Action-Electronics.com Order: 1-800-563-9405

Meterman®

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37XR Digital Multimeter

True RMS digital multimeter with component and logic test for troubleshooting electronics at the bench or on the job site

True RMS meter for electronics troubleshooting at the bench or job site. The highest accuracy meter in the XR series.

- Autoranging 10,000 count with 0.1 % accuracy
- LCR functions – inductance, capacitance and resistance
- Frequency, duty cycle and logic test
- Min/Max, Average, Relative, Peak, and Data Hold
- Bright blue backlight for dim environments
- Magne-Grip™ holster with magnetic hanging strap
- Auto power off to save battery life
- Separate door for easy battery and fuse access
- Three-year warranty

Specifications *(at 23 °C ± 5 °C, <75 % R.H. non-condensing)*

Function	Range	Accuracy
Voltage		
DC Voltage	1000 mV, 10 V, 100 V, 1000 V	± (0.1 % rdg + 5 dgt)
AC Voltage True RMS (45 Hz to 2 kHz)		
	1000 mV, 10 V, 100 V (45 Hz to 500 Hz)	± (1.2 % rdg + 10 dgts)
	1000 mV, 10 V, 100 V (500 Hz to 2 kHz)	± (2.0 % rdg + 10 dgts)
	750 V (45 Hz to 1 kHz)	± (2.0 % rdg + 10 dgts)
AC coupled True RMS specified from 5 % to 100 % of range		
Input Impedance	10 MΩ	
Resolution	100 µV	
Current		
DC Current	100 µA	± (0.5 % rdg + 10 dgt)
	1000 µA, 10 mA, 100 mA, 400 mA	± (0.5 % rdg + 5 dgts)
	10 A	± (1.5 % rdg + 10 dgt)
AC Current True RMS (45 Hz to 1 kHz)		
	100 µA, 1000 µA, 10 mA, 100 mA	± (1.5 % rdg + 10 dgts)
	400 mA	± (2.0 % rdg + 10 dgts)
	10 A	± (2.5 % rdg + 10 dgts)
AC coupled True RMS specified from 5 % to 100 % of range		
Resolution	0.01 µA	
Resistance	1000 Ω, 10 kΩ, 100 kΩ, 1000 kΩ	± (0.5 % rdg + 8 dgts)
	10 MΩ	± (1.0 % rdg + 10 dgts)
	40 MΩ	± (2.0 % rdg + 10 dgts)
Resolution	100 mΩ	
Capacitance	40 nF, 400 µF	± (3.0 % rdg + 10 dgts)
	400 nF, 4 µF, 40 µF	± (3.0 % rdg + 5 dgts)
Resolution	0.01 nF	
Inductance		
(for values of Q ≤ 7)	4 mH, 40 mH, 400 mH, 4 H, 40 H	± (5.0 % rdg + 30 dgts)
Resolution	1 µH	
Frequency	100 Hz, 1000 Hz, 10 kHz, 100 kHz, 1000 kHz, 10 MHz	± (0.1% rdg + 5 dgts)
Resolution	0.01 Hz	
Duty Cycle	0 to 90 %	5 V logic: ± (2.0% rdg + 20 dgts)
Resolution	0.01 %	
Frequency Range	0 % to 10 %: 40 Hz to 990 Hz 10 % to 90 %: 40 Hz to 20 kHz	

CAT II 1000 V CAT III 600 V

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Specifications *cont.*

Function	Range	Accuracy
Logic Test		
Logic Type	TTL, CMOS	
Thresholds		
Logic 1 (Hi)	TTL 2.8 V ± 0.8 V, CMOS 4 V ± 1 V	
Logic 0 (Lo)	TTL 0.8 V ± 0.5 V, CMOS 2 V ± 0.5 V	
Frequency Response	20 MHz	
dBm		
	-13 dBm to +50 dBm (45 Hz to 5 kHz)	± (0.7 dB + 8 dgts)
	-13 dBm to +50 dBm (5 kHz to 10 kHz)	± (2.5 dB + 8 dgts)
Resolution	0.01 dBm	
Continuity		
Audible Indication	< 40 Ω	
Response Time	100 ms	
Diode Test		
Test Current	1.0 mA (approximate)	
Open Circuit Voltage	3.0 V dc typical	
Peak		
AC Volts Accuracy	100 V, 750 V	± (3.0 + 200 dgts)
	1000 mV, 10 V	unspecified
AC Current	1000 µA, 10 mA, 100 mA, 400 mA, 10 A	± (3.0 + 200 dgts)
	100 µA	unspecified
Overload Protection		
AC/DC Voltage	1000 V dc or 750 V ac rms	
AC/DC Current	µA/mA input: F0.5 A /1000 V fast-blow ceramic 6.3 mm x 32 mm 10 A input: F10 A /1000 V fast-blow ceramic 10 mm x 38 mm (10 A for 4 minutes maximum followed by a 12 minute cooling period)	
Resistance, Continuity, Diode Test, Inductance, Capacitance	All ranges: 1000 V dc or 750 V rms	

General Specifications	
Display (Autoranging)	4-3/4 digit LCD, 10,000 counts with 41-segment analog bar graph
Display Update Rate	2/sec, nominal
Power Battery	9 V NEDA 1604, JIS 006P, IEC 6F22
Battery Life	150 hrs typical (alkaline) frequent use of backlight will decrease battery life
Operating Temperature	0 °C to 45 °C at < 70% R.H.
Storage Temperature	-20 °C to 60 °C, 0 to 80 % R.H. with battery removed from meter
Temperature Coefficient	0.1 x (specified accuracy) per °C (0 °C to 18 °C , 28 °C to 45 °C)
Altitude	2000 m (6562 ft)
Dimensions	195 mm x 92 mm x 60 mm (7.75 in x 3.55 in x 2.4 in)
Weight (without holster, including battery)	450 g (1 lb)
Warranty	Three-year

No waiting.

No shipping charges.

WARRANTY NO HASSLE PROGRAM

No hassle warranty

Our commitment to high-quality products and customer service is demonstrated by our industry exclusive "No Hassle" warranty. In the unlikely event that a Meterman test tool requires warranty service, any of our local dealers are authorized to replace it, on the spot.

Included Accessories

Test leads with threaded alligator clips (TL36), 9 V battery (installed), Magne-Grip™ Holster with magnetic hanging strap, spare fuse and users manual.

Optional Accessories

VC221A Padded Vinyl Carrying Case
DL248C Deluxe Test Lead Kit
DC205B Heavy Duty Carrying Case
HV231-10 High Voltage Probe
TP253A Temperature Converter

Meterman®
The right tool, everyday.™

Meterman Test Tools

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