ($-328\text{ }^{\circ}\text{F}$)	0.014	—
$0\text{ }^{\circ}\text{C}$ ($32\text{ }^{\circ}\text{F}$)	0.021	0.009
$100\text{ }^{\circ}\text{C}$ ($212\text{ }^{\circ}\text{F}$)	0.027	0.030
$300\text{ }^{\circ}\text{C}$ ($572\text{ }^{\circ}\text{F}$)	0.040	—
$420\text{ }^{\circ}\text{C}$ ($788\text{ }^{\circ}\text{F}$)	0.050	—

Equivalent temperature readout accuracy for measuring type K thermocouples is $\pm 0.24\text{ }^{\circ}\text{C}$ ($\pm 0.43\text{ }^{\circ}\text{F}$) from $0\text{ }^{\circ}\text{C}$ to $1370\text{ }^{\circ}\text{C}$ ($32\text{ }^{\circ}\text{F}$ to $2498\text{ }^{\circ}\text{F}$) and $\pm 0.61\text{ }^{\circ}\text{C}$ ($\pm 1.10\text{ }^{\circ}\text{F}$) from $-200\text{ }^{\circ}\text{C}$ to $0\text{ }^{\circ}\text{C}$ ($-328\text{ }^{\circ}\text{F}$ to $32\text{ }^{\circ}\text{F}$). Additional errors for thermocouple accuracy or calibration must be added separately.

Ordering information

Included accessories	Models
12 V dc universal power supply, RS-232 cable, NIST traceable calibration certificate, technical manual and 9940 IO ToolKit software on CD, three AA batteries, users guide.	FLUKE-1524 Thermometer Readout (2 inputs)
	FLUKE-1523 Thermometer Readout (1 input)
TPAK, 2373-LTC, carrying case.	FLUKE-1524-P1 1524 Bundled with 5616 PRT
	FLUKE-1523-P1 1523 Bundled with 5616 PRT
NVLAP-accredited report of calibration, user's guide on CD-ROM, 3 AAA batteries.	1551A-9 Thermometer, Fixed RTD, $-50\text{ }^{\circ}\text{C}$ to $160\text{ }^{\circ}\text{C}$, 3/16 x 9 in
	1551A-12 Thermometer, Fixed RTD, $-50\text{ }^{\circ}\text{C}$ to $160\text{ }^{\circ}\text{C}$, 1/4 x 12 in
	1552A-12 Thermometer, Fixed RTD, $-80\text{ }^{\circ}\text{C}$ to $300\text{ }^{\circ}\text{C}$, 1/4 x 12 in

Model number appended with a -9, -12, -20 indicates probe sheath length in inches. All probe diameters are 6.35 mm (1/4 in) with the exception of the 1551A-9, which is 4.8 mm diameter (3/16 in).

Recommended accessories 1523/1524

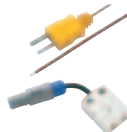


5616-12-P
Precision PRT
305 mm x 6.35 mm
(12 in x .25 in)

5610-9-P
Precision Thermistor
229 mm x 3.2 mm
(9 in x 1/8 in)



2373-LTC
Smart Connector
with universal
TC adapter



FLK80K1
80PK-1 Type K
Probe and Adapter
(2373-LTC)



TPAK
Magnetic Meter Hanger
See page 64



2373-LPRT
Lemo to Mini Grabbers
(4-wire) Adapter



1523-CASE
1523/1524 Readout
and Probe Carrying Case



2384-P, 2384-T
INFO-CON Connectors, PRT
(gray cap) or TC (blue cap)

Recommended accessories 1551A/1552A



1551-CASE
Carrying Case

Fluke Calibration Temperature Sources



9103/9140/9141 Field Dry-Well Calibrators

- Lightweight and very portable
- Three models ranging from -25 °C to 650 °C
- Accuracy to ±0.25 °C



9142/9143/9144 Field Metrology Wells

Small dry wells for big field applications

- Lightweight, portable, and fast
- 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



4180/4180 Precision Infrared Thermometers

Accredited performance for point-and-shoot calibrations

- Calibrated radiometrically for meaningful, consistent results
- Accredited calibration included
- Accurate, reliable performance from -15 °C to 500 °C

Recommended accessories



9142-CASE
Carrying Case



9936A LogWare III
Temperature Data
Logging Software



4180-CASE
Carrying Case



4181-DCAS
Carrying Case w/wheels



1620A Digital Thermometer-Hygrometer

The most accurate temperature and humidity graphical data logger on the market

- Superior accuracy
- Network enabled
- Powerful logging and analysis tools

Ordering information

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) and 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), and 2 at 3/8" (9.5 mm)
9141-X Field Dry-Well Calibrator, 50 °C to 650 °C	Insert C: 6 at 1/4" (6.35 mm)
	Insert D: 2 at 3 mm, 2 at 4 mm, and 2 at 6 mm

Models	Well inserts
9142-X Field Metrology Well, -25 °C to 150 °C	9142-INSA Insert A, 9142, misc holes
9142-X-P Field Metrology Well, -25 °C to 150 °C, process version	9142-INSB Insert B, 9142, comp holes
9143-X Field Metrology Well, 33 °C to 350 °C	9142-INSC Insert C, 9142, 6 x 0.25 in holes
9143-X-P Field Metrology Well, 33 °C to 350 °C, process version	9143-INSA Insert A, 9143, misc holes
9144-X Field Metrology Well, 50 °C to 660 °C	9143-INSB Insert B, 9143, comp holes
9144-X-P Field Metrology Well, 50 °C to 660 °C, process version	9143-INSC Insert C, 9143, 6 x 0.25 in holes
	9144-INSA Insert A, 9144, misc holes
	9144-INSB Insert B, 9144, comp holes
	9144-INSC Insert C, 9144, 6 x 0.25 in holes

Included accessories	Models
Report of Calibration (NVLAP accredited), power cord, user's guide, documentation CD, target cover, serial cable.	4180 Precision Infrared Calibrator, -15 °C to 120 °C
	4181 Precision Infrared Calibrator, 35 °C to 500 °C

Included accessories	Models
Accessories vary by model. For details see www.flukecal.com/DewK	1621A "DewK" Thermo-Hygrometer*
	1622A "DewK" Thermo-Hygrometer*

*Each model comes in "-H" version (High-Accuracy Value Kit) and "-S" version (Standard-Accuracy Value Kit).

Fluke 560 Series Infrared Thermometers



CE

Fluke 566 and 568 IR and Contact Thermometers

With a straight-forward user interface and soft-key menus, the Fluke 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 566 and 568 can stand up to tough industrial, electrical, and mechanical environments.

- Measure up to 800 °C (1470 °F)
- Easily access advanced features with the soft-key buttons and graphical display
- Measure smaller objects from further away
- Compatibility with most type K thermocouples
- Confidently measure more surfaces, with adjustable emissivity and built-in materials table
- Log and download measurements for reporting (568)
- Two levels of backlight
- Audible and visual alarms alert you to measurements outside of set limits
- Min/Max/Avg/Dif functions
- Includes KTC bead probe
- 1 % measurement accuracy
- Versatile interface with six languages

Specifications

Models	Fluke 561	Fluke 566	Fluke 568
Infrared temperature range	-40 °C to 535 °C (-40 °F to 1022 °F)	-40 °C to 650 °C (-40 °F to 1200 °F)	-40 °C to 800 °C (-40 °F to 1470 °F)
Accuracy	greater of ± 1 % or ± 1 °C (2 °F)		
Distance to Spot (D:S)	12:1	30:1	50:1
Sighting	Laser point		
Typical distance to target	Up to 2.5 m (7 ft)	Up to 4.5 m (15 ft)	Up to 7.5 m (25 ft)
Probe type	Thermocouple K		
Contact temperature range	-40 °C to 550 °C (-40 °F to 1022 °F)	-270 °C to 1372 °C (-454 °F to 2501 °F)	
Number of on-board memory locations	—	20	99
PC download and software	—	—	Yes, with FlukeView® Forms
Soft-key feature menu navigaton	—	Yes	
Min/Max/Avg/Dif	Min/Max/Dif	Min/Max/Avg/Dif	
English, French, Chinese, Spanish, Portuguese, German user interface	—	Yes	
Material type adjustment (emissivity)	Hi/Med/Lo	Material table or 0.1 to 1.00 by 0.01	
Two levels of backlight	—	Yes	
High and low alarms	—	High and low alarms	
Hands-free logging	—	—	Yes
Battery	2 AA		
Included case	Hard case (except 561/R and 561/P)	Hard case	
Warranty	Two-year		

Ordering information

Included accessories	Models
USB cable, FlukeView® Forms software, thermocouple type K bead probe, carrying case, two AA batteries, users manual, quickstart guide.	FLUKE-568 Infrared Thermometer
Thermocouple type K bead probe, carrying case, two AA batteries, users manual and quickstart guide.	FLUKE-566 Infrared Thermometer
Thermocouple type K pipe probe, carrying case, two AA batteries, users manual.	FLUKE-561 Infrared Thermometer
9 V battery, instruction sheet.	FLUKE-61 Infrared Thermometer

Specialty models

Fluke 561 Infrared and Contact Thermometer

The Fluke 561 combines the temperature measurement functions that professionals need for most HVAC and industrial jobs, all in one tool.

- Pipe probe for superheat and sub-cooling and other contact and ambient measurements
- Min/Max/Dif functions help you quickly identify problems
- Scan large areas or small objects quickly and efficiently



Fluke 61 Infrared Thermometers

- Easy to use one button operation
- Easy targeting with bright laser
- Shock-absorbing molding increases ruggedness
- Two-year conditional warranty
- Temperature measurement range up to 275 °C (525 °F)
- 8:1 optics
- Accurate to within $\pm 2\%$ of reading or 2 °C, whichever is greater
- Recommended optional carrying case, C25



Recommended accessories



80PK-11
Pipe Clamp Probe
See page 60



80PK-27
Industrial Surface
Temperature Probe
See page 60



80PK-8
Pipe Clamp Probe
See page 61



80PK-18
Pipe Clamp Probe Kit
See page 61



80PK-22
SureGrip™ Immersion Probe
See page 60



C1600
Gear Tool Box
See page 56

Contact your local distributor for price and availability.
www.fluke.com/au/wtb

Fluke 62 Mini Infrared Thermometer

Non-contact temperature measurement



The Fluke 62 Mini Non-contact Thermometer is the perfect introduction to infrared (IR) thermometers for the professional. With the best accuracy in its class, the Fluke 62 mini offers quick and reliable surface temperature readings. This compact and portable tool enables professionals to diagnose heating and ventilation problems and monitor the temperature of electrical motors and electrical panels without contact.

- Backlit display for poorly lit areas
- Laser sighting
- Dual display shows current and max measurements simultaneously

Model	Fluke 62
Infrared temperature range	-30 °C to 500 °C (-20 °F to 932 °F)
Accuracy	greater of $\pm 1.5\%$ or $\pm 1\text{ °C}$ (2 °F)
Distance to Spot (D:S)	10:1
Sighting	Laser point
Typical distance to target	Up to 2 m (6 ft)
Min/Max/Avg/Dif	Max
Material type adjustment (emissivity)	Preset to 0.95
Battery	9 V
Included case	Soft case
Warranty	Two-year

Fluke 50 Series II Thermometers

Lab accuracy in a field thermometer



All models offer:

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

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



Features

Features	54 II B	53 II B	52	51
Thermocouple types	K,J,T,E,N,R,S	K,J,T,E,N,R,S	K,J,T,E	K,J,T,E
Number of inputs	Dual	Single	Dual	Single
Time stamp	Time of day	Time of day	—	—

Ordering information

Included accessories	Models
Storage pouch and instruction sheet.	FLUKE-62 Mini Infrared Thermometer
	FLUKE-T5-600/62/1AC IR Thermometer, Electrical Tester and Voltage Detector Kit
	FLUKE-62/322/1AC IR Thermometer, Clamp Meter and Voltage Detector Kit
	FLUKE-411D/62 IR Thermometer and Distance Laser Meter Kit
Bead thermocouple(s), batteries, overview manual and instructional guide on CD.	FLUKE-54-2-B Datalogging Thermometer, Dual Input
	FLUKE-53-2-B Datalogging Thermometer, Single Input
	FLUKE-52-2 Digital Thermometer, Dual Input
	FLUKE-51-2 Digital Thermometer, Single Input
Thermocouple K probe (574), power supply (574), RS-232 data cable (574), data graphing, storage and analysis software on CD (574), hard case, two AA batteries, operator's guide on CD.	FLUKE-574-CF Precision Infrared Thermometer w/Logging SW Close Focus
	FLUKE-574 Precision Infrared Thermometer w/Logging SW
	FLUKE-572-CF Precision Infrared Thermometer with Close Focus Option
	FLUKE-572 Precision Infrared Thermometer

Specialty models

Fluke 570 Series Infrared Thermometers

The Fluke 572 and 574 are ideal diagnostic tools for maintenance professionals requiring accurate temperature readings at all distances. Predictive maintenance professionals requiring analysis and documentation use the 574 model, with 100-point data logging with the included software for graphing and analysis for follow-up reporting and documentation.



- Backlit display for poorly lit areas
- Displays last ten temperature readings
- Enhanced optics (distance to spot ratio up to 60:1)

Intrinsically safe model on page 39.

Recommended kits

T5-600/62/1AC-II Kit

- Fluke 62 Mini IR Thermometer
- Fluke T5-600 Voltage Electrical Tester
- 1AC-II Voltage Detector
- Carrying case



62/322/1AC-II Kit

- Fluke 62 Mini IR Thermometer
- Fluke 322 Clamp Meter
- 1AC-II Voltage Detector
- Test leads
- Carrying case



62-411D Kit

- Fluke 62 Mini IR Thermometer
- Fluke 411D Laser Distance Meter
- Soft pouch for each model



Contact your local distributor for price and availability.
www.fluke.com/au/wtb

Fluke 810 Vibration Tester

Take a vibration expert along



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.

Use the Fluke 810 to:

- Easily determine the root cause, location and severity of common mechanical faults
- Efficiently prioritize and plan equipment repair or replacement
- Effectively deploy maintenance resources at the point of greatest impact

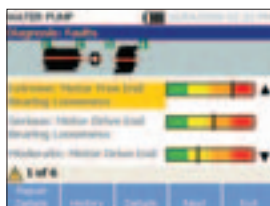
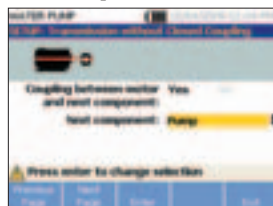
Simple 3 step process

The Fluke 810 helps you locate and diagnose common mechanical problems and prioritize 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 pro.

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.



Breakthrough diagnostic technology

The Fluke 810's diagnostic technology combines powerful algorithms with a database of real-world measurement experience, making the Fluke 810 the most advanced troubleshooting tool for mechanical maintenance teams.

Analyze most common equipment:

- Motors
- Fans and blowers
- Belt and chain drives
- Gearboxes
- Pumps
- Compressors
- Spindles

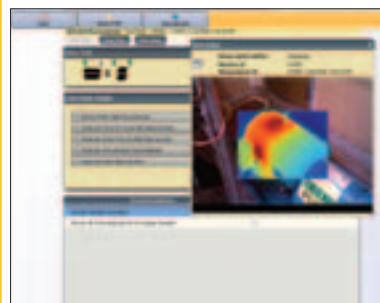
Detect the most common causes of mechanical failure:

- Bearing problems
- Misalignment
- Unbalance
- Looseness

Software and resources

Viewer PC Software

- Store and track your data
- Generate diagnostic reports and track the severity of your machine's condition
- Import and store JPEG and Fluke IS2 thermal images



Interactive, self-paced training on DVD

Learn more about the basics of vibration and how to fully utilize 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.

Specifications

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
Machine 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
Warranty	Three-years (tester), One-year (sensor and tachometer)
Sensor specifications	
Sensor type	Tri-axial accelerometer, 100 mV/g ($\pm 5\%$, 25 °C)
Tachometer specifications	
Tachometer type	Laser Diode Class 2

Ordering information

Included accessories	Models
Tri-axial accelerometer, magnet mount, mounting pad kit with adhesive, quick-disconnect accelerometer cable, laser tachometer with storage pouch, battery pack with cable and adapters, shoulder strap, adjustable hand strap, Viewer PC software, mini USB to USB cable, carrying case, training DVD, getting started guide, quick reference guide, users manual on DVD.	FLUKE-810 FLUKE-810 Vibration Tester
Additional accessories	810SC-20 Sensor Cable, 20 ft

Contact your local distributor for price and availability.
www.fluke.com/au/wtb

ACCESSORIES AS TOUGH AS YOUR METER

TPAK Meter Hanger—
hang your meter from
magnetic surfaces and
free both hands
(see p. 64)

iFlex® Flexible Current Probe
Expands measurement
range to 2500 A ac
and provides ultimate
measurement flexibility
(see p. 5)

**TL175 TwistGuard™ Test
Leads**—get two category
ratings with one set of
test leads and a wire that
changes color when the
leads need to be replaced
(see p. 59)



**When your job depends on your meter... your
meter depends on Fluke Genuine Accessories**

Fluke cases and holsters

A premium meter deserves a premium case



Soft cases

CAMO-C25 Camouflage Carrying Case

New

- High quality 1000D fabric
- Dimensions (HxWxD): 20.3 x 12.1 x 4.6 cm (8 x 4.8 x 1.8 in)

CAMO-C37 Camouflage Carrying Case

New

- High quality 1000D fabric
- Dimensions (HxWxD): 26.5 x 9 x 3 cm (10.5 x 3.5 x 1.2 in)

C12A Meter Case

- Made of vinyl
- Dimensions (HxWxD): 172 x 128 x 38 mm (6.8 x 5 x 1.5 in)

C75 Accessory Case

- Made of vinyl
- Dimensions (HxWxD): 179 x 103 x 26 mm (7 x 4 x 1 in)

C50 Meter Case

- Made of vinyl
- Dimensions (HxWxD): 192 x 90 x 38 mm (7.56 x 3.5 x 1.5 in)

C25 Large Soft Case for DMMs

- Made of vinyl
- Dimensions (HxWxD): 218 x 128 x 64 mm (8.6 x 5 x 2.52 in)

C90 Soft Case for DMMs

- Made of vinyl
- Dimensions (HxWxD): 205 x 90 x 72 mm (8 x 3.5 x 2.8 in)

C35 Soft Carrying Case

- Made of durable polyester 600D
- Dimensions (HxWxD): 220 x 140 x 65 mm (8.7 x 5.5 x 2.6 in)

C23 Soft Carrying Case

- Made of vinyl
- Dimensions (HxWxD): 225 x 95 x 58 mm (8.9 x 3.75 x 2.3 in)

C280 Soft Case

- Made of durable polyester 600D
- Dimensions (HxWxD): 230 x 185 x 65 mm (9 x 7.3 x 2.6 in)

C115 Soft Carrying Case

- Made of durable polyester 600D
- Dimensions (HxWxD): 240 x 205 x 75 mm (9.5 x 8 x 3 in)

C116 Soft Carrying Case

- Made of durable polyester 600D
- Dimensions (HxWxD): 240 x 230 x 65 mm (9.5 x 9 x 2.6 in)

C781 Meter Case

- Made of durable polyester 600D
- Dimensions (HxWxD): 269 x 141 x 90 mm (10.6 x 5.6 x 3.5 in)

C33 Soft Carrying Case

- Made of vinyl
- Dimensions (HxWxD): 280 x 115 x 55 mm (11 x 4.5 x 2.2 in)

C789 Meter and Accessory Case

- Made of durable polyester 600D
- Dimensions (HxWxD): 308 x 256 x 77 mm (12 x 10 x 3 in)

C43 Soft Carrying Case

- Made of durable polyester 600D
- Dimensions (HxWxD): 318 x 230 x 90 mm (12.5 x 9.1 x 3.5 in)

C550 Tool Bag

- Made of ballistic cloth with heavy-duty hardware
- Dimensions (HxWxD): 333 x 513 x 231 mm (13 x 20.2 x 9.1 in)

C345 Soft Case

- Made of durable polyester 600D
- Dimensions (HxWxD): 360 x 200 x 240 mm (14 x 8 x 9.5 in)

Hard cases

CXT Series Extreme Cases

- Models CXT80, CXT170, and CXT280 for various meter compatibility
- Unbreakable, watertight, airtight, chemical resistant and corrosion proof

C800 Meter and Accessory Case

- Dimensions (HxWxD): 230 x 385 x 115 mm (9 x 15 x 4.5 in)

C101 Hard Case

- Exterior dimensions (HxWxD): 305 x 360 x 105 mm (12 x 14.2 x 4.1 in)
- Interior dimensions (HxWxD): 230 x 290 x 65 mm (9 x 11.5 x 2.5 in)

C100 Universal Carrying Case

- Dimensions (HxWxD): 397 x 346 x 122 mm (15.7 x 13.6 x 4.8 in)

C1600 Gear Box

- Includes five hook and loop straps to wrap cords and test leads
- Dimensions (HxWxD): 260 x 390 x 200 mm (10 x 15 x 7.8 in)

Leather cases

C520A Leather Tester Case

- Dimensions (HxWxD): 256 x 154 x 106 mm (10 x 6 x 4 in)

C510 Leather Meter Case

- Dimensions (HxWxD): 287 x 179 x 106 mm (11 x 7 x 4 in)

Holsters

H80M Protective Holster

- Includes a hanging magnet, general purpose hanger, and hook and loop straps
- Dimensions (HxWxD): 190 x 95 x 43 mm (7.5 x 3.7 x 1.7 in)

H5 Electrical Tester Holster

- Dimensions (HxWxD): 192 x 90 x 38 mm (7.5 x 3.5 x 1.5 in)

H3 Clamp Meter Holster

- Dimensions (HxWxD): 231 x 90 x 64 mm (9 x 3.5 x 2.5 in)

H6 IR Thermometer Holster

- Dimensions (HxWxD): 302 x 178 x 57 mm (11.9 x 7 x 2 in)

Cases and Holsters Selection Guide	113/114/115/116/117	27 II/28 II	77-4/175/177/179	83V/87V	233	287/289	8845A/8846A/8808A	120/190/22X Series	51-II/52-II/53-II B/54-II B	561/566/568	63/66/68	321/322	365	365/373/902	374/375/376/381	705/707	712/714/715/717/72X Series	718/719	753/754	787/789	T+/T+PRO	T5-600/T5-1000	1503/1507/1577
C12A	•																						
C23	•	•	•	•	•	•						•											
CAMO-C25	•	•	•	•	•	•														•	•		•
C25	•	•	•	•	•	•			•			•								•	•		•
C33																							
C35			•		•																	•	
CAMO-C37															365	•					•	•	•
C43			•	•	•	•			•											•			
C50	•																					•	
C75	The C75 is designed to hold test leads, probes, clips and other required accessories																						
C90	•	•	•	•					•				•								•		
C100	•	•	•	•									•				71X			787			
C101	•	•	•	•	•	•		•			•	•	•	•	•	•	•	•	•	•	•	•	•
C115/C116	•	•	•	•	•	•		•						365			•	•	•	•	•	•	•
C125			•	83V	•																		
C280	•	•	•	•	•	•														•	•	•	•
C345	The perfect case for carrying a wide range of Fluke handheld test tools and accessories																						
C510			•																	787			
C520A																					•	•	
C550/C1600	The C550 and C1600 are large enough to hold accessories and multiple test tools																						
C781						•		•						•	•		72X	•	•	789			•
C789							•							365				•					
C789																			•				
C800			•	•					•					•	•	•		71X		787			
CXT80		•	•	•													72X			•			
CXT170	•		•						•								71X						•
CXT280						•														•			

Fluke accessory sets and kits

Get an outstanding value with our most popular accessories



FLUKE®



TL220 Industrial Test Lead Set

- Starter kit for industrial applications
- TP220 has round, stainless steel tip
- Includes 1 pair: AC220, TP220, TL222
- CAT III 1000 V, CAT IV 600 V, 10 A



TL223 Electrical Test Lead Set

- Starter kit for electrical applications
- TP1 has flat blades for wall sockets
- Includes 1 pair: AC220, TP1, TL224
- CAT III 1000 V, CAT IV 600 V, 10 A



TLK287 Electronics Master Test Lead Set

The perfect test lead kit for today's electronics test and design.

- Precision electronic probes with multiple spring-loaded sharp tips to maximize contact with SMD test points
- Micro-grabbers and leads to enable fine SMD test
- Modular mini-alligator clips, grabbers, leads, probes, and couplers for virtually every electronics need



TLK289 Industrial Master Test Lead Set and Case

Designed for electrical and electronics test in today's industrial environment.

- SureGrip™ alligator clips, grabbers, hook clips and industrial test probes for dependable contact with a variety of test points
- Magnetic hanger for suspension of your DMM
- Temperature adapter with type K thermocouple for direct temperature measurement with your DMM's



TLK-220 SureGrip™ Accessory Kit with Meter Carrying Case

- Plunger style alligator clips
- Large jaw alligator clips
- Sharp test probes
- Right to straight test leads
- Zippered vinyl carry case with moveable divider
- Holds large DMMs



TLK-225 SureGrip™ Master Accessory Kit

- Plunger style alligator clips
- Plunger style hook clips
- Plunger style pincer clips
- Large jaw alligator clips
- Sharp test probes
- Right to straight test leads
- Six-pocket storage pouch, keeps the entire set together



T5-Kit, Tester Starter Kit

Getting started kit for electricians who already own a Fluke T5 Tester.

- Test probes
- Large jaw alligator clips
- Zippered soft case

Test Lead Kits Selection Guide		113/114/115/116/117																						
		27 II/28 II/27		77 IV		175/177/179		83V/87V/233		287/289		434/435		8845A/8846A/8808A		120 Series		190 Series		225C		321/322		355
	TLK287																							
	TLK289	116																						
	TL220																							
	TL223																							
	TL225																							
	TL238																							
	TL80A																							
	TL81A																							
	80K-8, 80K-15, 80K-40	dc only																						
						</																		

Fluke test leads, probes and clips

The best leads for all your measurement needs



For electronic applications

For automotive applications



TL80A Basic Electronic Test Lead Set

- Six piece set with zippered case
- Probes, alligator clips and tip extenders for electronic applications
- CAT II 300 V

TL910 Electronic Test Probes with Replacement Tips

- Small profile provides accessibility
- Comes with five sets of replaceable tips
- Replacement tips: TP912
- CAT III 1000 V, 3 A



TP80 Electronic Test Probes

- Tapered tip ideal for probing electronic components or boards
- Removable guard for IC probing
- CAT III 1000 V, 10 A



TP920 Test Probe Adapter Kit

- IC test tip adapters, extended tips, medium alligator clips fit over TL71 and TL75 test lead sets
- IC test tip Adapter, 3 A
- Extended probe tip, 3 A
- Med. alligator clip, 5 A
- CAT II 300 V



TL40 Retractable Probe Assembly

- Retractable, insulated sharp probe tip
- CAT III 300 V, 3 A



TL26A Telecom Test Lead Set

- Five-way multi-point test clips for telecommunications applications
- Flexible silicone insulated leads are heat and cold resistant
- CAT I 30 V, 8 A



TP81 and TP82

- Stainless steel probe pierces insulation on 14, 16 and 18 gauge wire
- Design provides complete insulation while working on fuel injectors or sensors
- TP81 for use with modular test leads (Fluke TL224)
- TP82 slips over probe tips (Fluke TL71)
- Rated to 60 V dc



TP88 Rigid Backprobe Pin Set

- Two inch long pins pass between the weather pack seal and wire
- Use with Fluke TL71 or TL75 test lead sets
- Rated to 60 V dc



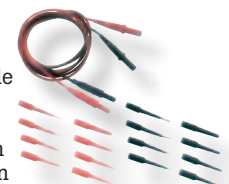
TP40 Automotive Back Probe Pin Set

- Set of five 1.5 inch pins
- Rated to 60 V dc
- Provide an easy connection past weather pack seals to connector conductors
- Use with Fluke TL71 or TL75 test lead sets



TL82 Automotive Pin & Socket Adapter Set

- Collection of male and female adapters allows you to make firm connection to pin and socket connectors
- Adapters with flexible tips come in the following sizes: 22, 20, 16 and 12
- Rated to 60 V dc



TLK281 Automotive Test Lead Kit

- Insulation piercing probes
- SureGrip™ silicone test leads
- SureGrip test probes
- SureGrip plunger style alligator clips
- SureGrip alligator clips
- Carrying case



TLK282 Deluxe Automotive Test Lead Kit

- Insulation piercing probes
- Set of five automotive back probe pins
- SureGrip silicone test leads
- SureGrip test probes
- SureGrip plunger style alligator clips
- SureGrip alligator clips
- SureGrip hook clips
- Carrying case



High-voltage probes

80K-6, 80K-15, 80K-40 High Voltage Probes

- Allows a digital multimeter to measure up to 6,000 volts peak, 15,000 volts peak and 40,000 volts peak respectively
- 1000:1 division ratio output when connected to 10 MΩ multimeter
- Ground clip included
- Intended for low energy applications that are referenced to ground
- 80K-15 (not available in Europe)



Fluke SureGrip™ accessories

As tough as your meter



FLUKE®

Modular test leads and test probes (use test probes with test leads)

TP175, TwistGuard™ Test Probes

- Converts probe tip length between 4 mm, a CAT III 1000 V, CAT IV 600 V measurement and 19 mm, a CAT II 1000 V measurement
- Fits standard modular test leads



FTP-1 SureGrip™ Fused Test Probes with Leads

- FTP-1 Fused Test Probes with built-in fuses for added protection
- TL224 Silicone Insulated Test Leads
- CAT III 1000 V, CAT IV 600 V, 10 A



TL221 SureGrip™ Silicone Test Lead Extension Kit

- Superior strain relief
- Includes two adapters to extend leads 1.5 m
- CAT III 1000 V, CAT IV 600 V, 10 A



TL222 SureGrip™ Silicone Insulated Test Leads

- Superior strain relief
- Recommended for use with AC220, AC280, AC283 test clips
- CAT III 1000 V, CAT IV 600 V, 10 A



Modular clips (use with test leads, includes one red, one black)

AC220 SureGrip™ Alligator Clips

- Insulated, nickel plated jaws grip objects up to .375 inch
- Blunt tip grabs round screw heads
- CAT III 1000 V, CAT IV 600 V, 10 A



AC72 Alligator Clips

- Slide-on style for test probes
- Jaws open to 8 mm
- For use with TL71 and TL75 test lead or any 2mm dia probe tips
- CAT III 1000 V, CAT IV 600 V, 10 A



AC280 SureGrip™ Hook Clips

- Profile narrows to .22 inch at tip
- Hook opening .20 inch at front, .08 inch at base
- CAT III 1000 V, CAT IV 600 V, 3 A



AC283 SureGrip™ Pincer Clips

- 4.5 inch flexible, insulated shaft
- Nickel plated pincers open to .20 inch
- CAT III 1000 V, CAT IV 600 V, 1 A



TL224 SureGrip™ Silicone Insulated Test Leads

- Superior strain relief
- 1.5 m silicone-insulated wire resists heat and cold
- CAT III 1000 V, CAT IV 600 V, 10 A



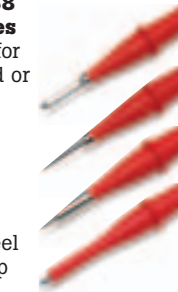
FTP-1 SureGrip™ Fused Test Probes

- Built-in fuses for added protection
- 2 mm threaded probe tips include removable 4 mm lantern-style spring contacts
- Removable GS38 insulated caps
- CAT III 1000 V, CAT IV 600 V, 10 A



TP1, TP2, TP4 and TP38 Slim Reach™ Test Probes

- Slender probe bodies for probing closely spaced or recessed points
- TP1 has a flat blade
- TP2 has 2 mm diameter tip
- TP4 has 4 mm diameter tip
- TP38 has stainless steel insulated probe to help lessen the risk of arc flash explosion
- CAT III 1000 V, CAT IV 600 V, 10 A



TP220 SureGrip™ Industrial Test Probes

- Sharp, .5 inch stainless steel tip provides reliable contact
- Flexible finger barrier improves grip
- CAT III 1000 V, CAT IV 600 V, 10 A



AC285 SureGrip™ Alligator Clips

- Multi-purpose tooth pattern grips anything from fine gauge wire to a .75 inch nut
- Nickel-plated steel jaws
- Accepts standard modular 4 mm test leads
- CAT III 1000 V, CAT IV 600 V, 10 A



AC175 Threaded Alligator Clips

- Threads securely onto TL175 or TP175 probes
- Insulated alligator clips with flexible boots
- Jaw opening: 7 mm (0.275 in), jaw contact material: nickel-plated steel
- CAT III 1000 V, CAT IV 600 V



AC173 Extended Tooth Alligator Clips

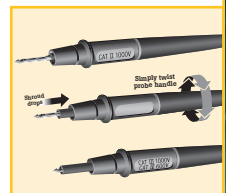
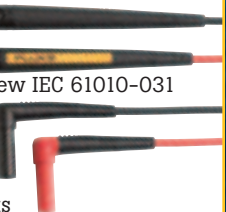
- Extended tooth jaw with front placement for attaching to screw heads
- Accepts standard 4 mm modular test leads
- Jaw opening: 8 mm (0.31 in), jaw contact material: nickel-plated steel
- CAT III 1000 V, CAT IV 600 V



The new standard for safety

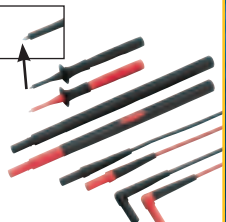
TL175 TwistGuard™ Test Leads

- Probes meet new IEC 61010-031 requirements for safety
- Patented extendable tip guard meets new CAT III 1000 V, CAT IV 600 V requirements while providing the flexibility you need for CAT II measurements
- New Wear-Guard™ test lead wear indicator that changes color when leads are damaged and in need of replacement
- Probes always show correct category rating for tip being used
- Advanced strain relief exceeds 5,000 bend life
- TP175 probes fit modular test leads



TL238 SureGrip™ Test Lead Set for high energy environments

- Insulated tip probes help lessen risk of arc flash explosion
- Probe extenders keep hands away from live current
- Includes one pair each, insulated test tip probes, probe extenders and TL224 Test Leads
- Probes and leads CAT III 1000 V, CAT IV 600 V, 10 A, extenders CAT III 1000 V 10 A



TL71 Premium DMM Test Lead Set

- Flexible silicone insulated leads are heat and cold resistant
- Distinctive comfort grip probes
- Recommended for μ V measurements
- CAT III 1000 V, CAT IV 600 V, 10 A



TL75 Hard Point Test Lead Set

- Extremely hard alloy tips resist wear
- Distinctive comfort grip probes
- 1.5 m PVC leads
- CAT III 1000 V, CAT IV 600 V, 10 A



Fluke temperature accessories

Hot probes with cool designs



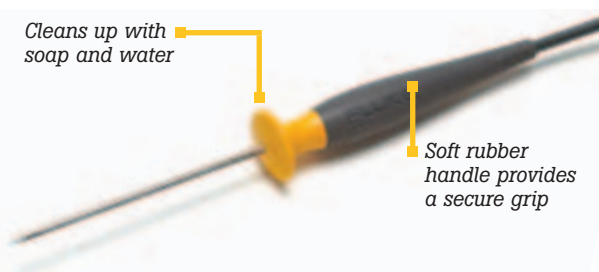
SureGrip™ temperature accessories





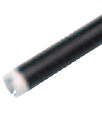
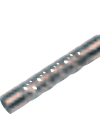

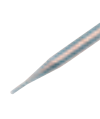

The innovative SureGrip™ design from Fluke is now available in select temperature probes. The soft rubber handle combined with a new ergonomic shape is so comfortable to hold that you'll forget about the probe and focus on the measurement. All SureGrip probes have an improved, more flexible strain relief for a long life.



Cleans up with soap and water

Soft rubber handle provides a secure grip



	Bead	Bead	HVAC	Immersion	Surface	Air	Piercing	General purpose	Industrial surface
									
	80BK-A	80PK-1 80PJ-1	80PK-11	80PK-22	80PK-3A	80PK-24	80PK-25 80PT-25	80PK-26	80PK-27
Lowest temperature	-40 °C (-40 °F)		-30 °C (-22 °F)	-40 °C (-40 °F)	0 °C (32 °F)	-40 °C (-40 °F)	KType: -40 °C (-40 °F) TType: -196 °C (-321 °F)	-40 °C (-40 °F)	-127 °C (-196 °F)
Highest temperature	260 °C (500 °F)		105 °C (221 °F)	1090 °C (1994 °F)	260 °C (500 °F)	816 °C (1500 °F)	350 °C (662 °F)	816 °C (1500 °F)	600 °C (1112 °F)
Probe material	Type K wire with teflon insulation		Velcro	Inconel 600	Type K sensor with teflon body	Inconel	316 Stainless Steel	304 Stainless Steel	
Probe length	1 m lead wire		19 in Velcro cuff	21.27 cm (8.375 in)	9.525 cm (3.75 in)	21.59 cm (8.5 in)	10.16 cm (4 in)	21.57 cm (8.5 in)	20.32 cm (8 in)
Cable length	1 m (3.3 ft)				1.3 m (4 ft)	1 m (3.3 ft)			
Connection	Standard banana jack	Molded thermocouple plug							
SureGrip handle	No	No	No	Yes	No	Yes	Yes	Yes	Yes
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.
Thermocouple types	K	K, J	K	K			K, T	K	
Typical use									
General purpose	•	•	•	•	•	•	•	•	•
HVAC	—	•	•	•	•	•	—	•	•
Food service	—	—	—	•	—	—	•	—	—
Industrial	•	•	•	—	—	—	—	—	•
Residential	•	•	—	—	•	•	•	—	—
Commercial	•	•	•	•	•	•	•	•	•

The 80TK enables your meter to read temperature using mV.

For the Fluke Thermometer, 51, 52, 53, and 54 III, no adapter is necessary for thermocouple types K, J, T and E.

Temperature Accessories Selection Guide	110/111/112	114/115/117	116	27 II	28 II	175/177	179	233	80 Series III/83V	87V	187/189	287/289	45/8845/8846	43B	120 Series	190 Series	51-II/52-II/ 53-II B/54-II B	561	574/576	714	715	725/726	741/743/744/754	787/789	902	1587	1577
80BK-A	—	—	•	—	—	—	•	•	—	•	•	•	—	—	—	—	—	—	—	—	—	—	—	—	•	•	—
All 80PK Probes	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
80PJ-1/80PJ-9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
80PT-25	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
80TK	•	•	—	•	—	•	—	—	•	—	—	—	•	•	•	•	—	—	—	—	•	—	—	•	—	—	—
80T-150UA	•	•	—	•	—	•	—	—	—	—	—	—	—	•	•	•	—	—	—	—	•	—	—	•	—	—	—
80PJ-EXT	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	•	—	—	—	—	•	—	—	—	—	—
80PK-EXT	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	—	—	•	•	•	•	•	•	•	•
80PT-EXT	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	•	—	—	—	•	—	•	—	—	—	—
80CK-M	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	—	—	•	•	•	•	•	•	•	•
80CJM	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	•	—	—	—	•	•	•	•	—	—	—

* Requires 80TK ▲ Requires 80AK-A — N/A

Fluke Temperature accessories

Turn your digital multimeter into a thermometer

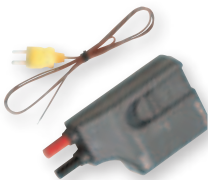


FLUKE®

Other temperature accessories

80TK Thermocouple Module

- Converts type K thermocouple signals into mV output
- Connects to DMM via standard banana plugs
- Switch selectable °C or °F
- Range: -50 °C to 1000 °C (-58 °F to 1832 °F)
- Includes 80PK-1 probe



80T-150UA Universal Solid State Temperature Probe

- For measurement of air, surface and non-corrosive materials
- Measurement range: -50 °C to 150 °C (-58 °F to 302 °F)
- Output: 1 mV/°C or 1 mV/°F (switch selectable)
- Connects to DMM via standard banana plugs



80PK-8, 80PK-10, Pipe Clamp Temperature Probes

- Type K thermocouples clamp securely onto pipes for fast temperature and superheat measurements
- Durable ribbon sensors
- 1 m (39 in) lead
- Measure from -29 °C to 149 °C
- 80PK-8 for 6.4 mm to 34.9 mm (0.25 in to 1.375 in)
- 80PK-10 for 32 mm to 64 mm (1.25 in to 2.5 in)

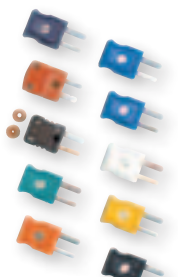


Thermocouple Plug Kits

700TC1

A kit of ten mini-plug connectors. One each of the following:

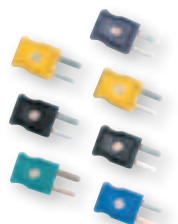
- Type J (black)
- Type K (yellow)
- Type T (blue)
- Type E (purple)
- Type R/S (green)
- Type B or Cu (white)
- Type L (J-DIN) (blue)
- Type U (T-DIN) (brown)
- Type C (red)
- Type N (orange)



700TC2

A kit of seven mini-plug connectors.

- Type J (black), two
- Type K (yellow), two
- Type E (purple), one
- Type T (blue), one
- Type R/S (green), one



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 to conveniently keep both clamps handy for any situation



80CK-M and 80CJ-M Type K and J Male Mini-Connectors

- Isothermal screw terminal for K or J wire
- Suitable for up to 20 gauge thermocouple wire
- Color coded to industry standards (K-yellow, J-black)
- Two per package



80PJ-EXT, 80PK-EXT, 80PT-EXT Thermocouple Wire Extension Kits

- For extending and repairing type J, K or T thermocouple wires.
- Kit includes 3 m (9 ft) of thermocouple wire and 1 pair of male/female mini-connectors
- Maximum continuous exposure temperature: 260 °C (500 °F)
- 80PK-EXT is compatible with type K thermometers; 80PJ-EXT is designed for type J thermometers, and 80PT-EXT is designed for type T thermometers



Process tools accessories

BP7240

- Li-ion rechargeable battery; nominal 7.2 volt, 4400 mA hr
- Use with 750 Series Calibrators



BP7235

- NiMH rechargeable battery; nominal 7.2 volt, 3500 mA hr
- Use in 700 and 740 Series Calibrators



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. Ideal for low pressure applications requiring accurate low pressure testing.



700ILF In-line Filter

The Fluke 700ILF can be used to isolate the calibrator from incidental contact with fluids. Particularly useful with the 718 calibrator to help keep moisture or oils from contaminating the on-board pump.



700PTP-1 Pneumatic Test Pump

The Fluke 700PTP is a handheld pressure pump designed to generate either vacuum to -11.6 psi/-0.8 bar or pressure to 600 psi/40 bar.



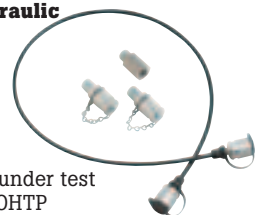
700HTP-2 Hydraulic Test Pump

The Fluke 700HTP is designed to generate pressures up to 10,000 psi/700 bar. Use the Fluke 700PRV adjustable relief valves to limit pressures from 1360 psi to 5450 psi.



700HTH-1 Hydraulic Test Hose

The 700HTH is a 10,000 psi, 700 bar test hose that connects to a calibration unit under test from a Fluke 700HTP hydraulic test pump.



700PMP Pressure Pump

The 700PMP is a hand-operated pressure pump to provide pressures up to 150 psi/1000 kPa. Output fitting is 1/8 FNPT.



Fluke 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



Fluke current clamps

For use with multimeters, portable oscilloscopes and power quality analyzers



AC only models

i200



i200s



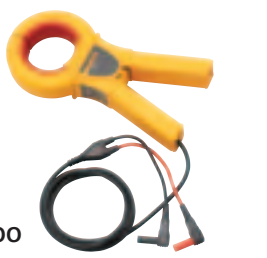
i400



i400s



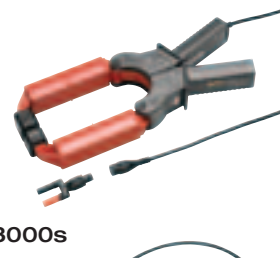
i800



i1000s



i3000s



i3000s Flex/i6000s



i3000s Flex-24 (24 in dia), i3000s Flex-36 (36 in dia), i6000s Flex-24 (24 in dia) i6000s Flex-36 (36 in dia)

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 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 % + 0.015 A, 5 A to 400 A, 2 % + 0.04 A, 45 to 400 Hz	0.1 A to 10 A, ± 3 % + 0.1 A, 10 A to 200 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 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 to 65 Hz	± 1 % of range 48 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 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 (0.8 in)	20 mm (0.8 in)	32 mm (1.25 in)	32 mm (1.25 in)	54 mm (2.13 in)	54 mm (2.13 in)	64 x 100 mm (2.52 x 3.94 in)	177 mm (7 in)	177 mm (7 in) or 265 mm (10.4 in)	193 mm (7.6 in) or 289 mm (11.4 in)
Maximum conductor size	300 MCM	300 MCM	750 MCM	750 MCM	2-500 MCM or 1-1000 MCM	2-500 MCM or 1-1000 MCM	64 mm (2.52 in) circumference	610 mm (24 in) circumference	610 mm or 915 mm circumference	610 mm (24 in) or 915mm (36 in)
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	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

Meter	i200	i200s	i400	i400s	i800	i1000s	i3000s	i2000 Flex ¹	i3000s Flex	i6000s
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	Best to use i430Flex-TF
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	Best to use i430Flex-TF
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	Best to use i430Flex-TF
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	Best to use i430Flex-TF
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	Best to use i430Flex-TF
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	Best to use i430Flex-TF
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	Best to use i430Flex-TF
1577/1587 Insulation Meter 83V/88V	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	Best to use i430Flex-TF
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	Best to use i430Flex-TF
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	Best to use i430Flex-TF
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	Best to use i430Flex-TF
43B Power Quality Analyzer		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	Best to use i430Flex-TF
434/435 Power Quality Analyzer		1 A to 200 A		1.2 A to 400 A		0.3 A to 1000 A	1.2 A to 3000 A	Best to use i430Flex	Best to use i430Flex-TF	
120 Series ScopeMeters		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	Best to use i430Flex-TF
190 Series Scopemeters		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	Best to use i430Flex-TF
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	Best to use i430Flex-TF
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	Best to use i430Flex-TF
787/789 Process Meters	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	Best to use i430Flex-TF

* Requires PM9081/001 Adapters.

¹ Three range version.

² Current and watt readings will be multiples of 10 higher or lower than actual on some ranges.

Fluke current clamps

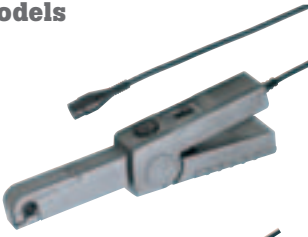
For use with multimeters, portable oscilloscopes and power quality analyzers



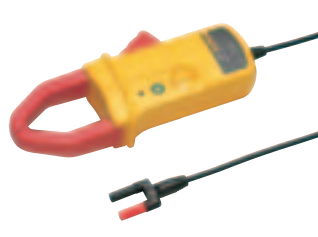
FLUKE®

AC/DC models

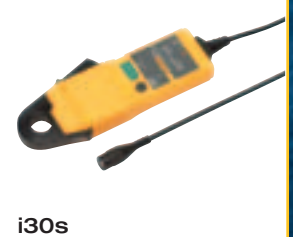
80i-110s



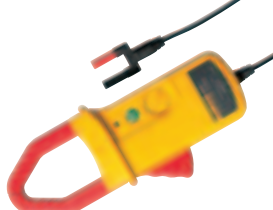
i1010



i30s



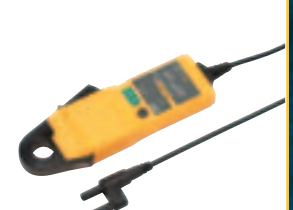
i410



i310s



i310s, i30s and i30
Hall Effect AC/DC
Current Clamps
Especially useful for low current measurements down to 30 milliamperes.



i30

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 rms	0.1 A to 300 A
Accuracy	0.1 A to 10 A; dc to 1 kHz: $\pm 3\%$ + 50 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, ± 2 mA	$\pm 1\%$ of reading, ± 2 mA	30 A range: $\pm 1\%$ + 50 mA 300 A range: $\pm 1\%$ + 300 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	Yes	Yes	Yes	Yes	Yes	Yes
Maximum conductor diameter	11.8 mm (0.46 in)	30 mm (1.18 in)	30 mm (1.18 in)	19 mm (0.75 in)	19 mm (0.75 in)	19 mm (0.75 in)
Maximum conductor size	1 AWG	750 MCM or 2-500 MCM	750 MCM or 2-500 MCM	250 MCM	250 MCM	250 MCM
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 meter with BNC termination	1.2 meter with shrouded banana plugs	1.2 meter with shrouded banana plugs	1.5 meter with shrouded dual banana plug	2 meter with BNC termination	2 meters 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

Meter	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 Insulation Meter	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 ScopeMeters	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**	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 Scopemeters	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 Process Meters	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

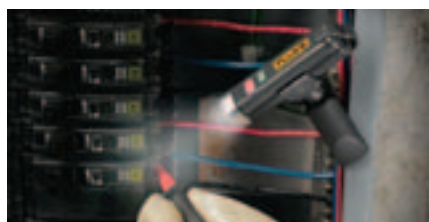
* Requires PM9081 Adapter

** Requires PM9082/001 Adapter

***Only for use with the 430 Series Power Quality Analyzers

Fluke lights and hangers

Free your hands and shed light on the contact point



LVD1 Volt Light

- Exclusive dual-sensitivity
- Detects voltages from 40 V ac to 300 V ac
- Voltage detector glows blue at 50 Hz to 60 Hz or 2.5 cm to 38 cm (1 in to 5 in) away from source
- Ultra-bright white LED with 100,000 hour bulb life
- AAA battery included



LVD2 Volt Light

- Non-contact ac voltage detector and bright white LED flashlight
- Detects voltage from 90 V to 600 V ac from one to five inches away
- CAT IV rated, one-year warranty



L205 Mini Hat Light

Rugged, high-intensity Xenon worklight.

- Attaches to a baseball cap
- Includes a hat clip
- Includes two AAA batteries
- Waterproof



L206 Deluxe LED Hat Light

(hard hat not included)

Attach it to a hard hat, a baseball cap, or even a panel door.

- Three super bright white LEDs—never burn out
- Special hard-hat attachment included
- 40-hour battery life
- Includes three AAA batteries

TPAK ToolPak™ Magnetic Meter Hanger

- Free both hands to make measurements
- Hang your meter from metallic surfaces like panels and pipes
- Kit includes universal hanger clips (two), hook and loop straps (two lengths), adapter and strong magnet
- Attaches to back of many Fluke meters, including 110, 170, 180, 280 Series, 87V and 83V DMMs, 724, 725 and 789 Process Calibrators, 70 Series III DMMs, 1503, 1507, 1577 and 1587 Insulation Multimeters and 50 Series II Digital Thermometers



LeadWrap Test Lead Fasteners

- Keep your favorite leads together
- Hook and loop fasteners
- Three per package



L215 SureGrip™ Kit with Probe Light and Probe Extenders

- L200 probe light
- TP220 SureGrip test probes
- TL224 SureGrip test leads
- TP280 test probe extenders
- Soft foldable pouch, keeps the entire set together



L210 Probe Light and Probe Extenders

- 8 inch probe extenders fit modular test probes
- Probe and extender length complies with NFPA recommendations
- Bright white LED illuminates contact area
- Probe light fits on extender or test probe

Specialty accessories and software

Get more out of your multimeter



FLUKE®

Stray voltage

SV225

- Eliminates stray voltage due to capacitance between wires in electrical installations
- Compatible with all instruments and test leads that accept standard 4 mm shrouded banana connectors



Pressure and vacuum

PV350 Pressure Vacuum Module

- Digital pressure and vacuum measurements in a single module
- Measures HVAC/R, hydraulic and pneumatic pressures to 350 psig/2413 kPa (usable to 500 psig)
- Measures to 76 cm Hg (29.9 in Hg) vacuum (not intended for measuring microns of vacuum)
- Compatible with most digital multimeters



Fiber optics

FOM Fiber Optic Meter

The Fluke Fiber Optic Meter (FOM) helps you test and maintain fiber optic cable without having to buy a whole new meter. Plug the FOM directly into any DMM with a mV dc function and a 10 mΩ input impedance, and quickly and accurately verify fiber optic cable system loss. Light sources and patch cords sold separately.



FOS 850 and FOS 850/1300 Fiber Optic Light Sources

A variety of LED light sources allow you to test different cables.



Logging software



FlukeView® Forms

Harness the power of the data logging function on your Fluke Digital Multimeter, Thermometer or ProcessMeter. Log live readings while connected to a PC, or leave your Fluke 289, 789 or 54-II in place to capture up to 1,000 readings for download to a PC.

Choose the model that's right for you:

- FVF-SC2:** Includes software and cable used with 280 Series DMMs and 789 ProcessMeters, and the 1550B Insulation Tester
- FVF-SC3:** Includes software and cable used with 45 Bench Meters
- FVF-SC4:** Includes software and cable used with 8845A and 8846A Multimeters

Go to www.fluke.com.au to download the demo.

FlukeView® Forms Basic

An abridged version of FlukeView Forms.

- Available for use with 280 Series DMMs and 789 ProcessMeters, only
- Upgrade to the full FlukeView Forms with FVF-UG
- Compatible with the 280 and 789 series only

Choose the model that's right for you:

- FVF-Basic:** FlukeView Forms Basic transfers data from Fluke test tool to a PC. Displays readings in table or graphical format.
- FVF-SC2, -SC4:** FlukeView Forms Full provides Basic software functions plus customizable documents and templates.
- FVF-UG:** FlukeView Forms Upgrade, compatible with all forms of FlukeView Forms (Basic and Full)

Fuse selection guide

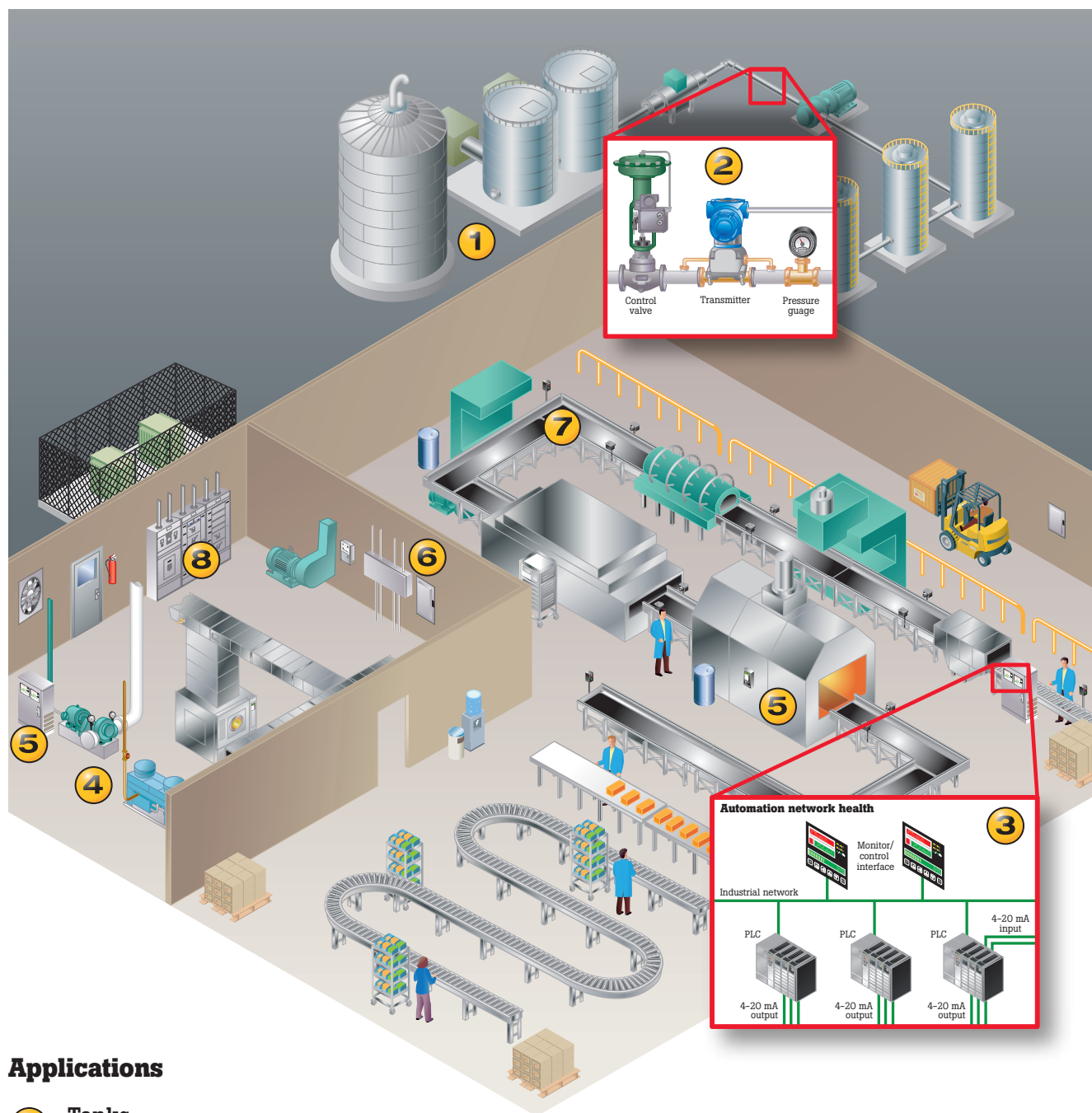
Model	Fuse Requirements
21-III/75-III/73-III	P/N 871173 630mA 250V fuse P/N 803293 11A 1000V fuse
27 (S/N<7247001)	P/N 871173 630mA 250V fuse P/N 871202 3A 600V fuse P/N 892583 15A 600V fuse
27 (S/N>7247001)	P/N 943121 440mA 1000V fuse P/N 803293 11A 1000V fuse
83/85/87 (S/N>6565000)	P/N 943121 440mA 1000V fuse P/N 803293 11A 1000V fuse
83-III/85-III/87-III 87-IV/89-IV/187/189/287/289/ 77-III/79-III/23-III/26-III/175/177/179/77-IV/27-II/28-II	P/N 943121 440mA 1000V fuse P/N 803293 11A 1000V fuse
111/112/115/117/233	P/N 803293 11A 1000V fuse
1577/1587	P/N 943121 440mA 1000V fuse
1503/1507	P/N 2279339 315mA 1000V fuse
787/789	P/N 943121 440mA 1000V fuse (Qty 2)

Selection Guide	110/111/112	114/116/116/117	27 II/28 II/27	175/177	179	80 Series III/83V	87/89 IV	87V	233	287/289/187/189	43B	120 Series	190 Series	51/52/53/54 II	705/707	715	725/726	741/743	744	787/789	1587	1577
TPak	•	•	•	•	•	83V	•	•	•	•	•	•	•	•	•	•	•	•	•	789	•	•
PV350 (pressure)	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
FOM (fiber optic)	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
CO-210	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

*53 B II, 54 B II only.

Model	Instrument Compatibility	Cable
FVF-BASIC	Fluke 280 Series, 789, 1550B, 1653, 180 Series	USB / IR
FVF-SC2	Fluke 280 Series, 789, 1550B, 1653, 180 Series	USB / IR
FVF-SC4	Fluke 8808A, 8845A, 8846A, 45*	USB / Serial
IR189USB	USB cable for Fluke-18X, 28X DMMs	USB / IR

Fluke tools for industrial technicians



Applications

- 1 Tanks**
Thermal imager and pressure calibrator.
- 2 Process Controls**
Thermal imager and mA clamp meter.
- 3 PLCs/Network**
ScopeMeter test tool and mA clamp meter.
- 4 Motors/Pumps**
Digital multimeter, insulation tester, thermal imager, clamp meter, infrared thermometer and power quality analyzer.
- 5 Drives/MCC/Large Loads**
Digital multimeter, ScopeMeter test tool, power quality analyzer and thermal imager.
- 6 Electrical Cabinets**
Digital multimeter, clamp meter, infrared thermometer, thermal imager and power quality analyzer.
- 7 Conveyors**
Thermal imager and distance meter.
- 8 Switchgear/Transformers**
Power quality analyzer and thermal imager.