

## Fluke ProcessMeter

### DMM and Loop Calibrator in One Tool!

- Precision 1000V, 440 mA Digital Multimeter
- 20 mA Current Source/Simulator
- 0.05% DC Current Accuracy, 1  $\mu$ A Resolution to 30 mA
- True RMS AC Voltage Measurement to 1 kHz
- Diode Test and Continuity Beeper
- Manual Step (25%, Coarse, Fine) Plus Auto Step and Auto Ramp
- Clear LCD with Backlight; 4,000 Counts (30,000 Counts for DC Current)
- Externally Accessible Battery for Easy Battery Changes
- IEC1010-1, CAT III 1000V

The Fluke 787 ProcessMeter combines a DMM and a mA Source in one rugged, handheld tool—for about what you would expect to pay for a loop calibrator alone. The 787 starts with the Fluke 87 DMM you know and trust, then adds the ability to measure, source, and simulate DC loop current with 0.05% accuracy and 1 micro-amp resolution. When you carry the ProcessMeter, you're ready for any loop trouble-shooting or calibration task. And since it's dust-and splash resistant and EMI-shielded, the 787 can survive in your tool belt.

**Each Unit Includes:** One 9V alkaline battery (installed), safety-designed test lead set (TL75), alligator clips (AC70A), protective yellow holster with flex-stand (C81Y), and user's manual and quick reference guide.



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See A12 for the NEW Model 789 ProcessMeter

### Specifications

Measurement Function	Range and Resolution	Best Accuracy (% of reading + LSD)
VDC:	400.0 mV, 4.000V, 40.00V, 400.0V, 1000V	0.1% + 1
VAC (true RMS) to 1 kHz:	400.0 mV, 4.000V, 40.00V, 400.0V, 1000V	0.7% + 2
mADC:	30.000 mA	0.05% + 2
A DC:	1.000A (0.440A continuous)	0.2% + 2
A AC:	1.000A (0.440A continuous)	1% + 2
Resistance (ohms):	400.0 $\Omega$ , 4.000k, 40.00k, 400.0k, 4.0M, 40M	0.2% + 1
Frequency (0.5 Hz to 20 kHz):	199.99 Hz, 1999.9 Hz, 19.999 kHz	0.005% + 1
Diode Test:	2.400V (shows diode voltage drop)	2% + 1
Continuity:	Beeps for resistance < approx 100 $\Omega$	
Operating Temperature:	-20 to 55°C	
Size/Weight (holster and flex stand):	2.06 x 3.86 x 7.93" (52 x 98 x 201 mm) HWD/22.5 oz (638g)	

Output Function	Range and Resolution	Drive Capability	Accuracy (% of span)
DC Current Output: (Internal battery oper):	0.000 to 20.000 mA or 4.000 to 20.000 mA (selectable at power-up) Over-range to 24.000 mA	12V compliance, or, 500 $\Omega$ @ 20 mA	0.05%
DC Current Simulate: (Ext. 24V loop supply):	0.000 to 20.000 mA or 4.000 to 20.000 mA, (selectable at power-up) Over-range to 24.000 mA		0.05%
Current Adjustment Modes:	Manual: Coarse, Fine, 25% step Automatic: Slow Ramp, Fast Ramp, 25% step		



**We have a full line of test leads and accessories.**  
See pages B25-B42

**See our 4-20 mA Current Probe**  
on page B42

Electrical Test Instruments

### Ordering Information

Order #	Mfg #	Description	Price
MP787E	787	Fluke ProcessMeter	
Transcat Accredited Calibration with Data			CALL
Transcat Accredited Calibration without Data			CALL

## Fluke Graphical Multimeter

- ±0.025% DC Accuracy
- 4½-Digit True RMS
- DC to 1 MHz Digital Waveform Display
- IEC 1010-1, CAT III 1000V
- Incredible High Visibility Backlit Display
- Three-Year Warranty

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Fluke revolutionizes the way we measure electrical variables with the model 867B Graphical Multimeter. The DMM features are world class with a basic DC accuracy of up to .025%. The graphical display provides comprehensive information fast. They're ideal for all maintenance and troubleshooting applications.

The rotary switch and convenient pushbuttons provide familiar multimeter-like operation. Perform direct measurements of AC and DC voltage and current, resistance, capacitance, conductance, frequency, duty cycle, period, pulse width, and dB. Other common features include true RMS or average response, manual set-up, external triggering, and trend plotting for up to 30 hours. The 1 MHz bandwidth waveform display makes it simple to spot noise, intermittents, glitches, and distortion. A single button automatically scales voltage, time base, triggering, and position for instant set-up.

**Each 867B Includes:** Test leads (TL71), rechargeable NiCd batteries (BP7217), battery eliminator (BE860), and instructions.

**Optional SC860 Includes:** Fluke View™ 860 software for Windows™, and optically isolated RS-232-C cable.

### Auxiliary Display Provides Even More Information

A secondary digital display allows you to view two different measurements at once from the same probes (voltage and frequency, for example). An analog NeedleGraph™ provides a familiar analog meter-like display for viewing dynamic signals.

Logic Activity Mode gives a quick way to track down digital failures. It shows changes and logic transitions to 10 MHz and indicates if the circuit is active or stuck high or low. It also shows frequency of activity and average DC voltage. The In-Circuit Component Test lets you troubleshoot components by comparing their in-circuit signatures with parts known to function.

Optional carrying cases and the SC860 FlukeView Software and cables are available to complete the package.



▲ 867BE

Electrical Test Instruments

### Specifications

AC/DC Voltage Range:	300 mV to 1000V
Basic DC Accuracy:	±0.025% + 2 digits
Basic AC Accuracy:	±0.5% + 10 digits
AC/DC Current Ranges:	300 µA to 10A
Basic DC Accuracy:	±0.05% + 10 digits
Basic AC Accuracy:	±0.75% + 10 digits
Ohms Range/Accuracy:	300Ω to 30 MΩ/±0.07% + 2 digits
Capacitance Range/Accuracy:	10 nF to 10,000 µF/±1.90%
Frequency Range/Accuracy:	2 Hz to 2 MHz/±0.05% + 1 digit
dB References in Ohms:	2, 4, 6, 16, 50, 75, 93, 110, 125, 135, 150, 300, 600, 900, 1000, and 1200
<b>Features</b>	
Frequency Counter Range:	10 MHz
Meter AC Bandwidth:	20 Hz to 300 kHz
Waveform Bandwidth:	1 MHz
Logic Activity:	Yes
Component Test:	Yes
LCD Display Backlight:	Yes
Internal Battery Charging:	Yes
Waveform Memory:	Yes
RS-232-C Cable and Adapters:	Optional
Companion Software:	Optional
Power Supply:	NiCd battery
Size/Weight:	9.3 x 5.1 x 2.4" HWD/2.7 lbs

### Ordering Information

Order #	Mfg #	Description	Price
MP5869E	867BE	Graphical Multimeter	
MPSC860	SC860	Optional Software for Windows™	
MPC781	C781	Soft Cordura Nylon Carrying Case	
MPBP7217	BP7217	NiCd Battery Pack	

Transcat Accredited Calibration with Data	CALL
Transcat Accredited Calibration without Data	CALL

## Fluke Digital Multimeters

- True RMS (Model 85 and 87)
- Touch-Hold, Continuity, Relative Mode, and Diode Test
- Sleep Mode (30 Minutes)
- LED Backlight on All Models
- New LCD Display with Larger Digits and Better Viewing Angle
- 4½-Digit High Resolution Mode (Model 87)
- MIN/MAX to Record the Minimum, Maximum, and Average
- 250 µs Peak Min/Max (Model 87)
- Significantly Improved Basic DC Accuracy
- Improved EMI Shielding
- IEC1010 CAT III 1000V
- Lifetime Warranty

### 83-3 and 85-3

The basic DC accuracy of this meter is  $\pm 0.1\%$  of reading, comparable to the best accuracy spec of the standard 80 Series. In addition to the 3½-digit, 4,000-count display, it features a 43-segment analog bargraph that's perfect for indicating rapidly changing/fluctuating signals. Test leads, alligator clips, and a protective holster with stand come with the unit.

The 85-3 is identical to the 83-3, but offers increased accuracy—an exceptional  $\pm 0.08\%$  of reading—plus true RMS AC measurements on non-sinusoidal signals.

### 87-3 and 87E-3

These two models have an even better basic accuracy of  $\pm 0.05\%$ , equaling or exceeding that of many higher-priced DMMs. Both are true RMS reading and include a MIN/MAX Peak function to capture transients as fleeting as 250 µs. The display offers a special high-resolution mode, which features 4½-digits and 20,000 counts. This enables you to view even subtle changes in measured values. And, instead of the bargraph, the LCD has a 32-segment analog pointer that indicates values in relation to zero, mid scale, and full scale.

### Specifications and Ordering Information

Mfg#	83-3	85-3	87-3	87E-3
<b>DC Volts</b>				
Max. Range:		1000V		
Max. Resolution:		0.1 mV		
Accuracy:	$\pm(0.1\% + 1d)$	$\pm(0.08\% + 1d)$		$\pm(0.05\% + 1d)$
<b>AC Volts</b>				
Max. Range:		1000V		
Max. Resolution:		0.1 mV		
Accuracy:	$\pm(0.5\% + 2d)$		$\pm(0.7\% + 2d)$	
<b>DC Current</b>				
Max. Range:	10A			
Max. Resolution:	0.01 mA		0.1 µA	
Accuracy:	$\pm(0.4\% + 2d)$		$\pm(0.2\% + 2d)$	
<b>AC Current</b>				
Max. Range:	10A			
Max. Resolution:	0.1 µA			
Accuracy:	$\pm(1.2\% + 2d)$		$\pm(1.0\% + 2d)$	
<b>Resistance</b>				
Max. Range:		40 MΩ		
Max. Resolution:		0.1 Ω		
Accuracy:	$\pm(0.4\% + 1d)$		$\pm(0.2\% + 1d)$	
<b>Capacitance:</b>		1 nF–5 µF		
<b>Frequency:</b>		0.5 Hz–200 kHz		
<b>Peak MIN/MAX:</b>		N/A		250 µs
<b>Digital Display:</b>		3½-digits, 4,000 counts		3½-digits, 4000 counts (4½-digit, 20,000-count)
<b>Analog Display:</b>		43-segment bargraph		32-segment pointer
<b>Power:</b>		Single 9V alkaline battery, typical 500-hr. life		
<b>Size:</b>		7.35 x 3.41 x 1.25" HWD		
<b>Weight:</b>		12.5 oz		
<b>Premium Test Lead Set</b>		n/a		YES
<b>Order #</b>	MP3449E-3	MP3450E-3	MP3451E-3	MP3451E-E
<b>Price</b>				

Transcat Accredited Calibration with Data	CALL
Transcat Accredited Calibration without Data	CALL



87-3 ▲

**Each Unit Includes:** 9V alkaline battery, set of TL75 test leads, pair of AC70A alligator clips, protective holster with Flex Stand™, and instructions.

**Each 3451E-E Also Includes:** Premium test lead set: extra-long silicone-insulated, heat-resistant test leads, Slim-Reach™ test probes, probe tips, and black AC20 alligator clip.

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Electrical Test Instruments

## Fluke Datalogging Digital Multimeters

- 0.025% Basic DC Accuracy
- 50,000-Count Resolution with Instant Readings Enables Detailed Analysis
- Internal Memory Allows for Stand Alone Logging and Storage of Up to 1000 Measurements for Later Viewing or Uploading to Optional FlukeView® Forms
- MIN/MAX to Record and Timestamp Values in Real-Time. Fast MIN/MAX Captures Peaks to 250 µs
- Temperature Readings in °C or °F Using Optional 80BK or 80AK
- Enhanced Ranges, Such as DC Voltage Measurements Down to 10 µV, and Capacitance Up to 50 mF
- Multiple Reading Display with Bargraph and Two-Level Backlight
- CAT III 1000V/CAT IV 600V
- Lifetime Warranty



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The Fluke 80 Series Digital Multimeters (DMMs) have led the industry in versatility, performance, accuracy and ruggedness. The new Fluke 180 Series DMMs delivers breakthrough digital multimeter performance with a wealth of new features, ranges, and accuracy that will help make your job easier, such as:

### FlukeView® Forms

Document, store and analyze measurements from your Fluke 180 Series digital multimeter using optional FlukeView® Forms software.

### System Requirements:

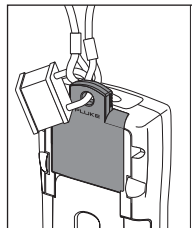
- Windows™ 95, 98, or Windows™ NT 4.0 Operating System
- 40 MB hard disk space
- Mouse or other pointing device
- Infrared port or serial adapter cable

### Minimum Recommended

#### System Requirements:

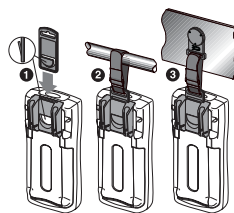
- 100 MHz processor
- 24 MB RAM
- SVGA Display

**Each Unit Includes:** Probe holder, test leads, and manual.



**LockPak™**  
Lock your Fluke 187 and 189 meter in place with the optional LockPak™ accessory.

◀ **Lock your meter into place with the optional LockPak™ accessory**



**ToolPak™**  
Hang your Fluke 187 and 189 meter by magnet or strap hanger with the optional ToolPak™ accessory.

◀ **Hang your meter with a magnet or use the strap hanger with the optional ToolPak™ accessory.**



### Specifications

Model #	187	189
Datalogging	n/a	YES
Primary Digital Display:	50,000 Count	
Analog Display:	51 Segment Bargraph	
True-RMS AC, AC + DC:	Yes	
100 kHz AC Bandwidth:	Yes	
dBm, dBV:	Yes	
Duty Cycle/Pulse Width:	Yes	
AC/DCV		
Maximum Voltage:	1000V	
Accuracy AC (TRMS):	±(0.4% +40)	
Accuracy DC:	±(0.025% +2)	
AC/DC Current		
Maximum Current:	10A	
Accuracy AC (TRMS):	±(0.75% +10)	
Accuracy AC:	±(0.15% +2)	
Maximum Resolution:	0.01µA	
Resistance		
Maximum Resistance:	500 MΩ	
Accuracy:	±(0.05% +2)	
Maximum Resolution:	0.01Ω	
Capacitance:	0.01 nF–50 mF	
Frequency:	0.5 Hz to 1000 kHz	
Temperature in °C and °F:	-200°C to 1370°C	

### Ordering Information

Order #	Mfg #	Description	Price
MP187E	187	True-RMS Digital Multimeter	
MP189E	189	True-RMS Datalogging Digital Multimeter	
MPFV-SC2	FVF-SC2	FlukeView Forms Software with Cable	
MP187E-SC2	KIT	187E with FVF-SC2 Software/Cable	
MP189E-SC2	KIT	189E with FVF-SC2 Software/Cable	
MPTPAK80-4	TPAK	ToolPak™ Strap and Magnet Hangers	
MPLPAK80-4	LPAK80-4	LockPak™ Security Locking Accessory	
MPC125	C125	Carrying Case	
MPTL23F	TL223	Electrical Test Lead Set	
MP80BK	80BK	K-Thermocouple w/ Standard Banana Plug	
MP80AK	80AK	T/C Mini-Plug to Banana Adapter*	

\* For use with T/C with Mini Connector

Transcat Accredited Calibration with Data	CALL
Transcat Accredited Calibration without Data	CALL



**Make sure to order Probes**  
See pages B25-B33 for details.

## Fluke True RMS Digital Multimeters

- 6000 Count Display
- Auto Hold and Manual Hold
- IEC 1010 Rating: CAT IV 600V / CAT III 1000V
- Backlight (177E and 179E Only)
- Temperature Measurements in °C and °F (179E Only)
- Battery Access Door
- Compatible with Fluke ToolPak™ Meter Hanging Kit

Want a smarter meter or a tougher one? Buy one of these and you get both. With features like lifetime warranty, 6000 count resolution, 0.09% accuracy, Min/Max/Average, True RMS, AC voltage and current. They're all CAT IV rated and sport an easy-open Battery access door. The 177 and 179 have a backlight. The 179 measures temperature. All told, this is one powerhouse line of digital multimeters. They're all super-simple to use and built tougher than a world champion wrestler.

**Each Unit Includes:** Test Leads and User Manual

**179 Also Includes:** 80BK Temperature Probe

**Approvals:** CATIV 600V, CATIII 1000V, CSA, CE, CVE, TUV, UL

### Specifications and Ordering Information

Mfg#	175	177	179
BackLite	n/a	•	•
AC Amperes		0.01 mA to 10.00A	
Accuracy		± 1.5% of reading plus 3 counts	
DC Amperes		0.01 mA to 10.00A	
Accuracy		± 1.0% of reading plus 3 counts	
AC Volts		0.1 mV to 1000V	
Accuracy		45 Hz to 500 Hz 1% of rdg + 3 counts 500 Hz to 1 kHz 2% of rdg + 3 counts	
DCVolts		0.1 mV to 1000V	
Accuracy	±0.15% of reading	±0.09% of reading plus 2 counts	
Ohms		0.1Ω to 50.00 MΩ	
Best Accuracy		± 0.9% of reading plus 1 count	
Capacitance		1 nF to 9999 μF	
Best Accuracy		± 1.2% of reading plus 2 counts	
Frequency		Voltage Input: 2 Hz to 100 kHz, Current Input: 2 Hz to 30 kHz	
Accuracy		± 0.1% of reading plus 2 counts	
Temperature	n/a		40° to +400°C / -40° to +752°F
Accuracy	n/a		1% + 1.0 °C / 1% + 1.8 °F
Continuity		Continuity Beeper guaranteed on <25, guaranteed off >250; detects opens or shorts of 250 μs or longer	
Order #	MP175E	MP1773E	MP179E
Price			

### 70 Series and Accessories Ordering Information

Order #	Mfg #	Description	Price
MP73-3	73-3	Digital Multimeter	
MP77-3	77-3	Digital Multimeter	
MPTPAK80-4	TPAK80-4	ToolPak™ Strap and Magnet Hangers	

Transcat Accredited Calibration with Data	CALL
Transcat Accredited Calibration without Data	CALL



**Fluke 170 Series**  
(Shown with TPAK80-4)



Electrical Test Instruments

## Meterman™ True Heavy-Duty DMMs

- Unparalleled Ruggedness, Reliability, Safety and Ease of Use
- IP67 Rated-Total Protection Against Dust, Immersion to 3 Feet
- Drop Proof to 10 Feet
- High Voltage Alerts for Extra User Safety
- Digi-Glo Backlight (excluding 23880E)
- Oversized Character Displays for Easy Reading
- Model 4967E Has True RMS, 10,000 Count
- Safety Tester Feature – Works Even When Battery is Dead
- 30 Minute Auto Off to Preserve Battery
- EN61010-1, CATIII 1000V Approvals



HD Family ▶

Three Heavy-Duty digital multimeters that are designed to be more rugged with extra features that make them better suited for field work. They offer extensive protection that will withstand rugged, even abusive environments. Thicker case walls made from specialty plastics, rubber holsters, sealed and gasketed openings, shock-dampened mountings, extensive fusing and superior protection from overloads. They will survive the unknown and inevitable misapplication and provide many years of uninterrupted field service.

### Ordering Information

Mfg#	HD110B	HD115B	HD160B
AC/DC Volts:	1000/1500	1000/1500	1000/1500 True RMS
Basic Accuracy:	0.1%		
AC/DC Current:	10A, Fused		
Resistance:	20 MΩ		40 MΩ
Capacitance:	—	20 mF	—
Diode/Continuity:	Yes		
Display Counts:	2,000 ct		10,000 ct
Order #	MP23880E	MP23882E	MP4967E
Price			

### Optional Accessories

Order #	Description	Price
MP4731E	Deluxe Hard Shell Case	
MP4732E	Deluxe Hard Shell Case, Large	
	Transcat Accredited Calibration with Data	CALL
	Transcat Accredited Calibration without Data	CALL

## Megger® Digital Multimeters

- 4,000 and 40,000 Count Capability
- Basic Accuracy as High as 0.08%
- True RMS (DC + AC) and Avg. Responding Models
- Dual Displays for Simultaneously Viewing Multiple Parameters
- Analog Bargraph

### Each Unit Includes:

9V alkaline battery, test leads, protective holster, and instructions.

Simultaneously view AC volts and frequency, AC amps and frequency, conductance and resistance, or value and events.

### Ordering Information

Mfg#	M8035	M8037
TrueRMS	n/a	•
Volts DC:	40 mV to 1000V	
Basic Accuracy:	±0.08% + 1 digit	
Volts AC:	400 mV to 750V	
Basic Accuracy:	±0.5% + 3 digits	
AC/DC Current:	40 mA to 10A	
Basic Accuracy:	±0.2% + 2 digits	
Resistance:	40Ω to 40 MΩ	
Basic Accuracy:	±0.1% + 2 digits	
Frequency:	100 Hz to 4 MHz	
Capacitance:	4 nF to 40 mF	
Conductance:	400 nS	
Size:	7.8 x 3.8 x 2.2" HWD	
Weight:	1.1 lbs	
Order#	MP24248E	MP24249E
Price		

Using three different "relative" measurement modes, you can enter a reference value, then make measurements in comparison to it. You can simplify zero, peaking, and nulling measurements, and estimate cable lengths or pinpoint cable breakdown locations.

### Highly Accurate and Versatile

The 24248E (model M8035) is average responding; 24249E (model M8037) is true RMS (DC + AC). Both let you select either auto or manual ranging, have crest/peak functions, and can sort stored records. The 24249E adds duty cycle and dBm functions and a backlit display. The 24249E also displays frequency plus duty cycle or dBm.



M8037 ▲

Transcat Accredited Calibration with Data	CALL
Transcat Accredited Calibration without Data	CALL

## Fluke Industrial Hand-Held Multimeter

### Heavy duty multimeters

- 3½-Digit, 3200 Count 31-Segment Analog Bargraph
- Waterproof, Dustproof, MSHA Approved
- Lifetime Warranty

The Fluke 27 multimeter was tested by MSHA for intrinsic safety in methane air mixtures only. The Fluke 27 multimeter is MSHA approved with a 9V NEDA 1604 (carbon zinc) battery only.

Autorangeing is standard. Audible continuity allows quick wiring, diode, and transistor tests without looking at the display. Meter also includes the Touch Hold® feature that captures reading, beeps, and locks the display.

The 8505E also includes min/max recording and relative measurement capability between any two readings.

**Each Unit Includes:** 9V alkaline battery, test leads (TL75), insulated alligator clips (AC70A), spare fuse (658658), and instructions.

**Approvals:** 1000V, CAT III, CSA Certified.

### Specifications

AC/DC Voltage Ranges:	320.0 mV, 3.200V, 32.00V, 320.0V, 1000V
Accuracy:	DC: ±(0.1% of rdg. + 1 dig.); AC: ±(0.5% of rdg. + 3 dig.)
AC/DC Current Ranges:	320.0 µA, 3200 µA, 32.00 mA, 320.0 mA, 10.00A
Accuracy:	DC: ±(0.75% of rdg. + 2 dig.); AC: ±(1.5% of rdg. + 2 dig.)
Resistance Ranges (6)/Acc:	320.0Ω to 32 MΩ/±(0.2% of rdg. + 1 dig.)
Conductance/Accuracy:	32.00 nS/±(2.0% of rdg. + 1 dig.)
Diode Test/Accuracy:	2.080V/±(1.0% of rdg. + 1 dig.)
Power Supply:	9V alkaline battery
Size/Weight:	8 x 3.75 x 2.2" HWD/1.6 lb

### Ordering Information

Order #	Mfg #	Description	Price
MP8505E-Y	27	Digital Multimeter with MIN/MAX, Yellow	
Transcat Accredited Calibration with Data			CALL
Transcat Accredited Calibration without Data			CALL



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## AEMC/Metrix Intrinsically Safe Digital Multimeter

- FM Approval Pending
- EEx ib Group I, IIc and Temperature Class T6 Assigned Specifications
- Currents to 500 mA for Intrinsically Safe Operation
- MIN/MAX Functions
- Bargraph with Zoom (x5) and Center Zero
- Rugged Design — IP66 Rating
- Protection by 500 mA Intrinsic Safety Fuse for the Current Range
- Continuity, Diode and Logic Tests
- Resistance to 40 MΩ
- Resolution 5,000 Counts

2130.65 ▶

### Specifications

AC/DC Voltage	500 mV	5V	50V	500V*	750 VAC/1000 VDC*
DC Basic Accuracy:	±0.15% Reading + 2 cts		±2% Reading + 1 cts		
AC Bandwidth:	40 Hz to 1 kHz				
AC Basic Accuracy (40 to 400 Hz):	±0.75% Reading + 3 cts				±1% Reading + 4 cts
AC/DC Current:	500 µA	5 mA	50 mA	500 mA	
DC Basic Accuracy:	±1.2% Reading + 2 cts	±1% Reading + 1 cts	±0.1% Reading + 3 cts	±1% Reading + 1 cts	
AC Bandwidth:	40 Hz to 1 kHz				
AC Basic Accuracy (40 to 400 Hz):	±1.5% Reading + 3 cts	±1% Reading + 3 cts	±1.5% Reading + 3 cts		

\* Operating Voltages are limited to 60V peak currents to 500 mA for intrinsically safe operation

### Ordering Information

Order #	Mfg #	Description	Price
MP2130.65	2130.65	MX57EX DMM (Intrinsically Safe, TRMS, 5,000 Count, 0.1% Accuracy)	
Transcat Accredited Calibration with Data			CALL
Transcat Accredited Calibration without Data			CALL



Electrical Test Instruments

## NEW Meterman Digital Multimeters

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30XR ▲



33XR ▲



34XR ▲



37XR ▲



38XR ▲

### 30XR Multimeter with Non-Contact Voltage Detector

- Built-in Non-contact Voltage Detector for Detection of Live Circuits
- Magne-Grip™ Holster with Hanging Magnet Strap for Hands-free Operation
- 9 Ranges, 30 Functions Handle Most Measurement Needs
- Safety Rated at CAT II 600V, CAT III 300V, UL Listed

### 37XR Precision True RMS DMM

- Autoranging, True RMS for the Most Accurate Voltage Measurements
- 10,000 Count with 0.1% High Accuracy
- LCR Component Test Functions - Inductance, Capacitance, Resistance
- Frequency, Logic Test, dBm for Easy Circuit Board Troubleshooting
- Bright Blue Backlight
- CAT III 600V, UL Listed

### 33XR and 34XR Field Service Multimeters

**Model 33XR is manual ranging with these features:**

- Temperature, Frequency and Capacitance for Complete Measurement Capability
- Magne-Grip™ Holster with Hanging Magnet Strap for Hands-free Operation
- Data Hold, Min/Max and Bargraph for Capturing Quick Measurement Events
- CAT III 600V, CAT II 1000V, UL Listed

**Model 34XR has all the above functionality plus these added features:**

- True RMS for the Most Accurate Measurements
- Autoranging for Ease of Use
- Bright Blue Backlight for Dim Work Areas

### 38XR True RMS Industrial DMM with RS232

- True RMS, AC + DC Coupled for Accurate Ripple Measurements
- 10,000 Count with High 0.25% Accuracy
- 4 - 20 mA Loop Current with % Readout
- Brilliant Blue Backlight
- Optically Isolated RS232 PC Interface for Real Time Recording
- Bright Blue Backlight
- CAT IV 600V, Cat III 1000V - Highest Safety Rating Available

### Optional Accessories

Order #	Mfg #	Description	Price
MP221A	MP221A	Vinyl Padded Carrying Case	
MPXR-TA	MPXR-TA	K Thermocouple Mini Plug Adapter*	

\* Supplied with 33XR, 34XR and 38XR

### Specifications and Ordering Information

Mfg #	30XR	33XR	34XR	37XR	38XR
Counts	2,000	4,000		10,000	
Analog Bar Graph	NA			Yes	
BackLight	NA	NA		Yes	
Peak Hold		NA			Yes
Voltage DC	600V			1000V	
Voltage AC	600V Avg.	750V Average		750 TRMS AC	750 TRMS AC+DC
Basic DC Accuracy	1.0%	0.7%	0.5%	0.1%	0.25%
AC/DC Current, Fused			10A		
Resistance	20 MΩ	4 MΩ		40 MΩ	
Continuity Beeper			Yes		
Diode			Yes		
Capacitance	NA	4000 μF			400 μF
Frequency	NA	40 MHz			10 MHz
Temperature	NA	1832 °F/1000 °C		NA	2372 °F/1300 °C
Logic Test		NA		TTL/CMOS 20 MHz	NA
Inductance		NA		40 H	NA
Duty Cycle		NA		Yes	
Non-Contact Voltage Detect	Yes			NA	
Warranty		1 Year		3 Year	
Order #	MP30XR	MP33XR	MP34XR	MP37XR	MP38XR
Price					

Electrical Test Instruments

## Meterman Pocket Size Full Featured DMMs

The XL Series are compact, yet full function, full performance digital multimeters. They have large LCD digits for easy viewing, fully fused current input jacks and an Input Warning tone. Protects you when the test lead is plugged into the current jack but meter is not set to measure current. All meters have passed stringent safety standards. Each meter has its own unique measurement offerings, listed in chart below. Safety Tester™ feature detects and displays with LEDs the presence of AC or DC voltage; works even when DMM battery is dead. All meters ship with a protective holster. Model DM-35XL is autoranging with Range Lock and Data Hold capabilities. Size: 6.1" x 2.8" x 1.3", weighs 8 oz.

**Each Unit Includes:** Set of Safety test leads with shrouded probe tips, operator's manual and is covered by Meterman's "No Hassle" Warranty Program.

### Specifications and Ordering Information

Mfg#	DM-5XL	DM-10XL	DM-15XL	DM-16XL	DM-35XL
AC/DC Voltage	500/1000V	750/1000V		600/600V	
Basic Accuracy	0.8%	0.7%		0.5%	
DC Current, Fused	200 mA		10A		
AC Current, Fused	No			10A	
Resistance	2 MΩ	20 MΩ	2000 MΩ	20 MΩ	32 MΩ
Diode/Continuity			Yes		
Logic Test	No		TTL to 20 MHz		No
Safety Tester	No		To 220V		No
Capacitance		No		To 20 μF	To 32 mF
Frequency Counter		No		To 15 MHz	No
Transistor Beta		No		Yes	No
Order #	MPDM-5XL	MPDM-10XL	MPDM-15XL	MPDM-16XL	MPDM-35XL
Price					



B

## **NEW** Extech Digital Multimeter with Contact IR Temperature

- Models 450 and 470 Include Built-in Contact IR Thermometer with Laser
- Low Current Capability — Measures Down to 1 μA
- Audible and Visual Input Alerts
- Easy to Read 1" Digits on Backlit Display
- MAX (Model 450) and RELATIVE (Model 470) Functions
- IR Thermometer has 8:1 Distance to Target Ratio, 0.95 Fixed Emissivity
- CAT III 600V, CE and UL Listed

**Each Unit Includes:** CAT III test leads, multi-purpose tilt stand and velcro strip for hanging, protective holster with test lead holder, bead wire temperature probe, (except Model 450) and 9V battery

### Specifications and Ordering Information

Mfg#	450	470
Description	DMM + IR Thermometer	True RMS DMM + IR Thermometer
Display Counts	2000 Counts Backlit	4000 Counts Backlit
Basic Accuracy (VDC)	0.5%± (VDC)	0.3%± (VDC)
DC Voltage		0.1mV to 600V
AC Voltage		0.1mV to 600V
DC Current		0.1μA to 20A
AC Current		0.1μA to 20A
Resistance	0.1Ω to 20MΩ	0.1Ω to 40MΩ
Capacitance	N/A	0.01nF to 100 μF
Frequency	N/A	0.001Hz to 10MHz
Temperature (Type K)	N/A	-4 to 1382°F (-20 to 750°C)
Temperature (IR with Laser)	-4 to 518°F (-20 to 270°C)	
Diode/Continuity		Yes
CAT Rating		CAT III-600V
Warranty		Three Year
Order #	MP450EXT	MP470EXT
Price		



470



Electrical Test Instruments

## Fluke True RMS Digital Multimeters

- Basic DC Accuracy of 0.7%
- New Compact Size – 3.8" x 6.3"
- Min/Max/Average
- Manual Reading Hold
- IEC 1010 Rating: CAT III 600V
- Compatible with Fluke ToolPak™ (110, 111, 122 only)
- Backlight for Measurements (112E only)
- Three Year Warranty

Want to compare sizes? These little meters pack more features than some DMMs twice their size. True RMS AC voltage and current readings for example, 6000 count resolution, Min/Max/Average, frequency and capacitance capabilities. Plus they give you an easy-open battery access door. They're all CAT III rated for 600V and are protected by a three-year warranty. The 112 model has a backlight and delivers 0.7% basic DC accuracy.

**Each Unit Includes:** Test Leads and User Manual

**Approvals:** CAT III 600V, CSA, CE, CVE, TUV, UL



▲ 112

### Specifications and Ordering Information

Mfg#	110	111	112	12
AC Amperes	N/A	0.01A to 10.00A		N/A
Accuracy	N/A	± 1.5% of reading plus 3 counts		N/A
DC Amperes	N/A	0.01A to 10.00A		N/A
Accuracy	N/A	± 1.0% of reading plus 3 counts		N/A
AC Volts	300 mV to 600V rms	1 mV to 600V rms		400 mv to 600V
Accuracy		± 1.0% of rdg plus 3 counts		±1.9% rdg+ 3 counts
DC Volts		1 mV to 600V		400 mv to 600V
Accuracy		± 0.7% of reading plus 2 counts		±0.9% rdg+ 1 counts
Ohms		0.1Ω to 40.00 MΩ		
Best Accuracy		± 0.9% of reading plus 1 count		
Capacitance		1 μF to 9999 μF		1 μF to 10,000 μF
Best Accuracy		± 1.9% of reading plus 2 counts		
Frequency	Voltage Input: 5 Hz to 50 kHz	Voltage Input: 5 Hz to 50 kHz, Current Input: 50 Hz to 5 kHz		N/A
Accuracy		± 0.1% of reading plus 2 counts		N/A
Backlight	N/A		Yes	N/A
Continuity	Continuity Beeper guaranteed on <20, guaranteed off >250; detects opens or shorts of 250 μs or longer			
Dimensions	4.6 cm x 9.6 cm x 10 cm			142.3 mm x 70.5mm x34.6mm
Order #	MP110E	MP111E	MP112E	MP12
Price				

### Recommended Accessories

Order #	Mfg #	Description	Price
MPC-101	C-101	Durable Multimeter Case with Storage Pouch	
MPC125	C125	Soft Vinyl Meter Case	
MPTL23F	TL223	Electrical Test Lead Set	
MPTPAK80-4*	TPAK	ToolPak Strap and Magnet Hangers	
MP80TK	80TK	Thermocouple Modules	

\* Fluke 12 not compatible with ToolPak

Transcat Accredited Calibration with Data	CALL
Transcat Accredited Calibration without Data	CALL

**See Pages B25-B42  
for additional accessories**



## Fluke Multimeter with Temperature

### Ideal for HVAC applications

The smallest and most affordable standards-level thermometer available, with accuracy and functions previously found only in more expensive bench or lab units.

- Temperature Measurement
- Microamp Current Range
- 5 Ranges of Capacitance
- Automatic Readings of Volts AC or DC
- High Resistance Ranges to 40 MΩ
- Continuity Capture™ Locates Intermittent Opens as Brief as 250 μS
- Min/Max Recording
- Sleep Mode Preserves Battery Life
- Three Year Warranty

#### It's a Thermometer!

The Fluke 16 measures temperature quickly and accurately. Temperature measurement accessories are included. This unit is compatible with a wide range of type K thermocouples with mini-connectors.

#### It's a Multimeter!

The Fluke 16 measures capacitance up to 10,000 microfarads, volts AC or DC, ohms, continuity, and resistance.

#### It's a Flame Rod Circuit Tester

Use the built-in microamp function to make flame sensor measurements down to 0.1 μA (200 μA Max).

**Each Unit Includes:** Integrated temperature probe (80BK), test leads (TL75), and holster (C10).



B

### Specifications

Voltage	Range	Resolution	Accuracy
DC V (5 Ranges):	4000 mV* to 600V	1 mV to 1V	±0.9% + 1 > 40V
AC V (5 Ranges):	4000 mV* to 600V	1 mV to 1V	±1.9% + 3
Current:	200 μA	1 μA	±0.5% + 1.5
Ohms (6 Ranges):	400 Ω to 40 MΩ	0.1 Ω to 0.01 MΩ	±0.9% + 1
Capacitance (5 Ranges):	1.000 μF to 10,000 μF	0.001 μF to 10 μF	±1.9% + 2**
Temperature (Type K):	-40 to 400°C	0.1°C	3°C Typical
Other Features:	Diode Test, Continuity Beeper, Min/Max Record, V-Check, Auto-range All Functions, and Continuity Capture		
Safety Requirements:	UL, CSA, CE, TUV		
Size	142.3 mm L x 70.5 mm W x 34.6 mm D		

\*The 4000 mV range can only be entered in manual range mode. Use the 4000 mV range with accessories.

\*\* The accuracy specification is for capacitors that have negligible dielectric absorption.

### Ordering Information

Order #	Mfg #	Description	Price
MP16E	16	DMM with Temperature	
MP80AK	80AK	Thermocouple Adapter Option	

Transcat Accredited Calibration with Data	CALL
Transcat Accredited Calibration without Data	CALL

## Fluke Electrical Testers

- AC/DC Auto Detection
- Continuity Measurement
- 4000 Count Digital Display
- Two Year Warranty

These voltages automatically detect and display AC and DC voltages and displays the dominant signal, identifying it as AC or DC. When measuring ohms/continuity with more than 4.5 volts present across input jacks, the meter automatically switches to measuring AC or DC volts. The input impedance is approximately 2 kΩ, which helps you determine if voltage is from leakage or a hard connection.

**Each Unit Includes:** Test leads (TL75), 9V alkaline battery, instructions

### Specifications

	Range/Resolution	Best Accuracy
VAC	40.00V, 400.0V, 600 V	±2.9% +3 counts
VDC	40.00V, 400.0V, 600 V	±1.5% +1 count
Ohms	400.0Ω	±1.5% +2 counts
Size	5.55 x 2.75 x 1.25" / 10 oz; 142.3 x 70.5 x 34.6 mm	

### Ordering Information

Order #	Mfg #	Description	Price
MP22448E	7-600	(600V electrical tester)	



7-600 ▲

Electrical Test Instruments

## Transcat C-101 Multimeter Case

*Designed by our customers to be the perfect case!*

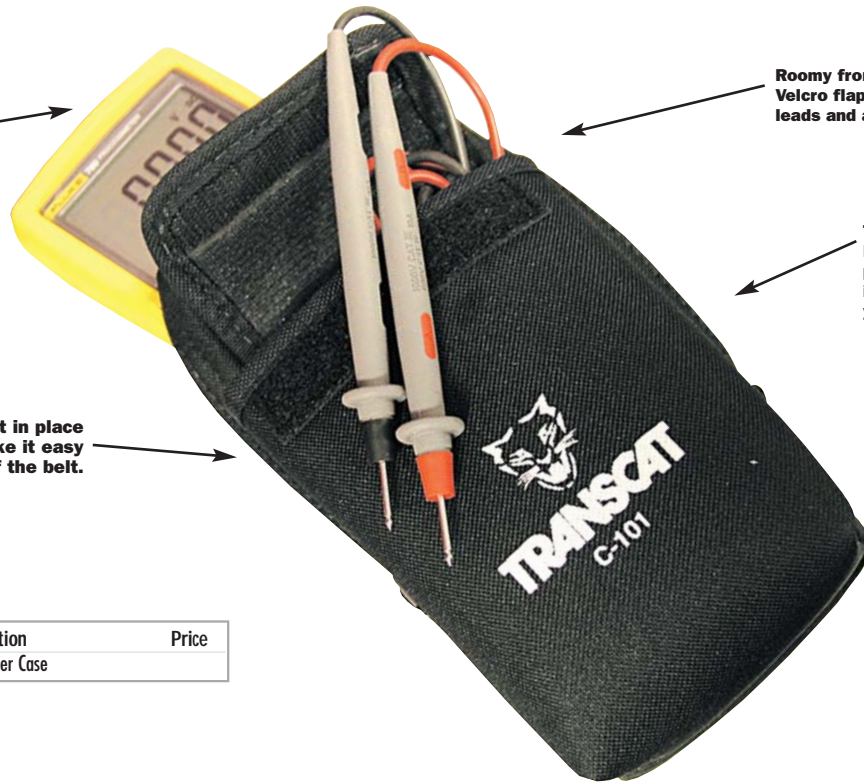
B

Fits all hand-held multimeters - even the Fluke 27

Roomy front pouch with Velcro flap holds test leads and accessories.

Tough Cordura Nylon outside, padded on the inside to protect your meter.

Two Nylon belt loops hold it in place on any tool belt. Snaps make it easy to get on and off of the belt.



### Ordering Information

Order #	Mfg #	Description	Price
MPC-101	C-101	Multimeter Case	

Electrical Test Instruments

## Meterman Probe Style Multimeter

- Auto Ranging, Probe Style DMM
- Simple, One-Handed Operation

Ideal for engineers and techs, the 8390E-1 can be carried in a shirt pocket. Use the attached probe point for hard-to-reach measurement spots. Measures AC and DC voltage, resistance, and continuity. Touch Hold™ function freezes the measurement value on the display allowing you to concentrate on the test area.

DM73B ▶



### Specifications

DC Voltage Ranges:	340 mV, 3.4V, 34V, 340V, 600V
DC Voltage Accuracy:	0.5%
AC Voltage Ranges:	3.4V, 34V, 340V, 600V
Resistance Ranges:	340V, 3.4 kΩ, 34 kΩ, 340 kΩ, 3.4 MΩ, 34 MΩ
Display:	3¼-digit LCD, 0.4"
Size/Weight	6.75 x 1.25 x 0.75"/3 oz

### Ordering Information

Order #	Mfg #	Description	Price
MP8390E-1	DM73B	Probe Style Multimeter	
MP8393E	VC12	Vinyl Carrying Case	
MP4734E	AL73A	Alligator Clip Test Lead	

Transcat Accredited Calibration with Data	CALL
Transcat Accredited Calibration without Data	CALL

**Each Unit Includes:** Two alkaline manganese batteries installed, (4804A), spare probe tip, ground test leads with detachable threaded alligator clip (3003-370-102), and instructions.

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**B**

*Electrical Test Instruments*

## Instek Multimeters

### DM-8034

- 750 VAC/1000 VDC and 20A
- 8 Functions AC/DC Voltage, AC/DC Current, Resistance Diode Test, and Audible Continuity Check
- High Voltage 1000V and 20A Current Range

GDM-8034



### DM-8041

- 600 VAC/600 VDC and 10 AAC/ADC
- Resistance 40 mΩ
- Autoranging and Manual Selections
- 4000 Count LCD Display with 42 Segment Analog Bar Graph
- Min/Max Hold, REL, Store/Recall, Data Hold, Back Light
- Multi-Function Volts, Ampere, Ohms, Hz, Diode Test and Capacitance
- AC/DC Dual Power Sources
- True RMS

GDM-8041



### DM-8145

- 1000 VAC/1200 VDC and 20A
- Resistance 20 mΩ
- Diode Test
- ±0.03% Basic DC Accuracy
- 0.5" Large Red LED Display
- High Resolution 10 μV, 10 nA, and 10 mΩ
- Automatic Zero Circuit
- All Ranges with Protection Circuit
- AC or AC + DC True RMS

GDM-8145



### DM-8245

- 1000 VAC/1200 VDC and 20 AAC/ADC
- AC TrueRMS or AC+DC TrueRMS
- 0.03% DCV Accuracy
- 50000 Counts
- Multi-Function ACV, DCV, ACA, DCA, R, C, Hz Continuity Beeper, Diode Test, Max/Min, REL, Hold, dBm
- Dual Display Indicate: ACV and Hz or DCV(ACV) and dBm
- Manual or Autoranging

GDM-8245



**Each Units Includes:** Test leads and manual.

### Specifications and Ordering Information

Order #	Mfg#	Special Measurement Functions	Display	DCV Basic Accuracy	Autoranging	Ωs Measurement	Max. Current Range	Price
MPDM-8034	GDM-8034	C, Diode Test, Continuity Beeper	3½ LCD	0.50%		2 Wires	20A	
MPDM-8041	GDM-8041	C, Hz, Diode Test, Continuity Beeper, Max/Min, Relative, Hold, Back Light	4000 Counts LCD With 42 Segment Bar	0.10%	Y	2 Wires	10A	
MPDM-8145	GDM-8145	Diode Test, AC+DC True RMS, Back Light	4½ LED	0.03%		2 Wires	20A	
MPDM-8245	GDM-8245	C, Hz, Diode Test, Continuity, Beeper, Max, Min, dBm, Relative, Hold, AC+DC True RMS	50000 Counts Dual LED Display	0.03%	Y	2 Wires	20A	

Transcat Accredited Calibration with Data	CALL
Transcat Accredited Calibration without Data	CALL

B

Electrical Test Instruments

## Fluke Multimeter

### Dual display multimeter

- Basic DC Accuracy .025% Rdg
- Twin 5-Digit Displays
- 16 Measurements Including True RMS AC, dB, Frequency, and Audio Power
- Standard RS-232-C, Optional IEEE 488.2 Interfaces

Two 5-digit, 100,000 count vacuum fluorescent displays allow you to make two different measurements at the same time. Measure the output of a DC supply and check its AC ripple at the same time. Check voltage drop across a load while you measure current through it.

Compare function allows fast in tolerance tests, with readouts showing Hi/Low/Pass and measured value.

Touch-Hold™ captures measurement, locks it on display, and beeps—useful for tests on HV supplies. Min/Max records highest and lowest values measured; relative mode remembers last reading, compares it to the current one, and shows the difference.

This unit can also be used in conjunction with the Crystal MultiCal Pressure module for high accuracy pressure transmitter calibration.

**Each Unit Includes:** Test leads (TL71), power cord (707018), quick reference card, and instructions.

**Approvals:** UL3111.

#### Specifications

DC Voltage Ranges:	300 mV, 3V, 30V, 300V; 100 mV, 1V, 10V, 100V, 1000V
DC Accuracy:	±0.025% of rdg
Max Input V:	1000 VDC/VAC
AC Voltage Ranges:	True RMS, AC-coupled: 300 mV, 3V, 30V, 300V, 100 mV, 1V, 10V, 100V, 750V
DC Current Ranges:	10 mA, 30 mA, 100 mA, 10A
AC Current Ranges:	True RMS, AC-coupled: 10 mA, 30 mA, 100 mA, 10A
Resistance Ranges:	300Ω, 3 kΩ, 30 kΩ, 300 kΩ, 3 MΩ, 30 MΩ, 300 MΩ, 100Ω, 1000Ω, 10 kΩ, 100 kΩ, 1000 kΩ, 10 MΩ, 100 MΩ
Frequency Ranges:	1000 Hz, 10 kHz, 100 kHz, 1000 kHz, 1 MHz
Power Supply:	90–264 VAC, 50/60 Hz or optional rechargeable lead-acid battery pack
Size/Weight:	3.67 x 8.5 x 11.27" HWD/5.2 lbs without battery



▲ 45

REGISTERED  
ISO 9000  
MANUFACTURER

#### Ordering Information

Order #	Mfg #	Description	Price
MP4212E	45	Dual Display Multimeter with Standard RS-232-C Interface	
MP4213E	45-01	Dual Display Multimeter with Rechargeable Battery and RS-232-C	
MP4214E	45-05	Dual Display MM with IEEE 488.2 Interface	
MP4215E	45-15	Dual Display MM Rechargeable Battery and IEEE 488.2	
MP4216E	45-01K	Rechargeable Battery Kit	
MP4217E	45-05K	IEEE 488.2 Interface Kit	
MPFVF-SC3		Software & Cable for Fluke 45	
		Transcat Accredited Calibration with Data	CALL
		Transcat Accredited Calibration without Data	CALL

Electrical Test Instruments

## NEW Meterman Benchtop DMM

- True-RMS, 4-½ digit, 20,000 Count Benchtop DMM
- AC or AC+DC Input Coupling
- High Accuracy, Basic VDC 0.03 %
- Voltage to 1200 VDC, 1000 VAC
- Current From 10 nA to 20A
- Resistance From 10 MW to 20 MW
- Easy-to-read 0.5" LED Display
- Interlocking Push-button Control for Easy Selection CAT III 1000V Rated
- CAT III, 1000V
- One-year Warranty



▲ BDM40

#### Ordering Information

Order #	Mfg #	Description	Price
MPBDM40	BDM40	True-RMS Benchtop DMM	

## Triplett Analog Multimeters

- 28 Ranges and Functions
- AC Voltage Frequency Response to 40 kHz Typical
- Overload Relay (630-PLK) Provides User Resettable Protection
- Polarity Reversing Switch
- Range Doubling Switch
- Large, Durable Plastic Window for Easy Viewing

### Specifications

DC Voltage Range:	0.25, 2.5, 10, 50, 250, 1000
Accuracy:	±1.5% of Full Scale
AC Voltage Range:	3, 10, 50, 250, 1000
Accuracy:	±3% of Full Scale
AC Output Voltage Meas. Range:	3, 10, 50, 250
DC Current Range:	100 µA, 10 mA, 100 mA, 1A, 10A
Accuracy:	±1.5% of Full Scale
Resistance Range:	1 kΩ, 10 kΩ, 1 MΩ, 100 MΩ
Accuracy:	±1.5% of scale length
Size/Weight:	7.5 x 5.5 x 3.34" HWD/5.5 lbs

### Ordering Information

Order #	Mfg #	Description	Price
MP3050	630-PL	Diode-Protected Multimeter	
MP3055	630-PLK	Switch-Protected Multimeter	

Transcat Accredited Calibration with Data	CALL
Transcat Accredited Calibration without Data	CALL

3050 ▶



## Triplett Analog Multimeters

- Lightweight, Handheld
  - Diode Overload Protection with Fused Ohm Ranges
  - Single Enclosed Range Switch
- Each Unit Includes:** Batteries, 42-inch safety test leads, screw-on insulated alligator clips, and manual.

### Specifications

Range (AC/DC):	0–3–12–60–300–600V (310-C); 0–3–12–60–300–1200 (310)
Accuracy:	±4% of Full Scale
Resistance Range:	0–20 kΩ–200 kΩ–2 MΩ–20 MΩ (200Ω center scale on lowest range)
Accuracy:	±3% of scale length
DC Current Range:	600 µA, 6 mA, 60 mA, and 600 mA
Accuracy:	±3% of Full Scale
Size/Weight:	2 3/4 x 1 5/16 x 4 1/4" HWD/2 lbs (1 kg)

### Ordering Information

Order #	Mfg #	Description	Price
MP3018	310	Volt Ohmmeter (Model 310)	
MP3022E	310-C	Volt Ohmmeter to 600 VAC/VDC	

Transcat Accredited Calibration with Data	CALL
Transcat Accredited Calibration without Data	CALL

310-C ▶



## Triplett Analog Multimeters

- All Ranges Protected by a Unique, Three-Fuse Arrangement
  - Accuracy: ±1.5% DCV, DCI, Ω; 3% ACV
- Each Unit Includes:** Batteries, 48-inch safety test leads, screw-on insulated alligator clips, spare 1/8 A and 1A fuses, and operating manual.

### Specifications

DC Voltage Range:	0, 1, 3, 10, 30, 100, 300, 1000
AC Voltage Range:	3, 10, 30, 100, 300, 1000
DC Current Range:	100 µA, 10 mA, 100 mA, 1000 mA
Resistance Range:	1 kΩ, 10 kΩ, 100 kΩ, 1 MΩ, 10 MΩ
Decibels:	-20 dBm to 52 dBm
Size/Weight:	3 1/4 x 5 1/4 x 7 1/4" HWD/4 lbs (1.8 kg)

### Ordering Information

Order #	Mfg #	Description	Price
MP3145	3145	28 Range VOM	

Transcat Accredited Calibration with Data	CALL
Transcat Accredited Calibration without Data	CALL

3145 ▶



## Simpson Analog Multimeters

- Measures AC/DC Volts, AC/DC Current, Resistance, -20 to +50 dB
- ±2% FS DC Accuracy
- Models with Audible Continuity and Resettable Circuit Protection

These are some of the most popular analog volt-ohm meters ever made. A quick comparison of price vs performance shows why: they deliver all basic functions, they're compact, portable, easy to carry around, simple to use, have that legendary Simpson quality, and they're at home in lots of different places—service, test, design, maintenance, even hobby use.

These meters all measure AC/DC voltage to 1 kV, AC/DC current to 10A, resistance to 20 megohms, plus dB from -20 to +50 dB. The differences among them are minor. The 4785E/4786E has a high visibility yellow ABS case with high impact resistance and extra drop protection. The extra few dollars you pay for that feature is a good investment. (Anyone who's never dropped a meter please raise your hand.)

The 7865E/7866E have that familiar black phenolic case that Simpson made famous and include an extra 1.0 VDC range. The 4786E and 7866E both have audible continuity check—very useful for those measurements when you'd prefer to watch your probes rather than the meter. These also include resettable circuit protection for those occasions when you've pumped a few too many mils through the meter.

All instruments feature a big taut-band mirrored scale analog meter for quick nulling and peaking adjustments, carrying handle, direct reading amp-clamp scales, UL 1244 listing, zero RFI emissions, and recessed, insulated panel connections.

Transcat NIST Traceable Certificates are available for all of these meters, both with and without data.

**Each Unit Includes:** Batteries (one of each required): one 9V alkaline and one 1.5V zinc carbon D cell, test leads, and instructions.



▲ 12388

### Specifications

DC Voltage Ranges:	250 mV, 2.5V, 10V, 25V, 50V, 250V, 500V, 1000V; 1V scale on 7865E/7866E
AC Voltage Ranges:	2.5V, 10V, 25V, 50V, 250V, 500V, 1000V
DC Current Ranges:	50 µA, 1 mA, 10 mA, 100 mA, 500 mA, 10A
AC Current Ranges:	Up to 250A with optional clamp-on current adapter
Resistance Ranges:	2000Ω, 200 kΩ, 20 MΩ
dB Ranges:	-20 to +50 in five ranges
Size/Weight:	4785E/4786E: 7 x 5.25 x 3.1" HWD/2.5 lbs; 7865E/7866E: 7 x 5.5 x 3.1" HWD/3 lbs

### Ordering Information

Order #	Mfg #	Description	Price
MP7865E	12388	Model 260-8, Varistor Protected	
MP7866E	12391	Model 260-8P, Relay Overload Protected, Continuity	
MP4785E	12395	Model 260-8XI, Yellow	
MP4786E	12396	Model 260-8XPI, Yellow, Relay Overload Protected	
MP4740E	00541	Clamp-On Current Adapter	
MP7870E	00805	Drop Front Hard Case	
MP4741E	00818	Universal 23-Piece Test Lead Set	
MP8039E	00544	Power Line Splitter	
MP4742E	00832	Yellow "Grab-N-Go" Nylon Padded Case	
MP4743E	00834	Black "Grab-N-Go" Nylon Padded Case	
MP00043	00043	Probe Set for 260-8/8P	
MP00125	00125	Probe Set for 260-8XI/XPI	

Transcat Accredited Calibration with Data	CALL
Transcat Accredited Calibration without Data	CALL



▲ 12395

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Electrical Test Instruments