



## AM-150 TRMS TRMS Digital Multimeters with PC Connection

Professional grade and quality performance mark these digital multimeters as a "must have." Don't miss the download capability and optional accessories that make these value testers versatile.

- True RMS (TRMS)
- Optical isolated PC interface capability
- Auto and manual ranging
- Auto power off
- Data hold
- Peak Hold
- Auto & Manual Ranging
- Backlight display
- Large, easy to read LCD display
- Auto Compensation of the test leads resistance
- Diode Test
- Audible continuity
- Safety: CAT III 1000V, CAT IV 600V

### 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)

#### Included Accessories

Thermocouple TPK-59; Test leads MTL-90B; Fuse 1A/1000V IR 10kA for mA/uA terminal FA-1A/1000V; Fuse 15A/1000V IR 10KA or 11A/1000V IR 20kA for Amp terminal FA-15A/1000V; users manual

#### Optional Accessories

ACF-3000AK	3000A AC Flexible Clamp-on Attachment
A-1000	1000A TRMS AC/DC Clamp-on Attachment
CT-600 AC/DC	600A AC/DC Clamp-on Attachment
A400	400A AC Clamp-on Attachment
CT-30	Milli-Amps to 30A AC/DC Clamp-on Attachment
DKTA-620 and two of TPK-56	Dual input Thermocouple adapter with two thermocouples -50°F to 600°F
RS-232 KIT1	PC Interface kit (PC connection cable with software) Software
RS-USB	USB to RS-232 Adapter
DL243D	Deluxe Test Leads
CC-ACDC	Carrying Case



**General Specifications**

<b>Display:</b>	3-4/5 digits 5000 counts LCD display
<b>Update Rate:</b>	Digital Data 5 per second nominal; 52 Segments Bar-graph 60 per second nominal
	AC Sensing: True RMS
<b>Operating Temperature:</b>	0°C to 45°C
<b>Relative Humidity:</b>	Maximum relative humidity 80% for temperature up to 31°C decreasing linearly to 50% relative humidity at 45°C
<b>Storage Temperature:</b>	-20°C to 60°C, 80% R.H. (with battery removed)
<b>Pollution degree:</b>	2
<b>Altitude:</b>	Operating below 2000m
<b>Temperature Coefficient:</b>	nominal 0.15 x (specified accuracy)/ °C @(0°C -- 18°C or 28°C -- 45°C), or otherwise specified
<b>Overload Protections:</b>	
μA & mA:	1A/1kV (or 0.44A/1kV), IR 10kA, F fuse
A :	15A/1kV, IR 10kA (or 11A/1kV, IR 20kA), F fuse
V, mV, Ω, & Others :	1050Vrms / 1450Vpeak
<b>Safety:</b>	The meter (all versions) is protected, against the users, by double insulation per EN61010-1 and IEC61010-1 2nd Edition (2001) to CAT III 1000V & CAT IV 600V. The meter (all versions) also meet CSA C22.2 No. 1010-1-92* to CAT III 1000V.
<b>Terminals (to COM) ratings:</b>	
V / A / mAμA:	Category III 1000 Volts AC & DC, and Category IV 600 Volts AC & DC.
<b>E.M.C.:</b>	Meets EN61326
<b>In an RF field of 3V/m:</b>	Capacitance function is not specified. Other function ranges: Total Accuracy = Specified Accuracy + 30 digits. Performance above 3V/m is not specified
<b>Power Supply:</b>	Single standard 9V battery NEDA1604, JIS006P or IEC6F22 for AM-120 & AM-130, and single standard 9V alkaline battery NEDA1604A, JIS6AM6 or IEC6LF22 for AM-150
<b>Power Consumption:</b>	2.6 mA typical
<b>Low Battery:</b>	Below approx. 7V
<b>APO Timing:</b>	Idle for 17 minutes
<b>Dimension:</b>	L193mm X W97mm X H46mm
<b>Weight:</b>	370 gm

**Electrical Specifications**

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

<b>DC Voltage</b>			
	<b>Range</b>	<b>Accuracy</b>	
	50.00 mV	0.12% + 2d	
	500.0 mV	0.06% + 2d	
	5.000V, 50.00V, 500.0V, 1000V	0.08% + 2d	
NMRR :	>60dB @ 50/60Hz		
CMRR :	>120dB @ DC, 50/60Hz, Rs=1kΩ		
Input Impedance : 10MΩ, 16pF nominal (44pF nominal for 50mV & 500mV ranges)			
<b>AC Voltage</b>			
	<b>Range</b>	<b>Accuracy</b>	
<b>50Hz to 60Hz</b>			
	50.00mV, 500.0mV, 5.000V, 50.00V, 500.0V, 1000V	0.5% + 3d	
<b>40Hz to 500Hz</b>			
<b>40Hz to 50Hz</b>	50.00mV, 500.0mV	0.8% + 3d	
<b>60Hz to 500Hz</b>	5.000V, 50.00V, 500.0V 1000V	1.0% + 4d 1.2% + 4d	
<b>500Hz to 20kHz</b>			
	50.00mV, 500.0mV	0.5dB*	
	5.000V, 50.00V, 500.0V	3dB*	
	1000V	Unspecified	
*Specified from 30% to 100% of range			
CMRR :	>60dB @ DC to 60Hz, Rs=1kΩ		
Input Impedance : 10MΩ, 16pF nominal (44pF nominal for 50mV & 500mV ranges)			
<b>Temperature</b>			
	<b>Range</b>	<b>Accuracy*</b>	
	-50°C to 1000 °C	0.3% + 3d	
	-58°F to 1832 °F	0.3% + 5d	
*Thermocouple range & accuracy not included			
<b>DC Current</b>			
	<b>Range</b>	<b>Accuracy</b>	<b>Burden Voltage</b>
	500.0μA	0.2%+4d	0.15mV/μA
	5000μA	0.2%+4d	0.15mV/μA
	50.00mA	0.2%+4d	3.3mV/mA
	500.0mA	0.2%+4d	3.3mV/mA
	5.000A	0.2%+4d	0.03V/A
	10.00A**	0.2%+4d	0.03V/A
**10A continuous, 20A for 30 seconds max with 5 minutes cool down interval			
<b>AC Current</b>			
	<b>Range</b>	<b>Accuracy</b>	<b>Burden Voltage</b>
<b>50Hz -- 60Hz</b>			
	500.0μA	0.6%+3d	0.15mV/μA
	5000μA	0.6%+3d	0.15mV/μA
	50.00mA	0.6%+3d	3.3mV/mA
	500.0mA	1.0%+3d	3.3mV/mA
	5.000A	0.6%+3d	0.03V/A
	10.00A**	0.6%+3d	0.03V/A

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## Data Sheet

### Electrical Specifications, continued

40Hz to 1kHz			
40Hz to 50Hz	500.0μA	0.8%+4d	0.15mV/μA
60Hz to 1kHz		5000μA 0	.8%+4d 0.15mV/μA
	50.00mA	0.8%+4d	3.3mV/mA
	500.0mA	1.0%+4d	3.3mV/mA
	5.000A	0.8%+4d	0.03V/A
	10.00A**	0.8%+4d	0.03V/A

\*10A continuous, 20A for 30 seconds max with 5 minutes cool down interval

### Ohms

Range	Accuracy
50.00Ω	0.2% + 6d
500.0Ω	0.1% + 3d
5.000kΩ, 50.00kΩ, 500.0kΩ	0.1% + 2d
5.000MΩ	0.4% + 3d
50.00MΩ	1.5% + 5d

Open Circuit Voltage : < 1.3VDC (< 3VDC for 50Ω & 500Ω ranges)

### Audible Continuity Tester

Audible threshold : between 20Ω and 200Ω. Fast response time < 100μs

### Diode Tester

Range	Accuracy	Test Current (Typical)	Open Circuit Voltage
2.000V	1%+1d	0.8mA	< 3.5 VDC

### Frequency

Function	Sensitivity (Sine RMS)	Range
mV	300mV	6Hz - 125kHz
5V	2V	6Hz - 125kHz
50V	20V	6Hz - 20kHz
500V	80V	6Hz - 1kHz
1000V	300V	6Hz - 1kHz
Ω, Cx, diode	300mV	6Hz - 125kHz
μA, mA, A	10% F.S.	6Hz - 125kHz

Accuracy: 0.01% + 2d

### Capacitance

Range	Accuracy*
50.00nF	0.8% + 3d
500.0nF	0.8% + 3d
5.000μF	1.0% + 3d
50.00μF	2.0% + 3d
500.0μF	3.5% + 5d
9999μF	5.0% + 5d

\*Accuracies with film capacitor or better

### Amprobe® Test Tools

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