



Data Sheet

ACD-10 PLUS 600A Clamp-On Multimeter

Amprobe's ACD-10 PLUS meter offers thinner jaws over standard clamp meters. Allowing access to tight measurement areas and still accommodating conductors up to 25 mm. It also measures Capacitance and Frequency. Frequency is measured by either jaws or test leads. Very versatile clamp multimeter.

- AC & DC Voltage to 600V
- AC Current to 600A
- Thin Jaws, only 10mm (0.4") thick
- Resistance to 40MΩ
- Continuity Buzzer
- Capacitance to 3000 uF
- Frequency measurement
- In rush current
- Hold & Maximum reading functions
- Accommodates conductors up to 26mm (1.02") in diameter
- Auto ranging
- Auto power off
- Rubber over-molded case
- Overload protected

No hassle warranty

No waiting.





(note: \$500 MSLP limit)













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General Specifications

Display:	3-3/4 digits 4000 counts LCD display		
Update Rate:	3 per second nominal		
Polarity:	Automatic		
Operating Temperature:	0 °C to 40 °C; < 80% RH for temperature up to 31 °C decreasing linearly to 50% RH at 40 °C		
Altitude:	Operating below 2000m; Indoor use		
Storage Temperature:	-20 °C to 60 °C, < 80% RH (with battery removed)		
Temperature Coefficient:	nominal 0.15 x (specified accuracy)/°C @(0 °C \sim 18 °C or 28 °C \sim 40 °C)		
Low Battery:	Below approx. 2.4V		
Power Supply:	3V coin battery IEC-CR2032		
Power Consumption:	2.8 mA typical except that 3.3 mA typical for ACA function		
APO Timing:	Idle for 30 minutes		
APO Consumption:	5 μA typical		
Dimension:	190 x 63 x 32 mm (7.4 x 2.5 x 1.3 in)		
Weight:	139 gm approx		
Jaw opening & Conductor diameter:	max 26 mm		
Special Features:	30ms Max Hold; Data Hold; Relative Zero mode		
Safety:	Meets EN61010-2-032, UL61010B-2-032, IEC61010-1 2nd Ed., EN61010-1		
	2nd Ed., UL61010-1 2nd Ed. CAT III-600 Volts ac & dc; Pollution degree : 2		
EMC:	Conforms to EN61326-1.		

This product complies with requirements of the following European Community Directives: 89/ 336/ EEC (Electromagnetic Compatibility) and 73/ 23/ EEC (Low Voltage) as amended by 93/ 68/ EEC (CE Marking). However, electrical noise or intense electromagnetic fields in the vicinity of the equipment may disturb the measurement circuit. Measuring instruments will also respond to unwanted signals that may be present within the measurement circuit. Users should exercise care and take appropriate precautions to avoid misleading results when making measurements in the presence of electronic interference.

Electrical Specification Accuracy (23 °C ± 5 °C & < 75% R.H.)

Function	Range	Accuracy	
DC Voltage			
	400.0 mV	±(0.3% + 4 digits)	
	4.000, 40.00, 400.0 V	±(0.5% + 3 digits)	
	600 V	±(1.0% + 4 digits)	
	NMRR:	>50 dB @ 50/60Hz	
	CMRR:	>120 dB @ DC, 50/60 Hz, Rs=1 $k\Omega$	
	Input Impedance:	10 M Ω , 30 pF nominal (1000 M Ω for 400.0 mV range)	
	Transient protection:	6.5 kV (1.2/50 µs surge)	
AC Voltage (50Hz ~ 500Hz)			
	4.000, 40.00, 400.0 V	±(1.5% + 5 digits)	
	600 V	±(2.0% + 5 digits)	
	CMRR:	>60dB @ DC to 60 Hz, Rs=1 $k\Omega$	
	Maximum Crest Factor:	< 1.75 : 1 at full scale & < 3.5 : 1 at half scale limited to fundamental and harmonics, that fall within the meter specified AC bandwidth for non-sinusoidal waveforms	
	Input Impedance:	10 M Ω , 30 pF nominal	
	Transient protection:	6.5 kV (1.2/50µs surge)	
	ACD-10 Plus:	Average Sensing	





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Function	Range	Accuracy
AC Current (Clamp-c	on 50Hz / 60Hz)	
	Range	Accuracy 1) 2) 3)
	40.00, 400.0, 600 A	±(1.5% + 8 digits)
	Overload Protections:	ACA Clamp-on jaws : 600 A rms continuous
	ACD-10 Plus:	Average Sensing
2) Specified accuracy is		ents made at the jaw center. When the conductor is not position
 Specified accuracy is at the jaw center, posi- (toward jaw opening) Add 8 digits to speci- 	from 1% to 100% of range and for measurem	
²⁾ Specified accuracy is at the jaw center, posi (toward jaw opening)	from 1% to 100% of range and for measuren tion errors introduced are: Add 2% to specifie fied accuracy @ reading < 10% of range	nents made at the jaw center. When the conductor is not position Id accuracy for measurements made BEYOND jaw marking lines
 Specified accuracy is at the jaw center, posi- (toward jaw opening) Add 8 digits to speci- 	from 1% to 100% of range and for measuren tion errors introduced are: Add 2% to specifie	ents made at the jaw center. When the conductor is not position
 Specified accuracy is at the jaw center, posi- (toward jaw opening) Add 8 digits to speci- 	from 1% to 100% of range and for measuren tion errors introduced are: Add 2% to specific fied accuracy @ reading < 10% of range 400.0 Ω	nents made at the jaw center. When the conductor is not position and accuracy for measurements made BEYOND jaw marking lines to the second sec
 Specified accuracy is at the jaw center, posi- (toward jaw opening) Add 8 digits to speci- 	from 1% to 100% of range and for measurention errors introduced are: Add 2% to specification errors introduced are: Add 2% to specification errors introduced are: Add 2% to specification errors in $0.00000000000000000000000000000000000$	tents made at the jaw center. When the conductor is not position and accuracy for measurements made BEYOND jaw marking lines $\pm (\ 0.8\% + 8\ \text{digits})$ $\pm (\ 0.6\% + 4\ \text{digits})$
 Specified accuracy is at the jaw center, posi- (toward jaw opening) Add 8 digits to speci- 	from 1% to 100% of range and for measurention errors introduced are: Add 2% to specific field accuracy @ reading < 10% of range $\frac{400.0\ \Omega}{4.000,40.00,400.0\ k\Omega}$ $4.000\ M\Omega$	tents made at the jaw center. When the conductor is not position d accuracy for measurements made BEYOND jaw marking lines $ \pm (0.8\% + 8 \text{ digits}) $ $ \pm (0.6\% + 4 \text{ digits}) $ $ \pm (1.0\% + 4 \text{ digits}) $

	Open Circuit Voltage :	0.4 VDC typical 6.5 kV (1.2/50μs surge)	
	Transient protection :		
Frequency			
Function	Sensitivity (Sine RMS)	Range	Accuracy
400.0 mVac	350mV 1	0 Hz ~ 2 kHz	±(0.5%+4 digits)
4.000 Vac	1V	5 Hz ~ 5 kHz	±(0.5%+4 digits)
4.000, 40.00 Vac	32V	5 Hz ~ 100 kHz	±(0.5%+4 digits)
400.0 Vac	90V	5 Hz ~ 10 kHz	±(0.5%+4 digits)
600 Vac	500V	5 Hz ~ 5 kHz	±(0.5%+4 digits)
400.0 Aac	60A	40 Hz ~ 400 Hz	±(0.5%+4 digits)
Display counts:		5000	
Resolution:		0.001Hz	
Overload Protection :		ACA Clamp-on jaws : AC 600A rms continuous	
Transient protection :		VAC input jacks : 6.5kV (1.2/50µs surge)	
Capacitance			
	Range ¹⁾	Accuracy ^{2) 3)}	
	500.0nF, 5.000μF,	±(3.5% + 6 digits)	

 $50.00\mu\text{F, }500.0\mu\text{F, }3000\mu\text{F}$ 1) Additional 50.00nF range accuracy is not specified

2) Accuracies with film capacitor or better

3) Specified with battery voltage above 2.8V (approximately half full battery).

Accuracy decreases gradually to 12% at low battery warning voltage of approximately 2.4V

Transient protection:	6.5 kV (1.2/50 µs surge)
Audible Continuity Tester	
Audible indication:	between 10 Ω and 120 Ω .
Transient protection:	6.5 kV (1.2/50 µs surge)
Diode Tester / Open Circuit Voltage Test Current	
(Typical)	< 1.6 VDC @ 0.25 mA
Transient protection:	6.5 kV (1.2/50 µs surge)
Max Hold* (where applicable)	

Specified accuracy ± 50 digits for changes > 25 ms in duration





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Included Accessories

Test leads, battery installed, soft carrying pouch, and users manual





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