AMPROBE®

Data Sheet

ACD-15 TRMS-PRO
2000A Clamp-on Multimeter

Wide range of measuring features built into one, professional meter. The TRMS version with backlight display, improves performance and reliability.

- True RMS
- Backlight
- Measurements: AC/DC Voltage up to 600V, AC Current up to 2000A Resistance, Frequency and Capacitance
- Non-contact Voltage Level Detection
- Audible continuity
- Auto-check feature automatically selects DCV, ACV or Resistance (Ω)
- Auto power off
- Low battery indication
- Data hold
- Large, easy to read LCD display
- Accommodates conductors up to 45mm (1.77") in diameter
- Carrying case, test leads, batteries (installed) and 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 Model ACD-15 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, and with frequency spectrums, besides fundamentals, fall within the meter specified AC bandwidth for non-sinusoidal waveforms.

Function	Range	Accuracy
DC Voltage		
	6.000V	0.5% + 3d
	60.00V	1.0% + 5d
	600.0V	2.0% + 5d
NMRR :	>30dB @ 50/60Hz	
CMRR :	>100dB @ DC, 50/60Hz, Rs=1kΩ	
Hi-Z DCV Input Impedance:	5MΩ, 90pF nominal	
AutoCheck™ Lo-Z DCV input impedance:	Initially 1.6kΩ, 90pF nominal; Impedance increases significantly as display voltage increases from 50V (typical). Typical impedances vs display voltages for reference are: 15kΩ @ 100V; 100kΩ @ 300V; 210kΩ @ 600V	
AutoCheck™ DCV Threshold:	> +1.5VDC or < -1.0VDC nominal	
AC Voltage		
50Hz / 60Hz	6.000V, 60.00V	1.5% + 5d
	600.0V	2.0% + 5d
50Hz ~ 500Hz	6.000V, 60.00V	2.0% + 5d
	600.0V	2.5% + 5d
CMRR:	>60dB @ DC to 60Hz, Rs=1kΩ	
Hi-Z ACV Input Impedance:	5MΩ, 90pF nominal	
AutoCheck™ Lo-Z ACV input impedance:	Initially 1.6kΩ, 90pF nominal; Impedance increases significantly as display voltage increases from 50V (typical). Typical impedances vs display voltages for reference are: 5kΩ @ 100V; 100kΩ @ 300V; 210kΩ @ 600V	
AutoCheck™ ACV Threshold:	> 2VAC (50/60Hz) nominal. True RMS model ACD-15 TRMS-PRO Crest < 1.6 : 1 at full scale & < 3.3 : 1 at half scale	
Resistance		
	6.000kΩ [2]	1.2% + 6d [1] [3]
	60.00kΩ, 600.0kΩ	1.0% + 4d
	6.000MΩ	2.0% + 4d
Open Circuit Voltage: 0.4VDC typical	[1] Cool down interval 2 minutes after over 50V measurements in Auto-VΩ position [2] Beeper on while reading < 0.025kΩ [3] Add 40d to specified accuracy while reading is	
600Ω with Continuity Beeper	600.0Ω	2.0%+8d [1]
Continuity Beeper Response:	< 100µs	
Open Circuit Voltage:	0.4VDC typical	
Audible Threshold:	between 10Ω and 300Ω 1) Add 40d to specified accuracy while reading is below 20% of range	
Frequency		
Range	Sensitivity (Sine RMS)	**Voltage Range**
10Hz ~ 30kHz	4V	6.000V
0Hz ~ 1kHz	30V 1	60.00V
10Hz ~ 1kHz	60V	600.0V
Accuracy:	0.5%+4d	
Max display:	9999 counts	

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Function	Range	Accuracy
Diode Tester		
Open Circuit Voltage	Test Current	
< 1.6 VDC	0.4mA (typical)	
Audible Threshold:	between 0.015V & 0.080V	
Capacitance		
	100.0nF [2], 1000nF,	3.5%+5d [1] [3]
	10.00µF, 100.0µF, 2000µF	
1) Accuracies with film capacitor or better 2) Accuracy below 50nF is not specified 3) Specified with battery voltage above 2.8V (approxmately half full battery). Accuracy decreases gradually to 12% at low battery warning voltage of approximately 2.4V		
Non-Contact EF-Detection		
Typical Voltage	Bar Graph Indication	
15V TO 85V	-	
40V TO 130V	- -	
60V TO 210V	- - -	
90V TO 300V	- - - -	
ABOVE 120V	- - - - -	
Indication:	Bar graph segments & audible beep tones proportional to the field strength	
Detection Frequency:	50/60Hz	
Detection Antenna:	Top side of the stationary jaw	
Probe-Contact EF-Detection:	For more precise indication of live wires, use the Red (+) probe for direct contact measurements	
AC Current (Clamp-on)		
50Hz / 60Hz	400.0A, 2000A	1.5% + 5d [1] [2] [3]
True RMS model ACD-15 TRMS PRO Crest Factor: < 2.0 : 1 at full scale & < 4.0 : 1 at half scale		

[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 Rate:	5 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(1994), EN61010-2-032(1995), UL3111-2-032(1999). 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. Total Accuracy = Specified Accuracy + 45 digits Performance above 3V/m is not specified
Overload Protections:	ACA Clamp-on jaws: AC 2000A 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:	2.8mA typical
APO Timing:	Idle for 3 minutes
APO Consumption:	40µA typical on all model functions voltage & current functions
Dimension:	L224mm X W78mm X H40mm
Weight:	220 gm approx
Jaw opening & Conductor Diameter:	45mm max

Included Accessories
Test leads, carrying case and users manual

Optional Accessories

ELS2A	Line splitter (Energizer)
ACF-3000AK	3000A AC Flexible Clamp-On Attachment
TMA-K	Temperature Adapter
TL36A	Industry Test Leads with Threaded Alligator Clips

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