

AMPROBE®

Data Sheet

ACDC-100 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 ergonomic design.

- 1000 Amp AC and DC current
- 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
- 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.



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 ±(% reading digits + number of digits) or otherwise specified, at 23°C ± 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=1kΩ	
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	
1) Selection by RANGE button manuall	y, and is specified from AC 40mV and up	
Resistance	· ·	
	400.0Ω	0.8% + 6d
	4.000kΩ, 40.00kΩ, 400.0kΩ	0.6% + 4d
	4.000 Μ Ω	1.0% + 4d
	40.00MΩ	2.0% + 4d
Open Circuit Voltage :	0.4VDC typical	
Audible Continuity Tester		
Open Circuit Voltage:	0.4VDC typical	
Range: 400.0Ω; Accuracy:	1.5% + 6d	
Audible threshold:	between 10Ω and 120Ω .	
Diode Tester		
Open Circuit Voltage	Test Current (Typical)	
< 1.6 VDC	0.4mA	
Capacitance		
	500.0nF, 5.000μF, 50.00μF,	2.50/ . (-12/2)
1) A	500.0μF, 3000μF ¹⁾	3.5% + 6d ^{2) 3)}
1) Additional 50.00nF range accuracy is	•	
2) Accuracies with film capacitor or bet		
warning voltage of approximately 2.4		racy decreases gradually to 12% at low battery
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		
2) Δ Zero mode must be applied to zer	o the unit before measurement to ensure ac	curacy. 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⁾
	40Hz ~ 200Hz	1.5% + 5d ¹⁾
	200Hz ~ 400Hz @ <50A ²⁾	1.5% + 5d ¹⁾
	400Hz ~ 1kHz @ <50A ²⁾	2.0% + 5d ¹⁾
800A		
	15Hz ~ 40Hz @ 400A ~ 600A	2.0% + 5d ¹⁾
	40Hz ~ 100Hz @ 400A ~ 600A	1.5% + 4d ¹⁾
	15Hz ~ 60Hz @ 600A ~ 800A	5.0% + 30d ¹⁾
1) Induced error from adjacent of	current-carrying conductor: < 0.01A/A	
2) Accuracy is specified at <50A	in this frequency bandwidth due to limited o	calibrator output capability for testing

General Specifications

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:	Average sensing	
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 Performance above 3V/m is	specified Other function ranges: Total Accuracy = Specified Accuracy + 45 digits not specified	
Overload Protections:		
Clamp-on jaws: DC 1000A or A	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	

typical 11mA for ACA/DCA and 2.9mA for other functions

Idle for 30 minutes

L227mm X W78mm X H40mm

typical 10µA

50mm max

290 gm approx

3-3/4 digits 4000 counts LCD display

Jaw opening & Conductor diameter:

Power Consumption:

APO Consumption:

APO Timing:

Dimension: Weight:



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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

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.

Amprobe® Test Tools

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