

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 \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=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=1kΩ | |
| Input Impedance: | 10MΩ, 30pF nominal | |
| 1) Selection by RANGE button manually | ,, and is specified from AC 40mV and up | |
| Resistance | | |
| | 400.0Ω | 0.8% + 6d |
| | 4.000kΩ, 40.00kΩ, 400.0kΩ | 0.6% + 4d |
| | 4.000ΜΩ | 1.0% + 4d |
| | 40.00ΜΩ | 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: Diode Tester | between 10Ω and 120Ω . | |
| | Test Comment (Timisal) | |
| Open Circuit Voltage | Test Current (Typical) | |
| < 1.6 VDC | 0.4mA | |
| Capacitance | 5000 5 5 000 5 50 00 5 | |
| | 500.0nF, 5.000μF, 50.00μF, 500.0μF, 3000μF ¹⁾ | 3.5% + 6d ^{2) 3)} |
| 1) Additional 50.00nF range accuracy is | | 5.5 % T 00 ?-> |
| Additional 50.0011 range accuracy is Accuracies with film capacitor or bet | • | |
| · · · · · · · · · · · · · · · · · · · | | racy decreases gradually to 12% at low battery |
| warning voltage of approximately 2.4 | | racy decreases gradually to 1270 at low buttery |
| 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 | |



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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⁾ |
| Induced error from adjacent o | urrent-carrying conductor: < 0.01A/A | |
| Accuracy is specified at <50A | in this frequency bandwidth due to limited o | alibrator output capability for testing |

General Specifications

Display:

APO Timing:

Dimension: Weight:

APO Consumption:

Jaw opening & Conductor diameter:

| 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% relativ 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 speci Performance above 3V/m is not s | fied Other function ranges: Total Accuracy = Specified Accuracy + 45 digits pecified | |
| Overload Protections: | | |
| Clamp-on jaws: DC 1000A or AC 80 | 0A 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 | |
| | | |

3-3/4 digits 4000 counts LCD display

Idle for 30 minutes

L227mm X W78mm X H40mm

typical 10µA

50mm max

290 gm approx



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Included Accessories

Test leads; carrying case SV-U; users manual

Optional Accessories

Line splitter (Energizer)

ACF-3000 AK 3000A AC Flexible Clamp-on Attachment

ТМА-К Single Input Thermocouple Temperature Attachment

MTL-500 Test Lead Kit Test Lead Kit

Replacement Accessories

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.

