AMPROBE®

Data Sheet

AM-250
Professional Electrical Multimeter

A professional multimeter for Electrical and HVAC applications. Safety rated to CAT III 600V and CAT II 1000V for indoor applications requiring direct connection to main panel of the building. The AM-250 measures complete range of electrical parameters including voltage, current, resistance and frequency. It also covers HVAC application with temperature, capacitance and micro amps functions.

- **13 Features**
- **Measures AC/DC voltage up to 1000V, Current, Resistance, Frequency, Capacitance and Temperature**
- **Audible continuity**
- **Diode Test**
- **Auto and manual ranging**
- **Relative zero mode**
- **Data hold**
- **Peak hold (30ms response time)**
- **Backlight display**
- **Large, easy to read LCD display**
- **BEEP-JACK audible warning against improper connection**
- **Auto power off**
- **Safety CAT III 600V**

No hassle warranty

No waiting.

No shipping charges.

WARRANTY NO HASSLE PROGRAM

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)

Distributed by:
TESTERS AND TOOLS.COM
Trust Experience Reliability
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N10140

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Specifications

General Specifications Display	3-3/4 digits 4000 counts LCD display
Polarity	Automatic
Update Rate	3 per second nominal
Operating Temperature	0°C to 40°C (32°F to 104°F)
Relative Humidity	Maximum relative humidity 80% for temperature up to 31°C decreasing linearly to 50% relative humidity at 40°C
Altitude	Operating below 2000m
Storage Temperature	-20°C ~ 60°C (-4°F to 140°F), < 80% R.H. (with battery removed)
Temperature Coefficient	nominal 0.15 x (specified accuracy)/°C @(0°C - 18°C or 28°C - 40°C), or otherwise specified
Sensing	Average sensing
Pollution Degree	2
Safety	The meter (all versions) is protected, against the users, by double insulation per UL3111-1 (1st Edition), IEC61010-1 (1st Edition) + A1 and A2, CAN/CSA - C22.2 No. 1010.1 - 92 to CAT II 1000V & CAT III 600V. **Protection-reinforced CE Terminals (to COM) ratings:** **V:** Category II 1000 Volts AC & DC, and Category III 600 Volts AC & DC. **A / mAμA:** Category III 500 Volts AC and 300 Volts DC.
Overload Protections	
Protection-reinforced CE	**μA & mA:** 0.63A/500V, IR200kA, F Fuse; **A:** 12.5A/500V, IR20kA, F Fuse; **V:** 1050Vrms, 1450Vpeak; Ω **& Others:** 600VDC/VAC rms
E.M.C.	Meets EN61326(1997, 1998/A1), EN61000-4-2(1995), and EN61000-4-3(1996)
In an RF field of 3V/m	Capacitance function is not specified AC 4.000V range: Total Accuracy = Specified Accuracy + 700 digits AC 400.0μA range: Total Accuracy = Specified Accuracy + 300 digits Other function ranges: Total Accuracy = Specified Accuracy + 40 digits Performance above 3V/m is not specified
Transient protection	6.5kV (1.2/50μs surge)
Power Supply	1.5V AAA Size (NEDA 24A or IEC LR03) battery X 2
Power Consumption	3.2 mA
typical Low Battery	Below approx. 2.4V
Sleep Mode Timing	Idle for 30 minutes
Sleep Mode Consumption	360μA
Dimension	193(L) x 97(W) x 46(H)mm (7.6 X 3.8 X 1.8 in)
Weight	Approx. 370 gm / 0.815 lb
Special Features	25ms Max Hold; Data Hold; Relative zero mode; Beep-jack™ input warning; Back-lighted display

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Electrical Specification

Accuracy is ±(% reading digits + number of digits) or otherwise specified, at 23 °C ±5 °C & less than 75% R.H.

	Range	Accuracy
	400.0 mV	0.3% + 4d
	4.000V, 40.00V,	0.5% + 3d
	400.0V	
	1000V	1.0% + 4d

DC Voltage	Range	Accuracy
50Hz -- 500Hz	400.0mV*	4.0% + 5d
	4.000V, 40.00V,	1.5% + 5d
	400.0V	
	1000V	4.0% + 5d

AC Voltage	Range	Accuracy*
	-20 °C TO 300 °C	2% + 3 °C
	-4 °F TO 572 °F	2% + 6 °F
	NMRR: >50dB @ 50/60Hz **CMRR:** >120dB @ DC, 50/60Hz, Rs=1kΩ **CMRR:** >60dB @ DC to 60Hz, Rs=1kΩ **Input Impedance:** 10MΩ, 30pF nominal (1000MΩ for 400.0mV range) *Selection by RANGE button manually,	
	Type-K Temperature is specified from *Type-K thermocouple range & accuracy Specified accuracy ± 50 digits for changes > 25ms in duration	

DC Current	Range*	Accuracy**
Capacitance	500.0nF, 5.000µF,	
	50.00µF, 500.0µF,	3.5%*** + 6d
	3000µF	

Voltage	Range	Accuracy	Burden
	400.0µA	2.0% + 5d	0.15mV/µA
	4000µA	1.2% + 3d	0.15mV/µA
	40.00mA	2.0% + 5d	3.3mV/mA
	400.0mA	1.2% + 3d	3.3mV/mA
	4.000A	2.0% + 5d	0.03V/A
	10.00A*	1.2% + 3d	0.03V/A
	*10A continuous, 20A for 30 second max with 5 minutes cool down interval		

AC Current	Range	Accuracy	Burden
50Hz -- 500Hz	400.0µA	2.0% + 5d	0.15mV/µA
	4000µA	1.2% + 3d	0.15mV/µA
	40.00mA	2.0% + 5d	3.3mV/mA
	400.0mA	1.2% + 3d	3.3mV/mA
	4.000A	2.0% + 5d	0.03V/A
	10.00A*	1.2% + 3d	0.03V/A
	*10A continuous, 20A for 30 second max with 5 minutes cool down interval		

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Ohms	Range	Accuracy
	400.0Ω	0.8% + 6d
	4.000kΩ, 40.00kΩ, 400.0kΩ	0.6% + 4d
	4.000MΩ	1.0% + 4d
	40.00MΩ	2.0% + 4d

Open Circuit Voltage	0.4VDC typical
Audible Continuity	Tester
Audible Threshold	between 10Ω and 120Ω
	*Additional 50.00nF range accuracy is not specified **Accuracies with film capacitor or better ***Specified with battery voltage above 2.8V (approximately half full battery). Accuracy decreases gradually to 12% at low battery warning voltage of approximately 2.4V

Hz Frequency	Range*	Accuracy**
	50.00Hz, 500.0Hz,	0.5%+4d
	5.000kHz,	
	50.00kHz,	
	500.0kHz,	
	1.000MHz	
	*Additional 5.000Hz range accuracy & sensitivity are not specified **Accuracy is specified at < 20VAC rms Input Signal: Square wave with duty cycle > 40% & < 70%; or Sine wave Vrms AC Sensitivity: 10Hz--20Hz : > Sine 0.9Vrms; 20Hz--500kHz: > 2.6Vp; or Sine 1.9Vrms; 500kHz--1MHz: > 4.2Vp; or Sine 3Vrms Update Rate: 2 per second nominal	

Diode Tester	Open Circuit Voltage	Test Current (Typical)
	< 1.6 VDC	0.25mA
Included Accessories	Test leads (pair), Banana plug K-type thermocouple, batteries installed, user's manual	

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