



37XR-A True RMS Digital Multimeter

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

- Inductance to 40 H, frequency to 40 MHz, capacitance to 400 μ F, logic to 20 MHz
- Input warning tone when test leads are in wrong jack
- 10,000 count, 0.1 % accuracy
- 1000 V/750 V DC/AC True RMS
- 10 Amps AC/DC, fully safety fused
- Resistance to 40 M Ω
- Continuity beeper
- Min/Max, Average, Relative, Peak, and Data Hold
- Auto power off to save battery life
- Separate door for easy battery and fuse access
- Magne-Grip™ Holster with magnetic hanging strap
- CAT III 600 V, CAT II 1000 V rated
- UL (cULus) listed
- Three-year warranty

No hassle warranty

No waiting.

No shipping charges.



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

(note: \$500 MSLP limit)



N10140



37XR-A Digital Multimeter

General Specifications

Autoranging;	
Display:	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 x 92 x 60 mm (7.75" x 3.55" x 2.4")
Weight:	400 gr (1 lb) without holster, including battery

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

Function	Range	Accuracy
DC Voltage		
Ranges	1000 mV, 10 V, 100 V, 1000 V	± (0.1 % rdg + 5 dgt)
Resolution	100 µV	
AC Voltage (45 Hz to 2 kHz) True RMS		
Ranges	1000 mV, 10 V, 100 V, 750 V	
	750 V range: 45 to 1 kHz:	± (2.0 % rdg + 10 dgts)
	All other ranges, 45 to 500 Hz:	± (1.2 % rdg + 10 dgts)
	All other ranges, 500 to 2 kHz:	± (2.0 % rdg + 10 dgts)
Resolution	100 µV	
AC coupled True RMS specified from 5 % to 100 % of range		
DC Current		
Ranges	100 µA, 1000 µA, 10 mA, 100 mA, 400 mA, 10 A	
	100 µA range:	± (0.5 % rdg + 10 dgt)
	1000 µA to 400 mA ranges:	± (0.5 % rdg + 5 dgts)
	10 A range:	± (1.5 % rdg + 10 dgt)
Resolution	0.01 µA	
AC Current (45 Hz to 1 kHz) True RMS		
Ranges	100 µA, 1000 µA, 10 mA, 100 mA, 400 mA, 10 A	
	100 µA to 100 mA ranges:	± (1.5 % rdg + 10 dgts)
	400 mA range:	± (2.0 % rdg + 10 dgts)
	10 A range:	± (2.5 % rdg + 10 dgts)
Resolution	0.01 µA	
AC coupled True RMS specified from 5 % to 100 % of range		
Resistance		
Ranges	1000 Ω, 10 kΩ, 100 kΩ, 1000 kΩ, 10 MΩ, 40 MΩ	
	1000 Ω to 1000 kΩ ranges:	± (0.5 % rdg + 8 dgts)
	10 MΩ range:	± (1.0 % rdg + 10 dgts)
	40 MΩ range:	± (2.0 % rdg + 10 dgts)
Capacitance		
Ranges	40 nF, 400 nF, 4 µF, 40 µF, 400 µF	
	40 nF, 400 µF ranges:	± (3.0 % rdg + 10 dgts)
	400 nF to 40 µF ranges:	± (3.0 % rdg + 5 dgts)
Resolution	0.01 nF	

Function	Range	Accuracy
Inductance		
Ranges	4 mH, 40 mH, 400 mH, 4 H, 40 H	
	For values of Q ≥ 7:	± (5.0 % rdg + 30 dgts)
Resolution	1 µH	
Frequency		
Ranges	100 Hz, 1000 Hz, 10 kHz, 100 kHz, 1000 kHz, 10 MHz	± (0.1 % rdg + 5 dgts)
Resolution	0.01 Hz	
Duty Cycle		
Ranges	0 to 90 %	
Accuracy	5V logic:	± (2.0 % rdg + 20 dgts)
Resolution	0.01 %	
Frequency Range	0 % to 10 %: 40 Hz to 990 kHz 10 % to 90 %: 40 Hz to 20 kHz	
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		
Ranges	-13 dBm to + 50 dBm	
	45 Hz to 5 kHz:	± (0.7 dB + 8 dgts)
	5 kHz to 10 kHz:	± (2.5 dB + 8 dgts)
Resolution	0.01 dBm	
Continuity		
Audible Indication	< 40 Ω	
Diode Test		
Test Current	1.0 mA (approximate)	
Open Circuit Volts	3.0 V dc typical	
Peak		
AC Volts Accuracy	100 V, 750 V ranges:	± (3.0 % + 200 dgts)
	1000 mV, 10 V ranges:	unspecified
AC Current		± (3.0 % + 200 dgts)
	100 µA range:	unspecified
Overload Protection		
AC/DC Voltage	All ranges: 1000 V dc or 750 V ac rms	
AC/DC Current	µA/mA input: F0.5 A/1000 V fast-blow ceramic (6.3 x 32 mm) 10 A input: F10 A/1000 V fast-blow ceramic (10 x 38 mm) (10 A for 4 minutes maximum followed by a 12 minute cooling period)	

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Data Sheet

Included Accessories

Test leads with threaded alligator clips (TL36A), 9 V battery (installed), Magne-Grip™ Holster with magnetic hanging strap (H2-XRA), spare fuse, operators manual

Optional Accessories

VC221B Padded Vinyl Carry Case
DL248D Deluxe Test Lead Kit
DC205C Heavy Duty Case
HV231-10A High Voltage Probe
TP254A High Temperature Probe