



Data Sheet

ACDC-100 TRMS 1000A AC/DC Clamp-On Multimeter

Where accuracy, quality, and the newest technology meet. The ACDC-100 offers superior AC/DC measurement capabilities, highest product quality and enhanced ergonomics design. The TRMS version addresses needs of professionals who rely on performance and reliability.

- True RMS
- Backlight
- Capacitance test
- AC/DC voltage to 600V
- Resistance
- Continuity Beeper
- Relative zero mode
- Auto power off
- Data hold
- MAX capture function for in rush current measurements (30 mS response)
- Large, easy to read digital display
- Diode Test
- Audible continuity
- Accommodates conductors up to 50mm (2.00") in diameter
- "Third hand" - test probe holder
- Rubber over-molded case with built-in probes storage
- Carrying case, test leads, batteries (installed) and user manual included



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)





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

Function	Range	Accuracy
DC Voltage		
	400.0 mV	0.3% + 3d
	4.000V, 40.00V, 400.0V	0.5% + 3d
	600V	1.0% + 4d
NMRR :	>50dB @ 50/60Hz	
CMRR :	>120dB @ DC, 50/60Hz, Rs=1k Ω	
Input Impedance :	10M Ω , 30pF nominal (1000M Ω for 400.0mV range)	
AC Voltage		
50Hz ~ 500Hz	400.0mV 1)	4.0% + 4d
50Hz ~ 60Hz	4.000V, 40.00V, 400.0V	1.0% + 4d
60Hz ~ 500Hz	4.000V, 40.00V, 400.0V	1.5% + 4d
50Hz ~ 500Hz	600V	2.0% + 4d
CMRR :	>60dB @ DC to 60Hz, Rs=1k Ω	
Input Impedance:	10M Ω , 30pF nominal	
ACDC-100 TRMS Crest Factor:	< 1.6 : 1 at full scale & < 3.2 : 1 at half scale	
1) Selection by RANGE button manually, and is specified AC 60mV and up		
Resistance		
	400.0 Ω	0.8% + 6d
	4.000k Ω , 40.00k Ω , 400.0k Ω	0.6% + 4d
	4.000M Ω	1.0% + 4d
	40.00M Ω	2.0% + 4d
Open Circuit Voltage :	0.4VDC typical	
Audible Continuity Tester		
Open Circuit Voltage:	0.4VDC typical	
Range: 400.0 Ω ; Accuracy:	1.5% + 6d	
Audible threshold:	between 10 Ω and 120 Ω .	
Diode Tester		
Open Circuit Voltage	Test Current (Typical)	
< 1.6 VDC	0.4mA	
Capacitance		
	500.0nF, 5.000 μ F, 50.00 μ F, 500.0 μ F, 3000 μ F 1)	3.5% + 6d 2) 3)
1) Additional 50.00nF range accuracy is not specified		
2) Accuracies with film capacitor or better		
3) 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		
DC Current (Clamp-on)		
400.0A	0.0A ~ 400.0A	1.5% + 4d 1) 2)
1000A	400A ~ 800A	1.5% + 4d 1) 2)
	800A ~ 900A	2.0% + 4d 1) 2)
	900A ~ 1000A	5.0% + 30d 1) 2)
1) Induced error from adjacent current-carrying conductor: < 0.01A/A		
2) Δ Zero mode must be applied to zero the unit before measurement to ensure accuracy. This is particularly important below 20A.		



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Function	Range	Accuracy
AC Current (Clamp-on)		
400.0A	15Hz ~ 40Hz	2.0% + 5d ^{1) 2) 3)}
	40Hz ~ 200Hz	1.5% + 5d ^{1) 2)}
	200Hz ~ 400Hz @ <50A ⁴⁾	1.5% + 5d ^{1) 2)}
	400Hz ~ 1kHz @ <50A ⁴⁾	2.0% + 5d ^{1) 2)}
800A	15Hz ~ 40Hz @ 400A ~ 600A	2.0% + 5d ^{1) 2) 3)}
	40Hz ~ 100Hz @ 400A ~ 600A	1.5% + 4d ^{1) 2)}
	15Hz ~ 60Hz @ 600A ~ 800A	5.0% + 30d ^{1) 2)}

¹⁾ Induced error from adjacent current-carrying conductor: < 0.01A/A
²⁾ ACDC-100 TRMS crest Factor: < 1.6 : 1 at full scale & < 3.2 : 1 at half scale
³⁾ 4.0% + 5d for ACDC-100 TRMS
⁴⁾ Accuracy is specified at <50A in this frequency bandwidth due to limited calibrator output capability for testing

General Specifications

Display:	3-3/4 digits 4000 counts LCD display
Update Rate:	3 per second nominal
Polarity:	Automatic
Low Battery:	Below approx. 2.4V
Operating Temperature:	0°C to 40°C
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 to 60°C, < 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:	True RMS
Safety:	Meets EN61010-1:2001; IEC61010-2-032(2002), EN61010-2-032(2002), UL61010B-2-032(2003) Category III 600 Volts AC & DC.
Transient protection:	6.5kV (1.2/50µs surge) for all models
Pollution degree:	2
E.M.C.:	Meets EN61326-1

In an RF field of 3V/m:

Capacitance function is not specified Other function ranges: Total Accuracy = Specified Accuracy + 45 digits
Performance above 3V/m is not specified

Overload Protections:	
Clamp-on jaws: DC 1000A or AC 800A rms continuous + & COM terminals (all functions) : 600VDC/VAC rms	
Power Supply:	standard 1.5V AAA Size (NEDA 24G or IEC R03) battery X 2; or 1.5V AAA Size (NEDA 24A or IEC LR03) alkaline battery X 2
Power Consumption:	typical 11mA for ACA/DCA and 2.9mA for other functions
APO Timing:	Idle for 30 minutes
APO Consumption:	typical 190µA
Dimension:	L227mm X W78mm X H40mm
Weight:	290 gm approx
Jaw opening & Conductor diameter:	50mm max



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Included Accessories

Test leads; carrying case SV-U; users manual

Optional Accessories

ELS2A	Line splitter (Energizer)
ACF-3000 AK	3000A AC Flexible Clamp-on Attachment
TMA-K	Single Input Thermocouple Temperature Attachment
MTL-500	Test Lead Kit
	Test Lead Kit

Replacement Accessories

MTL-90B	Test Leads w/Alligator Clips
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Available with TRMS and Display Backlight

The ACDC-100 TRMS version addresses the needs of professionals who rely on performance and reliability. A large LCD for easy viewing.

Simplified Interface

These full function clamp-ons have simplified interfaces to help your customers get their work done quickly. Easy-to-read oversize display screens feature the large digits. Each meter offers auto and manual ranging along relative zero mode functions.

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