AMPROBE®

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.

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 c UL us CE N10140

ACD-10 PLUS 600A Clamp-On Multimeter

Data Sheet

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 ~ 18 °C or 28 °C ~ 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 kΩ
	Input Impedance:	10 MΩ, 30 pF nominal (1000 MΩ 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 kΩ
	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 MΩ, 30 pF nominal
	Transient protection:	6.5 kV (1.2/50µs surge)
	ACD-10 Plus:	Average Sensing

ACD-10 PLUS 600A Clamp-On Multimeter

Data Sheet

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

Function	Range	Accuracy
AC Current (Clamp-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

[1)] Max Induced error from adjacent current carrying conductor: 0.05 A
[2)] Specified accuracy is from 1% to 100% of range and for measurements made at the jaw center. When the conductor is not positioned at the jaw center, position errors introduced are: Add 2% to specified accuracy for measurements made BEYOND jaw marking lines (toward jaw opening)
[3)] Add 8 digits to specified accuracy @ reading < 10% of range

Resistance			
	400.0 Ω	±(0.8% + 8 digits)	
	4.000, 40.00, 400.0 kΩ	±(0.6% + 4 digits)	
	4.000 MΩ	±(1.0% + 4 digits)	
	40.00 MΩ	±(2.0% + 4 digits)	
	Open Circuit Voltage :	0.4 VDC typical	
	Transient protection :	6.5 kV (1.2/50µs surge)	
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, 50.00µF, 500.0µF, 3000µF	±(3.5% + 6 digits)	

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

ACD-10 PLUS 600A Clamp-On Multimeter

Data Sheet

Included Accessories

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

Amprobe® Test Tools
website: www.Amprobe.com
email: info@amprobe.com
Everett, WA 98203
Tel: 877-AMPROBE

Beha-Amprobe GmbH
In den Engematten 14
79286 Glottertal, Germany
Tel.: +49 (0) 7684 8009 - 0
www.amprobe.eu
info@amprobe.eu

©2007 Amprobe Test Tools. All rights reserved.
9/2007 Pub_ID: 11316-eng