



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  $40M\Omega$
- 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)











## **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 $\sim$ 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 $\pm$ 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 M $\Omega$ , 30 pF nominal (1000 M $\Omega$ 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 M $\Omega$ , 30 pF nominal
	Transient protection:	6.5 kV (1.2/50µs surge)
	ACD-10 Plus:	Average Sensing



## **ACD-10 PLUS 600A Clamp-On Multimeter**

(Typical)

Transient protection:

Max Hold\* (where applicable)

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

**Data Sheet** 

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

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		
to 100% of range and for measurement introduced are: Add 2% to specified	ents made at the jaw cent		
400.0 Ω	±( 0.8% + 8 digits)	±( 0.8% + 8 digits)	
4.000, 40.00, 400.0 kΩ	±( 0.6% + 4 digits)	±(0.6% + 4 digits)	
$4.000~\text{M}\Omega$	±( 1.0% + 4 digits)	±( 1.0% + 4 digits)	
40.00 M $\Omega$	±( 2.0% + 4 digits)		
Open Circuit Voltage :	0.4 VDC typical		
Transient protection :	6.5 kV (1.2/50µs sur	ge)	
Sensitivity (Sine RMS)	Range	Accuracy	
350mV 1	0 Hz ~ 2 kHz	±( 0.5%+4 digits)	
1V	5 Hz ~ 5 kHz	±( 0.5%+4 digits)	
32V	5 Hz ~ 100 kHz	±( 0.5%+4 digits)	
90V	5 Hz ~ 10 kHz	±( 0.5%+4 digits)	
500V	5 Hz ~ 5 kHz	±( 0.5%+4 digits)	
60A	40 Hz ~ 400 Hz	±( 0.5%+4 digits)	
	5000		
	0.001Hz		
	ACA Clamp-on jaws : AC 600A rms continuous		
	VAC input jacks : 6.5kV (1.2/50µs surge)		
500.0nF, 5.000μF, 50.00μF, 500.0μF, 3000μF	±(3.5% + 6 digits)		
or better above 2.8V (approximately half full			
6.5 kV (1.2/50 µs surge)			
between 10 $\Omega$ and 120 $\Omega$ .			
6.5 kV (1.2/50 µs surge)	·		
	40.00, 400.0, 600 A Overload Protections: ACD-10 Plus: ent current carrying conductor: 0.05 / 60 100% of range and for measurement introduced are: Add 2% to specified acy @ reading < 10% of range  400.0 Ω 4.000, 40.00, 400.0 kΩ 4.000 MΩ Open Circuit Voltage: Transient protection:  Sensitivity (Sine RMS) 350mV 1 1V 32V 90V 500V 60A  Range 1) 500.0nF, 5.000μF, 50.00μF, 50.00μF, 50.00μF, 500.0μF, 3000μF aracy is not specified or better above 2.8V (approximately half full 12% at low battery warning voltage 6.5 kV (1.2/50 μs surge)	40.00, 400.0, 600 A $\pm (1.5\% + 8 \text{ digits})$ Overload Protections: ACA Clamp-on jaws ACD-10 Plus: Average Sensing and current carrying conductor: 0.05 A to 100% of range and for measurements made at the jaw cent introduced are: Add 2% to specified accuracy for measurements are given accuracy for measurements accur	

< 1.6 VDC @ 0.25 mA

6.5 kV (1.2/50 µs surge)

www.Amprobe.com



## **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

#### **Amprobe® Test Tools Europe**

In den Engematten 14 79286 Glottertal, Germany Tel.: +49 (0) 7684 8009 - 0

©2007 Amprobe Test Tools. All rights reserved. 9/2007 3128771 Rev A