

# Digital Multimeters

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





# Digital Multimeter Selection Guide

Models	Advanced Meters				Wireless Meters				Industrial Maintenance and Field Service Meters				Compact Meter				Automotive Meters				Insulation Testers				Specialty Meters			
	87 V	87 V MAX	287	289	233	3000 FC	175	177	179	110	113	114	115	116 HVAC	117	88V	1577	1587 FC	27 II	28 II	28IIEX	279 FC						
<b>Basic features</b>	20000 AC	20000 AC	50000 AC+DC	50000 AC+DC	6000 AC	6000 AC	6000 AC	6000 AC	6000 AC	6000 AC	6000 AC	6000 AC	6000 AC	6000 AC	6000 AC	20000 AC	6000 AC	6000 AC	6000 AC	20000 AC	20000 AC	279 FC						
True-RMS readings	AC	AC	AC+DC	AC+DC	AC	AC	AC	AC	AC	AC	AC	AC	AC	AC	AC	AC	AC	AC	AC	AC	AC	6000						
Basic DC accuracy	0.05 %	0.05 %	0.02 %	0.02 %	0.09 %	0.09 %	0.09 %	0.09 %	0.5 %	0.5 %	0.5 %	0.5 %	0.5 %	0.5 %	0.5 %	0.1 %	0.2 %	0.09 %	0.1 %	0.05 %	0.05 %	0.09 %						
AC bandwidth	20 kHz	20 kHz	100 kHz	100 kHz	1 kHz	1 kHz	1 kHz	1 kHz	1 kHz	1 kHz	1 kHz	1 kHz	1 kHz	1 kHz	1 kHz	5 kHz	60 Hz	5 kHz	30 kHz	20 kHz	20 kHz	500 Hz						
Auto/manual ranging	•/•	•/•	•/•	•/•	•/•	•/•	•/•	•/•	•/•	•/•	•/•	•/•	•/•	•/•	•/•	•/•	•/•	•/•	•/•	•/•	•/•	•/•						
Class 1 Zone 1 AEx ia IIC T4 Class 1 Division 1, Groups ABCD																												
<b>Measurements</b>	1000 V	1000 V	1000 V	1000 V	1000 V	1000 V	1000 V	1000 V	600 V	600 V	600 V	600 V	600 V	600 V	600 V	1000 V	1000 V	1000 V	1000 V	1000 V	1000 V	1000 V						
Current AC/DC	10 A	10 A	10 A	10 A	10 A	10 A	10 A	10 A	10 A	10 A	10 A	10 A	10 A	10 A	10 A	10 A	10 A	10 A	10 A	10 A	10 A	10 A						
Resistance	50 MΩ	50 MΩ	500 MΩ	500 MΩ	40 MΩ	50 MΩ	50 MΩ	50 MΩ	40 MΩ	40 MΩ	40 MΩ	40 MΩ	40 MΩ	40 MΩ	40 MΩ	50 MΩ	50 MΩ	50 MΩ	50 MΩ	50 MΩ	50 MΩ	2500 A AC (w/IFlex™)						
Frequency	200 kHz	200 kHz	1 MHz	1 MHz	100 kHz	100 kHz	100 kHz	100 kHz	100 kHz	60 Hz	100 kHz	100 kHz	100 kHz	100 kHz	100 kHz	100 kHz	100 kHz	200 kHz	200 kHz	200 kHz	200 kHz	50 MΩ						
Capacitance	9999 nF	9999 nF	1 pF to 100 nF	1 pF to 100 nF	9999 nF	9999 nF	9999 nF	9999 nF	9999 nF	9999 nF	9999 nF	9999 nF	9999 nF	9999 nF	9999 nF	9999 nF	9999 nF	9999 nF	9999 nF	9999 nF	9999 nF	9999 nF						
Temperature	1090° C (1994° F)	1090° C (1994° F)	+1350° C (+2462° F)	+1350° C (+2462° F)	400° C (752° F)	400° C (752° F)	400° C (752° F)	400° C (752° F)	400° C (752° F)	400° C (752° F)	400° C (752° F)	400° C (752° F)	400° C (752° F)	400° C (752° F)	400° C (752° F)	500° C (932° F)	500° C (932° F)	+1090° C (+1994° F)	+1090° C (+1994° F)	+1090° C (+1994° F)	1090° C (1994° F)	1090° C (1994° F)						
dB			60 dB	60 dB																								
Conductance	50 nS	60 nS	50 nS	50 nS												60 nS	60 nS	60 nS	60 nS	60 nS	60 nS	9999 μF						
Duty cycle/pulse width	•/•	•/•	•/•	•/•												•/•	•/•	•/•	•/•	•/•	•/•	•/•						
Continuity/diode test	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•						
Motor Drive (MSD) Measurements	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•						
VoltAlert™, non-contact voltage detection	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•						
LoZ: low input impedance	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•						
Microamps	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•						
Insulation Test	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•						
Number of insulation test ranges																	2					5						
<b>Display</b>																												
Removable wireless display	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•						
Dot matrix display	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•						
Dual display	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•						
Analog bargraph	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•						
Backlight	Two level	Two level	Two level	Two level	Two level	Two level	Two level	Two level	Two level	Two level	Two level	Two level	Two level	Two level	Two level	Two level	Two level	Two level	Two level	Two level	Two level	Two level						
Graphical trend display	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•						
<b>Diagnostics and data</b>																												
Min/Max recording with time stamp	•/•	•/•	•/•	•/•	•/•	•/•	•/•	•/•	•/•	•/•	•/•	•/•	•/•	•/•	•/•	•/•	•/•	•/•	•/•	•/•	•/•	•/•						
Fast Min/Max	250 μs	250 μs	250 μs	250 μs	250 μs	250 μs	250 μs	250 μs	250 μs	250 μs	250 μs	250 μs	250 μs	250 μs	250 μs	250 μs	250 μs	250 μs	250 μs	250 μs	250 μs	250 μs						
Display Hold/Auto (Touch) Hold	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•						
Relative reference	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•						
Stand alone logging	•	•	•	•	(with app)	(with app)	(with app)	(with app)	(with app)	(with app)	(with app)	(with app)	(with app)	(with app)	(with app)	(with app)	(with app)	(with app)	(with app)	(with app)	(with app)	(with app)						
Trend Capture	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•						
Readings memories	100000	100000	100000	100000	100000	100000	100000	100000	100000	100000	100000	100000	100000	100000	100000	100000	100000	100000	100000	100000	100000	100000						
USB interface	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•						
<b>Other features</b>																												
Real time clock	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•						
Automatic selection, AC/DC volts	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•						
Closed case calibration	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•						
Separate battery/fuse access	•/•	•/•	•/•	•/•	•/•	•/•	•/•	•/•	•/•	•/•	•/•	•/•	•/•	•/•	•/•	•/•	•/•	•/•	•/•	•/•	•/•	•/•						
Operating temperature range	-120° C, 55° C (-4° F, 131° F)	-120° C, 55° C (-4° F, 131° F)	-20° C, 55° C (-4° F, 131° F)	-20° C, 55° C (-4° F, 131° F)	-10° C, 50° C (14° F, 122° F)	-10° C, 50° C (14° F, 122° F)	-10° C, 50° C (14° F, 122° F)	-10° C, 50° C (14° F, 122° F)	-10° C, 50° C (14° F, 122° F)	-10° C, 50° C (14° F, 122° F)	-10° C, 50° C (14° F, 122° F)	-10° C, 50° C (14° F, 122° F)	-10° C, 50° C (14° F, 122° F)	-10° C, 50° C (14° F, 122° F)	-10° C, 50° C (14° F, 122° F)	-10° C, 50° C (14° F, 122° F)	-10° C, 50° C (14° F, 122° F)	-10° C, 50° C (14° F, 122° F)	-10° C, 50° C (14° F, 122° F)	-10° C, 50° C (14° F, 122° F)	-10° C, 50° C (14° F, 122° F)	-10° C, 50° C (14° F, 122° F)						
<b>Warranty and electrical safety</b>																												
Input alert	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•						
IP Rating	IP30	IP67	IP67	IP67	IP54	IP67	IP67	IP67	IP42	IP42	IP42	IP42	IP42	IP42	IP42	IP42	IP42	IP42	IP42	IP42	IP42	IP40						
Safety rating (IEC 61010) CAT III	1000 V	1000 V	1000 V	1000 V	1000 V	1000 V	1000 V	1000 V	600 V	600 V	600 V	600 V	600 V	600 V	600 V	1000 V	1000 V	1000 V	1000 V	1000 V	1000 V	1000 V						
Safety rating (IEC 61010) CAT IV	600 V	600 V	600 V	600 V	600 V	600 V	600 V	600 V	600 V	600 V	600 V	600 V	600 V	600 V	600 V	600 V	600 V	600 V	600 V	600 V	600 V	600 V						

## Digital Multimeters



# Fluke 279 FC True-RMS Thermal Multimeter



Fluke 279 FC



## Find. Repair. Validate. Report.

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

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

## Recommended Accessories



**i2500-10**  
10 inch iFlex™ Flexible Current Probe



**i2500-18**  
18 inch iFlex™ Flexible Current Probe



**BC500**  
AC Power Charger



**BP500**  
Lithium-Ion Battery 3000mAh battery



**C280**  
Carrying Case

## Recommended Kits

Bundle & Save



**Fluke 279FC I/B TRMS Combo Kit**

## DMM

Basic DC accuracy	0.09%
Bandwidth	1% 45 Hz to 65 Hz, full time low pass filter
Voltage	AC/DC 1000 V
Current AC	iFlex™ Flexible Current Probe (included with the 279 FC/iFlex™)
Resistance	50 MΩ
Frequency	100 kHz
Capacitance	9999 μF
Continuity with beeper	Yes
Diode test	Yes
Min/Max recording	Yes
Display Hold	Yes

## Infrared Camera

Infrared resolution	80 × 60
Image capture frequency	8 Hz
Field of View	36° (w) × 27° (h)
NETD	≤200 mK
Infrared spectral band	7.5 to 14 microns
Center point	Yes (with center point temp)
Focus mechanism	Fixed focus
Temperature Range	-10° C to 200° C (14° F to 392° F) Accuracy: ±5° C (±9° F) or (±5% as tested)
Emissivity	0.95 fixed
Background compensation	20° C fixed
Memory storage	Approximately 100 images (internal)
File format	Non-radiometric .is2

## Other

Battery type	Rechargeable lithium-ion battery (charge time: 4.5 hours)
Operating temperature	-10° C to 50° C (14° F to 122° F)
Storage temperature	-20° C to 60° C (-4° F to 140° F)
Relative humidity	0% to 90% (0° C to 35° C) (32° F to 95° F) 0% to 75% (35° C to 40° C) (95° F to 104° F) 0% to 45% (40° C to 50° C) (104° F to 122° F)
Altitude	2 000 meters (6,561 feet)
Temperature coefficient	Add 0.1 × specified accuracy for each° C above 28° C (82° F) or below 18° C (64° F)
Ingress Protection	IEC 60529: IP40
Certifications	CE, CSA, FCC ID: T68-FBLE
Safety compliance	IEC 61010-1: Pollution degree 2; IEC 61010-2-033: CAT III 1000 V/CAT IV 600 V
EMC	IEC 61326-1
Size	215.9 x 93.9 x 57.1 mm (8.5 x 3.7 x 2.25 in)
Weight	0.793 kg (1.75 lb)



## Included Accessories

TL75 Test Leads, Rechargeable Lithium-ion Battery, Charger, 18-inch (45.72 cm) iFlex™ Flexible Current Probe, Hanging Strap, Soft Carrying Case.

279 FC I/B also includes: Additional Lithium-ion Battery.

## Ordering Information

**279 FC/iFlex** TRMS Thermal Multimeter with iFlex™

**Fluke 279FC I/B** TRMS Thermal Multimeter with iFlex™ and Extra Battery Kit

Contact your local distributor for price and availability.

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# Fluke 3000 FC Wireless Digital Multimeter



Fluke 3000 FC



## See it. Save it. Share it.

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

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

## Other capabilities of Fluke Connect™ and the 3000 FC Multimeter:

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

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

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

Functions	Range	Basic Accuracy
AC voltage	600.0 mV, 6.00 V, 60.00 V, 600.0 V, 1000 V	1.0% + 3
DC voltage	600.0 mV, 6.00 V, 60.00 V, 600.0 V, 1000 V	0.09% + 2
Continuity	600 Ω	Meter beeps at < 25 Ω, beeper detects opens or shorts of 250 μs or longer
Resistance	600 Ω, 600.0 Ω, 6.00 kΩ, 60.00 kΩ, 600.0 kΩ, 50.00 MΩ	0.5% + 1
Diode test	2.00 V	1% + 2
Capacitance	1000 nF, 10.00 μF, 100.0 μF, 9999 μF <sup>1</sup>	1.2% + 2
mA AC (45 Hz to 1 kHz) <sup>2</sup>	60.00 mA, 400.0 mA <sup>3</sup>	1.5% + 3
mA DC <sup>2</sup>	60.00 mA, 400.0 mA <sup>3</sup>	0.5% + 3
Frequency	99.99 Hz, 999.9 Hz, 9.99 kHz, 99.99 kHz	0.1% + 1

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

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

<sup>3</sup> 400.0 mA accuracy specified up to 600 mA overload.

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

## Recommended Accessories



**TL238**  
SureGrip™  
Test Lead Set



**C37XT**  
EVA Foam Hard Case



**PC Adapter**  
Fluke Connect™  
Wireless PC Adapter

## Recommended Kits Bundle & Save

**Fluke 3000 FC General Maintenance System**

**Fluke 3000 FC Industrial System**

**Fluke 3000 FC HVAC System**

**Fluke 3000 FC/1AC-II Wireless Multimeter and Non-Contact Voltage Detector Kit**

**Fluke 3000 FC/EDA2 Wireless Multimeter and Deluxe Accessories Combo Kit**

**Fluke 3000 FC/TPAK Wireless Multimeter and Magnetic Hanger Combo Kit**

## Included Accessories

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

## Ordering Information

**FLK-3000 FC** FC Wireless Digital Multimeter

**FLK-3000 FC GM** Wireless General Maintenance Kit

**FLK-3000 FC IND** Wireless Industrial System Kit

**FLK-3000 FC HVAC** Wireless HVAC System Kit

**FLK-3000 FC/1AC-II** Wireless Multimeter & Non-Contact Voltage Detector Combo Kit

**FLK-3000 FC/EDA2** Wireless Multimeter Deluxe Accessories Combo Kit

**FLK-3000 FC/TPAK** Wireless Multimeter & Magnetic Hanger Combo Kit

Contact your local distributor for price and availability.  
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Digital Multimeters



# Fluke 280 Series True-RMS Logging Multimeters



Fluke 289/FC



## Find little problems before they become big

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

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

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

- Large 50000 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 10000 recorded events
- Save, name, and recall multiple logging sessions before PC download is necessary
- Field upgradeable and expandable meter lets you stay current as new capabilities are added.
- Two terminal 50 ohm range with 1 milliohm resolution, 10 mA source current. Useful for measuring and comparing differences in motor winding resistance or contact resistance (289/FC)
- Low-pass filter for accurate voltage and frequency measurements on adjustable speed motor drives and other electrically noisy equipment (289/FC)
- Limited lifetime manufacturer's warranty

## Recommended Accessories



**TLK287**  
Electronic Test Lead Set



**TLK289**  
Industrial Test Lead Set



**FVF-SC2**  
FlukeView™ Forms Software with Cable



**C280**  
Soft Case



**i410**  
AC/DC Current Clamp



**ir3000 FC**  
Fluke Connect™ ir3000 Connector

## Recommended Kits

Bundle & Save

**Fluke 287 FlukeView™ Forms Combo Kit**

**Fluke 287 FlukeView™ Forms Combo Kit with ir3000FC Connector**

**Fluke 289 FlukeView™ Forms Combo Kit**

**Fluke 289 FlukeView™ Forms Combo Kit with ir3000FC Connector**

## Included Accessories

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

## Ordering Information

**FLUKE-287** True-RMS Industrial Logging Multimeter with TrendCapture

**FLUKE-289** True-RMS Electronics Logging Multimeter with TrendCapture

**FLUKE-287/ FVF Kit** FlukeView™ Forms Combo Kit

**FLUKE-289/ FVF Kit** FlukeView™ Forms Combo Kit

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

**FLUKE-289/ FVF/IR3000 Kit** Industrial Logging Multimeter and Software Combo Kit

**FLUKE IR3000 FC** Fluke Connect™ ir3000 Connector

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

Functions	Range	Basic Accuracy
AC volts or DC volts	50.00 mV, 500.00 mV, 5.00 V, 50.00 V, 500.00 V, 1000.0 V	0.02% 0.4% (True-RMS) (AC)
AC current DC current	500.00 µA, 5000.0 µA, 50.00 mA, 400.00 mA, 5.00 A, 10.00 A	0.15% 0.7% (True-RMS)
Temperature (excluding probe)	-200.0° C to 1350.0° C (-328° F to 2462° F)	1.0%
Resistance	50.00 Ω, 500.00 Ω, 5.00 kΩ, 50.00 kΩ, 500.00 kΩ, 5.00 MΩ, 50.00 MΩ, 500.0 MΩ	0.05%
Capacitance	1.00 nF, 10.00 nF, 100.0 nF, 1.00 µF, 10.00 µF, 100.0 µF, 1000 µF, 10.00 mF, 100 mF	1.0%
Frequency	99.99 Hz, 999.99 Hz, 9.99 kHz, 99.99 kHz, 999.99 kHz	0.005%

Contact your local distributor for price and availability.

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



Fluke 87V MAX

## Performance and accuracy for maximum industrial productivity

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

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

### Electrical safety

All inputs are protected to CAT III 1000 V and CAT IV 600 V. They can withstand impulses in excess of 8000 V to help protect you from arc blast resulting from surges and spikes. Limited lifetime manufacturer's warranty.



Fluke 87V



Fluke 83V



Features	83V	87V	87V MAX
True-RMS AC voltage and current for accurate measurements on non-linear signals	-	•	•
Selectable filter for accurate voltage and frequency measurements on motor drives	-	•	•
6000 counts, 3-3/4 digits	•	•	•
4-1/2 digit mode for precise measurements (20000 counts)	-	•	•
Measure up to 10 A, 20 A for up to 30 seconds	•	•	•
Built in thermometer lets you carry one less tool (TC probe included)	-	•	•
Frequency to 200 kHz and % duty cycle	•	•	•
Resistance, continuity and diode test	•	•	•
10000 µF capacitance range for components and motor caps	•	•	•
Min/Max/Average recording with Min/Max Alert to capture variations automatically	•	•	•
Battery Life with Backlight off	400 hours		800 hours

Functions	Range	Basic Accuracy		
		83V	87V	87V MAX
DC volts	600.0 mV, 6.00 V, 60.00 V, 600.0 V, 1000 V	0.1%	0.05%	
AC volts	600.0 mV, 6.00 V, 60.00 V, 600.0 V, 1000 V	0.5%	0.7% (True-RMS)	
DC current	600.0 µA, 6000 µA, 60.00 mA, 600.0 mA, 6.00 A, 10.00 A	0.4%	0.2%	
AC current	600.0 µA, 6000 µA, 60.00 mA, 600.0 mA, 6.00 A, 10.00 A	1.2%	1.0% (True-RMS)	
Temperature (excl. probe)	-200° C to 1090° C (-328° F to 1994° F)	-	1.0%	
Temperature Probe	-40° C to 260° C (-40° F to 500° F)	-	2.2° C (35.96° F) or 2%	
Resistance	600.0 Ω, 6.00 kΩ, 60.00 kΩ, 600.0 kΩ, 6.00 MΩ, 50.00 MΩ	0.4%	0.2%	
Capacitance	10.00 nF, 100.0 nF, 1.00 µF, 10.00 µF, 100.0 µF, 9999 µF	1.0%	1.0%	
Frequency	199.99 Hz, 1.99 kHz, 19.99 kHz, 199.99 kHz	0.005%	0.005%	

## Recommended Accessories



**TPAK**  
Magnetic Meter Hanger



**TL220**  
SureGrip™ Industrial Test Lead Set



**TL175**  
TwistGuard™ Test Leads



**TL224**  
SureGrip™ Silicone Insulated Test Leads



**AC285**  
SureGrip™ Alligator Clips



**i400**  
AC Current Clamp



**C31XT**  
EVA Foam Hard Case



**CKT80**  
Extreme Case

## Recommended Kits

Bundle & Save



**Fluke 87V/E2 Industrial Electrician's Combo Kit**

## Included Accessories

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

## Ordering Information

**FLUKE-83V** Industrial Multimeter

**FLUKE-87V** True RMS Industrial Multimeter

**FLUKE-87V/E2** Industrial Electrician Combo Kit

**FLUKE-87V-MAX** MAX True RMS Industrial Multimeter

**FLUKE-87V/IMSK** Industrial Multimeter Service Kit



# Fluke 88V Automotive Multimeter



Fluke 88V



## The right meter for automotive diagnostics

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

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

- 0.1% DC accuracy
- 4-1/2 digit mode for precise measurements (20000 counts)
- Measure up to 1000 V AC and DC
- Current measurements up to 10 A, 20 A for up to 30 seconds
- Built-in thermometer for temperature measurements when you need them (temperature probe included)
- Resistance, continuity and diode test
- RPM measurements with inductive pickup (included)
- Millisecond pulse width measurements for fuel injectors
- Magnetic hanger to attach meter to the vehicle and free your hands for other tasks
- Min/Max/Average recording with Min/Max Alert to capture variations automatically
- Peak Min/Max to record transients as fast as 250  $\mu$ s
- Relative mode to remove test lead resistance from low ohms measurements
- Auto and manual ranging for maximum flexibility
- Autohold™ to capture stable readings with only one touch of the leads
- Large display digits and two-level bright white backlight for increased visibility
- Analogue bar-graph to track changing or unstable signals
- Input Alert provides audible warning against wrong use of input jacks
- Limited lifetime manufacturer's warranty

Specifications	88V
DC volts	Maximum Voltage: 1000 V Accuracy: $\pm(0.1\% + 1)$ Best Resolution: 0.01 mV
AC volts	Maximum Voltage: 1000 V Accuracy: $\pm(0.5\% + 2)$ AC Bandwidth: 5 kHz Best Resolution: 0.01 mV
DC Current	Maximum Amps: 10 A Amps Accuracy: $\pm(0.4\% + 2)$ Best Resolution: 0.001 mA
AC Current	Maximum Amps: 10 A Amps Accuracy: $\pm(1.2\% + 2)$ Best Resolution: 0.001 mA
Resistance	Maximum Resistance: 50 M $\Omega$ Accuracy: $\pm(0.4\% + 1)$ Best Resolution: 0.1 $\Omega$
Capacitance	Maximum Capacitance: 9999 $\mu$ F Accuracy: $\pm(1\% + 2)$ Best Resolution: 0.01 nF
Frequency	Maximum Frequency: 200 KHz Accuracy: $\pm(0.005\% + 1)$ Best Resolution: 0.01 Hz
Duty Cycle	Maximum Duty Cycle: 99.9% Accuracy: within 2% per KHz + 0.1% Best Resolution: 0.1%
Temperature Measurement	-200.0° C to 1090° C (-328° F to 1994° F), 1.0% excluding probe
80BK Temperature Probe	-40° C to 260° C, 2.2° C (-40° F to 500° F) or 2% whichever is greater
Conductance	Maximum Conductance: 60.00 nS Accuracy: $\pm(1.0\% + 10)$ Maximum Resolution: 0.01 nS
Operating Range	Operating Temperature: -20° C to 55° C (-4° F to 131° F) Storage Temperature: -40° C to 60° C (-40° F to 140° F)
Size and Weight	5.2 cm $\times$ 9.8 cm $\times$ 20.1 cm, 624 g

## Recommended Accessories



- TLK281**  
Automotive Test Lead Kit
- TLK282**  
Deluxe Automotive Test Lead Kit
- C35**  
Soft Carrying Case
- 80PK-27**  
SureGrip™ Surface Temperature Probe (requires 80AK)
- i410**  
400 A AC/DC Current Clamp
- TL82**  
TL82 Automotive Pin & Socket Adapter Set

## Recommended Kits

Bundle & Save



### Fluke 88V/A Automotive Multimeter Combo Kit

## Included Accessories

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

## Ordering Information

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

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

# Fluke 170 Series Digital Multimeters

Troubleshooting tools for electrical and electronic systems



Fluke 179



Fluke 170 Series digital multimeters are the preferred solutions for professional technicians around the world. They include the features you need to troubleshoot and repair electrical and electronic systems, combined with Fluke's unparalleled reputation for ruggedness, reliability and accuracy.

- True RMS voltage and current measurements
- 0.09% basic accuracy (177, 179)
- 6000 count resolution
- Digital display with analog bargraph and backlight (177, 179)
- Manual and automatic ranging
- Display Hold and Auto Hold
- Frequency and capacitance measurements
- Resistance, continuity and diode measurements
- Temperature measurements (179)
- Min/max/average recording
- Smoothing mode allows filtering of rapidly changing inputs
- Easy battery exchange without opening the case
- Closed case calibration through front panel
- Ergonomic case with integrated protective holster
- IEC 61010-2-033 CAT III 1000V / CAT IV 600V
- Battery life: 200 hours typical for alkaline.
- Size: (H×W×L): 4.3 × 9.0 × 18.5 cm (1.69 × 3.54 × 7.28 in)
- Limited lifetime manufacturer's warranty



Fluke 177



Fluke 175

## Electrical safety

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

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

Functions	Range	Best accuracy
DC voltage	600.0 mV, 6.00 V, 60.00 V, 600.0 V, 1000 V	±0.09% (177 and 179) ±0.15% (175)
AC voltage <sup>1</sup>	600.0 mV, 6.00 V, 60.00 V, 600.0 V, 1000 V	±1.0% of reading
DC current	60.00 mA, 400.0 mA, 6.00 A, 10.00 A <sup>2</sup>	±1.0% of reading
AC current <sup>2</sup>	60.00 mA, 400.0 mA, 6.00 A, 10.00 A <sup>2</sup>	±1.5% of reading
Resistance	600.0 Ω, 6.00 kΩ, 60.00 kΩ, 600.0 kΩ, 6.00 MΩ, 50.00 MΩ	±0.9% of reading
Capacitance	1000 nF, 10.00 μF, 100.0 μF, 9999 μF	±1.2% of reading
Frequency <sup>3</sup>	99.99 Hz, 999.9 Hz, 9.99 kHz, 99.99 kHz	±0.1% of reading
Temperature (Model 179)	–40°C to 400°C (–4° F to 752° F)	1.0% of reading

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

<sup>2</sup> 10 A continuous, 20 A for up to 30 seconds.

<sup>3</sup> Voltage frequency is specified from 2 Hz to 100 kHz. Current frequency is specified from 2 Hz to 30 kHz.

## Recommended Accessories

**TPAK**  
Magnetic Meter Hanger

**TL81A**  
Deluxe Electronic Test Lead Set

**TL175**  
TwistGuard™ Test Leads

**i410**  
AC/DC Current Clamp

**AC220**  
SureGrip™ Alligator Clips

**TP220**  
SureGrip™ Industrial Test Probes

**C11XT**  
EVA Foam Hard Case

**C37XT**  
EVA Foam Hard Case

## Recommended Kits

Bundle & Save



**Fluke 179/EDA2 Industrial Digital Multimeter Combo Kit**

## Included Accessories

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

## Ordering Information

**FLUKE-175** True RMS Digital Multimeter

**FLUKE-177** True RMS Digital Multimeter

**FLUKE-179** True RMS Digital Multimeter

**FLUKE-179/EDA2** Electronics Combo Kit

**FLUKE-179/IMSK** Industrial Multimeter Service Kit





# Fluke 233 Remote Display Digital Multimeter



Fluke 233

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

- Wireless technology allows the display to be carried up to 9.1 m (29.8 ft) 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
- Three-year warranty



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

Specifications		
DC voltage	Range	0.1 mV to 1000 V
	Accuracy	0.25% + 2
AC voltage	Range	0.1 mV to 1000 V
	Accuracy	1.0% + 3
DC current	Range	0.001 A to 10 A
	Accuracy	1.0% + 3
AC current	Range	0.001 A to 10 A
	Accuracy	1.5% + 3
Resistance	Range	0.1 Ω to 40 MΩ
Capacitance		1000 nF to 9999 μF
Frequency		0.1 Hz to 50.00 kHz
Temperature		-40° C to 400° C (-40° F to 752° F)
Power		3 AA batteries main body, 2 AA batteries display module
Battery life		400 hours
Compliance		IEC 61010-2-033: CAT IV 600 V, CAT III 1000 V
Size (H×W×L)		5.3 x 9.3 x 19.3 cm (2.08 x 3.6 x 7.6 in)
Weight		604 g

## Recommended Accessories



**TPAK**  
Magnetic Meter Hanger



**TL220**  
SureGrip™ Industrial Test Lead Set



**80PK-22**  
SureGrip™ Immersion Temperature Probe



**i400s**  
AC Current Clamp  
See page 156



**80AK-A**  
Thermocouple Adapter



**AC285**  
SureGrip™ Alligator Clips



**TL175**  
TwistGuard™ Test Leads



**TLK289**  
SureGrip™ Industrial Test Lead Set



**TP175**  
TwistGuard™ Test Probes



**FTP-1**  
SureGrip™ Fused Test Probe Set



**TL224**  
SureGrip™ Silicone Insulated Test Leads



**C101**  
Hard Case



**C35**  
Soft Carrying Case



**C37XT**  
EVA Foam Hard Case

## Included Accessories

TL75 Test leads, AC175 Alligator Clips, 80BK-A Temperature Probe, CD, two AA batteries and user manual.

## Ordering Information

**FLUKE-233** Remote Display Digital Multimeter

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

# Fluke 110 Series True-RMS Digital Multimeters



Fluke 116

Fluke 117



113 only

## Dependable Digital Multimeters for Electrical and HVAC applications

All the models in the Fluke 110 series are True-RMS Multimeters with a large 3-1/2 digit / 6000 count display. The Fluke 117 includes integrated VoltAlert™ non-contact voltage detection and LoZ ghost voltage detector features to get the job done faster. The Fluke 116 is the HVAC/R Multimeter with temperature, microamps, and LoZ to quickly troubleshoot problems with HVAC/R equipment. The Fluke 115 is a compact meter for a wide variety of electrical/electronic testing applications, while the Fluke 114, 113 and 110 are basic electrical troubleshooting meters designed for "go/no-go" testing.

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

Specifications	117	115	113	110
VoltAlert™ detector	•	–	–	–
AutoVolt/LoZ	•	–	Vchek	–
Analogue bargraph	•	•	•	•
True-RMS for accurate measurements on non-linear loads	•	•	•	•
Min/Max recording	•	•	•	•
Display hold	•	•	•	•
3-1/2 digits	•	•	•	•
6000 counts	•	•	•	•
CAT III 600 V safety rated	•	•	•	•

	116		114	
Temperature	•	–	•	–
Microamps	•	–	•	–
Frequency	•	–	•	–
Capacitance	•	–	•	–
Diode test	•	–	•	–
AutoVolt/LoZ	•	•	•	•
Analogue bargraph	•	•	•	•
True-RMS for accurate measurements on non-linear loads	•	•	•	•
Min/Max recording	•	•	•	•
Display hold	•	•	•	•
3-1/2 digits	•	•	•	•
6000 counts	•	•	•	•

Functions	117	116	115	114	113	110
AC/DC voltage	600 V	600 V	600 V	600 V	600 V	600 V
AC/DC current	10 A	600.0 µA	10 A	–	–	–
Resistance	40 MΩ	40 MΩ	40 MΩ	40 MΩ	60 kΩ	40 MΩ
Capacitance	9999 µF	9999 µF	9999 µF	–	9999 µF	–
Diode test	•	–	•	–	•	–
Frequency	5 Hz to 99.99 kHz	5 Hz to 99.99 kHz	5 Hz to 99.99 kHz	–	–	–
Temperature	–	+400° C	–	–	–	–
Safety rating	CAT III 600 V	CAT III 600 V	CAT III 600 V	CAT III 600 V	CAT IV 600 V	CAT III 600 V

### Recommended Accessories



### Recommended Kits Bundle & Save



### Included Accessories

TL75 Test Leads, holster, 80BK Integrated Temperature Probe (116), user's manual and 9 V battery (installed).

### Ordering Information

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



# Fluke 27 II, 28 II and 28 II Ex Industrial IP67 Digital Multimeters



Fluke 27 II

Fluke 28 II



The 27 II, 28 II and 28 II Ex-AU Digital Multimeters are designed for tough work environments. All three meters have IP 67 waterproof and dustproof rating. They provide 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, 28 II Ex)
- Built-in thermometer conveniently allows you to take temperature readings without having to carry a separate instrument (28 II, 28 II Ex)
- Hi-resolution 20000 count display mode (28 II, 28 II Ex)
- Resistance and continuity. Relative mode to remove test lead resistance from low ohms measurements
- Large digit display with bright, two-level backlight
- Backlit keypad buttons allow for easy visibility in low-lit areas
- Optional magnetic hanger for easy setup and viewing, freeing your hands for other tasks
- Intrinsically safe certifications from the world's leading certification bodies (28 II Ex)
- Limited lifetime manufacturer's warranty

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

Specifications	27 II	28 II	28 II Ex
DC voltage	Range	0.1 mV to 1000 V	
	Accuracy	0.05% + 1	0.05% + 1
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		10 nF to 9999 µF
Frequency	0.5 Hz to 199.99 kHz		
Temperature	-	-200° C to 1090° C (-328° F to 1994° F)	
Low pass filter (measurement on VSD's)	-	Yes	Yes
Compliance	IEC 61010-2-033: CAT IV 600 V, CAT III 1000 V		
Measurement method	Avg. responding	True-RMS	True-RMS
Power	Three AA batteries		
Battery life	800 hours		400 hours
Dimensions (DxWxH)	6.35 x 10.0 x 19.81 cm (2.5 x 3.93 x 7.8 in)		
Weight with holster	700 g (24.69 oz)		

## Specialty Models

### Fluke 28 II Ex-ETL Intrinsically Safe True-RMS Multimeter

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

II 2G Ex ia IIC T4



## Recommended Accessories



## Included Accessories

TL175 Test Leads, AC175 Alligator Clips, 80BK-A Temperature Probe (28 II), holster, user manual and three AA batteries (installed).

## Ordering Information

<b>FLUKE-27II</b>	Industrial Multimeter
<b>FLUKE-28II</b>	Industrial Multimeter
<b>FLUKE-28IIEx</b>	Intrinsically Safe Industrial Multimeter

Contact your local distributor for price and availability.  
[fluke.com/wtb](http://fluke.com/wtb)



# Fluke 77IV Digital Multimeter



Fluke 77IV



## Versatile multimeter for field service or bench repair

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

- Wide 1000 V measurement range
- Average responding AC measurements
- 0.3% accuracy
- 10 amps continuous
- Frequency and capacitance
- Resistance and continuity
- Large display
- Backlight for work in dim areas
- Min/Max to record signal fluctuations
- Integral holster with probe holders
- Free your hands with the optional TPAK magnetic hanger
- Auto and manual ranging
- Limited lifetime manufacturer's warranty

## Recommended Accessories



**i400**  
AC Current Clamp



**C35**  
Soft Carrying Case



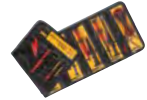
**TPAK**  
Magnetic Meter Hanger



**TL225**  
SureGrip™ Stray Voltage Adapter Test Lead Kit



**i2000 FLEX**  
AC Current Clamp



**TLK-225**  
SureGrip™ Master Accessory Kit

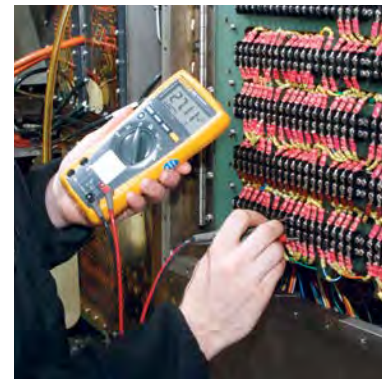
Function	Maximum	Max. resolution	Accuracy
Voltage DC	1000 V	1 mV	±(0.3%+1)
Voltage AC	1000 V	1 mV	±(2.0%+2)
Current DC	10 A	0.01 mA	±(1.5%+2)
Current AC	10 A	0.01 mA	±(2.5%+2)
Resistance	50 MΩ	0.1 Ω	±(0.5%+1)
Capacitance	9,999 μF	1 nF	±(1.2%+2)
Frequency	99.99 kHz	0.01 Hz	±(0.1%+1)

Accuracies are best accuracies for each function.

## General Specifications

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

Specifications	77IV
V Maximum voltage between any terminal and earth ground	1000 V
Surge protection	8 kV peak per IEC 61010-2-033
Fuse for mA input	440 mA, 1000 V FAST Fuse
Fuse for A input	11 A, 1000 V FAST Fuse
Display	Digital: 6000 counts, updates 4/sec
Bar Graph	33 segments, updates 32/sec
Frequency	10000 counts
Capacitance	1 000 counts
Operating altitude	2000 m
Storage altitude	12000 m
Operating temperature	-10° C to 50° C (14° F to 122° F)
Storage temperature	-40° C to 60° C (-40° F to 140° F)
Temperature coefficient	0.1 × (specified accuracy/° C (< 18° C or > 28° C) (< 64.4° F or > 82.4° F))
Electromagnetic compatibility (EN 61326-1:1997)	In an RF field up to 3 V/m, accuracy = specified accuracy except in temperature: specified accuracy ±5° C
Relative humidity (maximum non-condensing)	90% to 35° C; 75% to 40° C; 45% to 50° C (90% to 95° F; 75% to 104° F; 45% to 122° C)
Battery life	400 hours
Size (H×W×L) and Weight	185 × 90 × 43 mm (7.28 × 3.54 × 1.70 in); 420 g (14.81 oz)
Safety compliance	IEC 61010-2-033; CAT III 1000 V, CAT IV 600 V
Certifications	CSA



## Included Accessories

TL75 Test Leads, 9V battery (installed), manual information pack.

## Ordering Information

**FLUKE-77-4** Digital Multimeter

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



# Fluke PRV240 and PRV240FS Proving Units



Fluke PRV240



Fluke PRV240 FS



## Fluke PRV240 Proving Unit

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

- Sources both AC and DC steady-state voltage – supplies 240 V DC/AC
- A single LED indicates functionality, making this unit a simple-to-use solution for verification of your test tool
- Compatible with both high impedance or low impedance multimeters, clamp meters or two pole testers
- Voltage is sourced through recessed contacts that are activated when tested probes are inserted to avoid accidental contact
- Includes Magnetic Hanging Strap
- Long battery life – 5000 tests per set of four AA batteries
- One-year warranty

## Fluke PRV240FS Proving Unit

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

- Reduces the risk of shock and arc flash by validating the functionality of test tools without placing yourself in a potentially hazardous electrical environment
- Can prove functionality of the FieldSense™ measurement on the T6 Electrical Testers
- Sources both AC and DC steady-state voltage – supplies 240 V DC/AC
- A single switch and a set of LEDs indicate functionality of both the FieldSense™ “no-test-lead” voltage measurement capability, plus standard AC and DC measurements with test leads
- Compatible with high impedance multimeters or clamp meters
- Voltage is sourced through a central hub designed to test the T6 FieldSense™ open fork, as well as through recessed contacts that are activated when test probes are inserted to avoid accidental contact
- Long battery life – 2000 tests per set of four AA batteries
- One-year warranty

## Recommended Accessories



**TPAK**  
Magnetic Meter Hanger

## Recommended Kits Bundle & Save



**Fluke T6-1000 + PRV240FS  
Proving Unit Kit**



Specifications	PRV240	PRV240FS
Output voltage	240 V AC RMS or DC ±10% ≥ 1 MΩ	
LoZ >3 kΩ load	60 V AC typical 50 V AC RMS minimum	–
LED power indicator	Turns on when output voltage present	
Battery	4 AA Alkaline batteries NEDA 24 A IEC LR03	4 × AA Alkaline batteries NEDA 15A IEC LR6
Battery life	5000 (5-second duration) test cycles with >1 MΩ load, 300 tests minimum with >3 kΩ load	2000 (10-second duration) test cycles with >1 MΩ load
Operating temperature	–10° C to 50° C (50° F to 122° F)	
Operating altitude	2000 m (6,561 ft)	
Dimensions	11.7 × 7.4 × 2.8 cm (4.6 × 2.9 × 1.1 in)	11.7 × 7.4 × 4.5 cm (4.6 × 2.9 × 1.75 in)
Weight	0.23 kg (8.11 oz) includes batteries	0.32 kg (11.28 oz) includes batteries
Safety	IEC 61010-1, IEC 61010-2-030	

## Included Accessories

TPAK Hanging Strap, four AA batteries, instruction sheet.

## Ordering Information

<b>PRV240</b>	Proving Unit
<b>PRV240FS</b>	Proving Unit
<b>T6-1000/ PRV240FS</b>	T6-1000 & PRV240FS Proving Unit Kit

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

# Fluke 8808A Precision Bench Multimeter



Fluke 8808A



## 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 0.01%. The meter is easy to use and includes innovative functions to simplify routine testing and precision 4-wire resistance measurements.

- 5.5 digit resolution
- Up to 0.01% accuracy
- Dual measurement display
- Sensitive DC leakage current ranges
- Front panel setup keys
- TL2X4 wire measurement technique
- Three-year warranty

Specifications	8808A
Display	Dual
Resolution (digits)	5.5
Measurements	AC Volts, DC Volts, AC Current, DC Current, Frequency, Ohms, Continuity, Diode
Basic V DC accuracy (% Reading +% Range)	0.01 + 0.003
Advanced measurements/ functions	2x4 wire ohms, freq, i-Leakage, dedicated setup keys
Math	Null, dBm, dB, Min, Max
Analysis	Limit Compare
USB memory device port	No
Interfaces	RS-232, USB via optional adapter
Safety rating	IEC 61010-2-030: CAT II 600 V, 1000 V Max



## Recommended Accessories



**TL2X4W-TWZ**  
2x4-Wire Ohms  
Tweezers Test Leads



**TL2X4W-PTII**  
2x4-Wire Ohms  
Test Leads



**Y8846D**  
Rack Mount Kit, Dual



**884X-CASE**  
Moulded Plastic Case

## Included Accessories

LCI line power cord, test lead set, spare line power fuse, programmers manual/ user manual on CD-ROM, 884X-USB USB to RS232 cable adapter, FVF-BASIC FlukeView™ Forms Software Basic Version.

## Ordering Information

**FLUKE 8808A** 5.5 Digit Multimeter

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

*Calibration & Service Agreement units also available.*

Contact your local distributor for price and availability.  
flukecal.com/where-to-buy

