AMPROBE®

Data Sheet

ACD-16 TRMS-PRO

1000A Data-Logging Clamp-on Multimeter

Need the perfect tool to troubleshoot a system? The ACD-16 TRMS-PRO provides a full range of measurements, enhanced with data logging capabilities, to catch what the eye can't see. Double the efficiency, with an optional PC interface kit. True RMS for a more accurate signal in a noisy electrical environment.

- True RMS
- Backlight
- Measurements: AC/DC Voltage up to 600V, AC Current up to 1000A, Resistance, Frequency and Temperature
- Data-logging up to 5400 points
- Optional PC interface capability (RS-232 KIT2)
- Audible continuity
- Auto power off
- Data hold
- Large, easy to read digital display
- Accommodates conductors up to 45mm (1.77") in diameter
- Carrying case, Type k thermocouple, test leads, batteries (installed) and user manual included
- Voltage overload protection for all functions up to 600V AC/DC

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)

CAT III 600V

CE

N10140

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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. True RMS Models ACD-16 TRMS-PRO ACV & ACA clamp-on accuracies are specified from 5% to 100% of range or otherwise specified. Maximum Crest Factor are as specified below, & with frequency spectrums, besides fundamentals, fall within the meter specified AC bandwidth for non-sinusoidal waveforms. Fundamentals are specified at 50Hz and 60Hz.

Function	Range	Accuracy
AC Voltage		
50Hz / 60Hz	600.0 V	1.0% + 5d
45Hz ~ 500Hz	600.0 V	1.5% + 5d
500Hz ~ 3.1kHz 9	600.0 V	2.5% + 5d
CMRR:	>60dB @ DC to 60Hz, Rs=1kΩ	
Input Impedance:	2MΩ, 30pF nominal	
True RMS models Crest Factor:	< 2.3 : 1 at full scale & < 4.6 : 1 at half scale	
DC Voltage		
	600.0V	0.5% + 5d
NMRR:	>50dB @ 50/60Hz	
CMRR:	>120dB @ DC, 50/60Hz, Rs=1kΩ	
Input Impedance:	2MΩ, 30pF nominal	
Resistance		
	999.9Ω	1.0% + 6d
Open Circuit Voltage:	0.4VDC typical	
Audible Continuity Tester		
Audible threshold:	between 10Ω and 300Ω.	
Response time:	250µs	
Frequency		
	5.00Hz ~ 500.0Hz	0.5%+4d
Sensitivity (Sine RMS)		
40A range: > 4A		
400A range: > 40A		
1000A range: > 400A		
600V range: > 30V		
Temperature		
	-50°C ~ 300°C	2.0% + 3°C [1]
	-58°F ~ 572°F	2.0% + 6°F [1]
[1] Add 3°C (or 6°F) to specified accuracy @ -20°C ~ -50°C (or @ -4°F ~ -58°F) Type-K thermocouple range & accuracy not included		
AC Current (Clamp-on)		
50Hz / 60Hz	40.00A, 400.0A, 1000A	1.0% + 5d [1] [2] [3]
45Hz ~500Hz	40.00A, 400.0A	2.0% + 5d [1] [2] [3]
	1000A	2.5% + 5d [1] [2] [3]
500Hz ~ 3.1kHz		
	40.00A, 400.0A	2.0% + 5d [1] [2] [3]
	1000A	2.5% + 5d [1] [2] [3]

True RMS models Crest Factor:
< 2.5 : 1 at full scale & < 5.0 : 1 at half scale for 40.00A & 400.0A ranges < 1.4 : 1 at full scale & < 2.8 : 1 at half scale for 1000A range

1) Add 8d to specified accuracy while reading is below 10% of range
2) Induced error from adjacent current-carrying conductor: < 0.06A/A
3) Specified accuracy is for measurements made at the jaw center. When the conductor is not positioned at the jaw center, position errors introduced are:
   Add 1% to specified accuracy for measurements made WITHIN jaw marking lines (away from jaw opening)
   Add 4% to specified accuracy for measurements made BEYOND jaw marking lines (toward jaws opening)

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General Specifications

Display:	3-5/6 digits, 6000 counts LCD display
Update:	5 per second nominal
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)/ oC @ (0°C -18°C or 28°C -40°C), or otherwise specified
Sensing:	True RMS sensing
Safety:	Meets EN61010-1, 201; IEC61010-2-032(1994), EN61010-2 032(1995), UL3111-2-032(1999). Category III 600 Volts AC & DC
Transient protection:	6.5kV (1.2/50µs surge)
Pollution degree:	2
E.M.C.:	Meets EN61326-1
In an RF field of 3V/m:	Total Accuracy = Specified Accuracy + 45 digits Performance; above 3V/m is not specified
Overload Protections :	
AC Clamp-on jaws:	AC 1000A RMS continuous + & COM terminals (all functions): 600VDC/VAC RMS
Power Supply:	standard 1.5V AAA Size (NEDA 24A or IEC LR03) battery X 2
Power Consumption:	
Voltage & ACA functions:	3.5mA typical
Ohm & Temperature functions:	4mA typical
APO Timing:	Idle for 16 minutes
APO Consumption:	10µA typical
Dimension:	L224mm X W78mm X H40mm
Weight:	224 gm approx
Jaw opening & Conductor diameter:	45mm max
Special features:	Display Backlight; Auto-Hold; Display Hold; On screen stand alone Hi-Lo logging (5400 minutes) at sampling speed of faster than: 20 per second for Voltage & ACA functions 4 per second for Ohm & Temperature functions 2 per second for Hz function

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Included Accessories
MTL-90B Test leads, TPK-59 banana plug type-K thermocouple, batteries, carrying case and users manual

Optional Accessories

RS-232 KIT2	PC Interface kit (PC connection cable with software)
ELS2A	Line splitter (Energizer)
DKTA-620 and two of TPK-56	Dual input Thermocouple adapter with two thermocouples -50°F to 600°F
TL36A	Heavy duty test leads with threaded alligator clips

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