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.



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. 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:	5M Ω , 90pF nominal		
AutoCheck™ Lo-Z DCV input impedance:	Initially 1.6k Ω , 90pF nominal; Impedance increa		
	increases from 50V (typical). Typical impedances	s vs display voltages for reference are:	
	15kΩ @ 100V; 100kΩ @ 300V; 210kΩ @ 600V		
AutoCheck™ DCV Threshold:	> +1.5VDC or < -1.0VDC nominal		
AC Voltage	5 0001/ 50 001/	4.50/	
50Hz / 60Hz	6.000V, 60.00V	1.5% + 5d	
5011 50011	600.0V	2.0% + 5d	
50Hz ~ 500Hz	6.000V, 60.00V 600.0V	2.0% + 5d 2.5% + 5d	
CMRR:	>60dB @ DC to 60Hz, Rs=1kΩ	2.5% + 30	
Hi-Z ACV Input Impedance:	5MΩ, 90pF nominal		
AutoCheck™ Lo-Z ACV input impedance:	• •	ses significantly as display voltage	
Autocheck ···· Lo-2 ACV input impedance.	Initially $1.6k\Omega$, 90pF nominal; Impedance increases significantly as display voltage increases from 50V (typical). Typical impedances vs display voltages for reference are:		
	$5k\Omega$ @ 100V; 100kΩ @ 300V; 210kΩ @ 600V	s vs display voltages for reference are.	
AutoCheck™ ACV Threshold:	·		
	& < 3.3 : 1 at half scale		
Resistance			
	6.000kΩ ²⁾	1.2% + 6d ^{1) 3)}	
	60.00 k Ω , 600.0 k Ω	1.0% + 4d	
	$6.000 M\Omega$	2.0% + 4d	
Open Circuit Voltage: 0.4VDC typical	1) Cool down interval 2 minutes after over 50V n	neasurements in Auto-V Ω position	
	²⁾ Beeper on while reading $< 0.025 k\Omega$		
	3) Add 40d to specified accuracy while reading is		
600 Ω with Continuity Beeper	600.0Ω	2.0%+8d ¹⁾	
Continuity Beeper Response:	< 100µs		
Open Circuit Voltage:	0.4VDC typical		
Audible Threshold:	between 10 $\!\Omega$ and 300 $\!\Omega$ 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		



Accuracy

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Range

Function

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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)}	
	10.00μϜ, 100.0μϜ, 2000μϜ		
 Accuracies with film capa Accuracy below 50nF is r Specified with battery vo battery warning voltage 	oot specified oltage above 2.8V (approxmately	half full battery). Accuracy decreases gradually to 12% at low	
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)}	

¹⁾ Add 8d to specified accuracy while reading is below 10% of range

True RMS model ACD-15 TRMS PRO Crest Factor: < 2.0 : 1 at full scale & < 4.0 : 1 at half scale

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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