AMPROBE®





Data Sheet



ACD-14 PLUS 600A Clamp-On Multimeter with Dual Display

The ACD-14 PLUS is the professionals' choice for both **HVAC** and **Electrical** applications due to its complete set of measuring features. Its dual displays allows viewing amperage and voltage simultaneously. The ACD-14 PLUS meter offers thinner jaws over standard clamp meters. Allowing access to tight measurement areas and still accommodating conductors up to 28 mm. Both meters also measure Capacitance and Frequency. Very versatile clamp multimeters to support all your daily measurement needs.

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)

- Dual Displays Permits simultaneous reading of Amperage & Voltage
- AC Current to 600A
- New thin jaws, 5mm thinner than others to access tight measurement spaces
- Micro Amps measurement for testing Flame Sensors
- Capacitance to 3000 µF
- Temperature with Type-K Thermocouple probe
- AC and DC Voltage to 600V
- Resistance to $40M\Omega$
- Continuity Buzzer
- Frequency measurement
- Diode test
- Hold and Maximum reading functions
- In rush current
- Accommodates conductors up to 28 mm (1.1") in diameter
- Auto ranging
- Auto power off and low battery indication
- Rubber over-molded case











ACD-14 PLUS 600A Clamp-On Multimeter with Dual Display

Data Sheet

General Specifications

Display:	3-3/4 digits 4000 counts, dual LCD displays
Update Rate:	3 per second nominal
Polarity:	Automatic
Low Battery Indication:	Below approx. 2.4V
Operating Temperature:	0°C to 40°C (32°F to 104°F)
Relative Humidity:	Maximum relative humidity 80% for temperatures up to 31°C (88°F) decreasing linearly to 50% relative humidity at 40°C (104°F)
Altitude:	Indoor operation below 2000m (6,562 ft)
Storage Temperature:	-20°C to 60°C (-4°F to 140°F), < 80% R.H. (with battery removed)
Temperature Coefficient:	Nominal 0.15 x (specified accuracy)/°F @ 0°C - 18°C or 28°C - 40°C
	(32°F -64°F or 82°F - 104°F), or otherwise specified
Sensing:	Average sensing for ACD-14 PLUS
Power Supply:	Two 3V alkaline button batteries (ANSI/NEDA-5004LC, IEC-CR2032).
Battery Life:	95 hours approx. (in DCV mode)
Power Consumption:	2.5 mA typical for ACD-14 PLUS
Low Battery Indication:	Below approx. 2.4V (battery symbol appears in upper right)
Auto Power Off:	After being idle for 30 minutes
APO Consumption:	ACD-14 PLUS: 0.8μA typical except 25μA typical for temperature function
Safety:	CE EN61010-1, EN61010-2-032 - Pollution Degree 2
Transient Protection:	6.5kV (1.2/50μs surge) for all models
E.M.C.:	Meets EN61326
Overload Protections: RMS	ACA Clamp-on jaws: AC 600A RMS continuous "+" & "COM" terminals (all functions): 600VDC/VAC
Dimension:	L190mm X W 63mm X H 32mm (L 7.48" X W 2.48" X H 1.25")
Weight:	204 g (0.450 lb approx.)
Jaw opening & Conductor diameter:	28 (1.1") max

Electrical Specifications 23°C ± 5°C (73°F ± 9°F) & < 75% R.H.

Function	Range	Accuracy
DC Voltage		
	400.0 mV	± (0.3% rdg + 4 digits)
	4.000V, 40.00V, 400.0V	± (0.5% rdg + 3 digits)
	600V	± (1.0% rdg + 4 digits)
	NMRR:	>50dB @ 50/60Hz
	CMRR:	>120dB @ DC, 50/60Hz, Rs=1kΩ
	Input Impedance:	10M Ω , 30pF nominal (1000M Ω for 400.0mV range)
AC Voltage [50Hz 50	00Hz] Average sensing	
	4.000V, 40.00V, 400.0V	± (1.5% rdg + 5 digits)
	600V	± (2.0% rdg + 5 digits)
	CMRR:	>60dB @ DC to 60Hz, Rs=1k Ω
	Input Impedance:	10MΩ, 30pF nominal
AC Current (Clamp-on	n) [50Hz / 60Hz]	
	40.00A	± (1.5% rdg + 8 digits)
	400.0A	± (1.5% rdg + 8 digits)
	600A	± (1.5% rdg + 8 digits)*
*Accuracy specified to 6	00A continuous.	



ACD-14 PLUS 600A Clamp-On Multimeter with Dual Display

Data Sheet

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

Function	Range		Accuracy
Max/Hold (AC Current only)	Specified accuracy ± 50 digits for changes > 25ms in duration		
Ohms			
	400.0Ω	±	± (0.8% rdg + 8 digits)
	4.000kΩ, 40.00kΩ, 400.0kΩ	±	(0.6% rdg + 4 digits)
	4.000 Μ Ω	±	± (1.0% rdg + 4 digits)
	40.00ΜΩ	±	£ (2.0% rdg + 4 digits)
Open Circuit Voltage:	0.4VDC typical		
Audible Continuity Tester	Audible threshold: between 10	Ω and 120 Ω .	
Capacitance			
	500.0nF, 5.000μF, 50.00μF,		
	500.0μF, 3000μF*	±	± (3.5% rdg + 6 digits)***
Additional 50.00nF range accur	racy is not specified		
**Accuracies with film capacitor	or better		
***Specified with battery voltage warning voltage of approximate		ull battery). Accura	acy decreases gradually to 12% at low battery
ΟC μΑ			
Range	Accuracy	В	Burden Voltage
400.0µA	± (2.0% rdg + 4 digits)	2	2.8mV/μA
2000μΑ	± (1.2% rdg + 3 digits)	2	2.8mV/μA
/			
AC µA (50Hz - 500Hz)			
AC μA (50Hz - 500Hz) Range	Accuracy	В	Burden Voltage
<u> </u>	Accuracy ± (2.0% rdg + 5 digits)		Burden Voltage 2.8mV/µA
Range	<u> </u>	2	<u>_</u>
Range 400.0μΑ 2000μΑ	± (2.0% rdg + 5 digits) ± (1.5% rdg + 5 digits)	2	2.8mV/µA
Range 400.0μA 2000μA	± (2.0% rdg + 5 digits) ± (1.5% rdg + 5 digits)	2	2.8mV/µA
Range 400.0μΑ 2000μΑ Frequency (Voltage input or	± (2.0% rdg + 5 digits) ± (1.5% rdg + 5 digits)	2	2.8mV/μA 2.8mV/μA
Range 400.0μΑ 2000μΑ Frequency (Voltage input or Volts	± (2.0% rdg + 5 digits) ± (1.5% rdg + 5 digits) aly) Range	2 2 Sensitivity	2.8mV/μA 2.8mV/μA Accuracy
Range 400.0µA 2000µA Fr equency (Voltage input or Volts 400.0mV	± (2.0% rdg + 5 digits) ± (1.5% rdg + 5 digits) hly) Range 10Hz to 2kHz	2 2 Sensitivity 300mV	2.8mV/μA 2.8mV/μA Accuracy ± (0.5% rdg + 4 digits
Range 400.0µA 2000µA Frequency (Voltage input or Volts 400.0mV 4.000V	± (2.0% rdg + 5 digits) ± (1.5% rdg + 5 digits) aly) Range 10Hz to 2kHz 5Hz to 40kHz	Sensitivity 300mV 4V	2.8mV/µA 2.8mV/µA Accuracy ± (0.5% rdg + 4 digits ± (0.5% rdg + 4 digits)
Range 400.0µA 2000µA Frequency (Voltage input or Volts 400.0mV 4.000V 40.00V	± (2.0% rdg + 5 digits) ± (1.5% rdg + 5 digits) **Poly to 2kHz 5Hz to 40kHz 5Hz to 100kHz	Sensitivity 300mV 4V 28V	2.8mV/µA 2.8mV/µA Accuracy ± (0.5% rdg + 4 digits ± (0.5% rdg + 4 digits) ± (0.5% rdg + 4 digits)
Range 400.0µA 2000µA Frequency (Voltage input or Volts 400.0mV 4.000V 40.00V 400.0V	± (2.0% rdg + 5 digits) ± (1.5% rdg + 5 digits) **Table 1.5% rdg + 5 digits **Table 1.5% rdg + 5 digits **Range 1.5%	Sensitivity 300mV 4V 28V 100V	2.8mV/µA 2.8mV/µA Accuracy ± (0.5% rdg + 4 digits ± (0.5% rdg + 4 digits) ± (0.5% rdg + 4 digits) ± (0.5% rdg + 4 digits)
Range 400.0µA 2000µA Frequency (Voltage input or Volts 400.0mV 4.000V 40.00V 400.0V	± (2.0% rdg + 5 digits) ± (1.5% rdg + 5 digits) **Table 1.5% rdg + 5 digits **Table 1.5% rdg + 5 digits **Range 1.5%	Sensitivity 300mV 4V 28V 100V	2.8mV/µA 2.8mV/µA Accuracy ± (0.5% rdg + 4 digits ± (0.5% rdg + 4 digits) ± (0.5% rdg + 4 digits) ± (0.5% rdg + 4 digits)
400.0μA 2000μA Frequency (Voltage input or Volts 400.0mV 4.000V 40.00V 400.0V 600V Diode Tester	± (2.0% rdg + 5 digits) ± (1.5% rdg + 5 digits) **Table 1.5% rdg + 5 digits) **Range 10Hz to 2kHz 5Hz to 40kHz 5Hz to 100kHz 5Hz to 5kHz	Sensitivity 300mV 4V 28V 100V	2.8mV/µA 2.8mV/µA Accuracy ± (0.5% rdg + 4 digits ± (0.5% rdg + 4 digits) ± (0.5% rdg + 4 digits) ± (0.5% rdg + 4 digits)
Range 400.0µA 2000µA Frequency (Voltage input or Volts 400.0mV 4.000V 40.00V 400.0V 600V Diode Tester Open Circuit Voltage	± (2.0% rdg + 5 digits) ± (1.5% rdg + 5 digits) **Property of the state of the st	Sensitivity 300mV 4V 28V 100V	2.8mV/µA 2.8mV/µA Accuracy ± (0.5% rdg + 4 digits ± (0.5% rdg + 4 digits) ± (0.5% rdg + 4 digits) ± (0.5% rdg + 4 digits)
Range 400.0µA 2000µA Frequency (Voltage input or Volts 400.0mV 4.000V 40.00V 400.0V 600V Diode Tester Open Circuit Voltage < 1.6 VDC	± (2.0% rdg + 5 digits) ± (1.5% rdg + 5 digits) **Property of the state of the st	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	2.8mV/µA 2.8mV/µA Accuracy ± (0.5% rdg + 4 digits ± (0.5% rdg + 4 digits) ± (0.5% rdg + 4 digits) ± (0.5% rdg + 4 digits)
Range 400.0µA 2000µA Frequency (Voltage input or Volts 400.0mV 4.000V 40.00V 400.0V 600V Diode Tester Open Circuit Voltage < 1.6 VDC	± (2.0% rdg + 5 digits) ± (1.5% rdg + 5 digits) **Plantage** 10Hz to 2kHz 5Hz to 40kHz 5Hz to 100kHz 5Hz to 5kHz Test Current (Typical) 0.25mA **Procouple 1.5% rdg + 5 digits 10Hz to 2kHz 10Hz to 2kHz 10Hz to 2kHz 10Hz to 5kHz	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	2.8mV/µA Accuracy ± (0.5% rdg + 4 digits ± (0.5% rdg + 4 digits)
Range 400.0µA 2000µA Frequency (Voltage input or Volts 400.0mV 4.000V 40.00V 400.0V 600V Diode Tester Open Circuit Voltage < 1.6 VDC	± (2.0% rdg + 5 digits) ± (1.5% rdg + 5 digits) **Range** 10Hz to 2kHz 5Hz to 40kHz 5Hz to 100kHz 5Hz to 100kHz 5Hz to 5kHz Test Current (Typical) 0.25mA **Procouple** **Range** **Range** **Test Current** **Range** **Procouple** **Procouple** **Procouple** **Range** **Procouple** **Procouple	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	2.8mV/µA Accuracy ± (0.5% rdg + 4 digits)
Range 400.0µA 2000µA Frequency (Voltage input or Volts 400.0mV 4.000V 40.00V 400.0V 600V Diode Tester Open Circuit Voltage < 1.6 VDC	± (2.0% rdg + 5 digits) ± (1.5% rdg + 5 digits) **Range** 10Hz to 2kHz 5Hz to 40kHz 5Hz to 100kHz 5Hz to 100kHz 5Hz to 5kHz **Test Current (Typical) 0.25mA **Decouple) Range -20°C to 300°C	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	Accuracy ± (0.5% rdg + 4 digits ± (0.5% rdg + 4 digits) Accuracy* E (2% rdg + 3 °C)



ACD-14 PLUS 600A Clamp-On Multimeter with Dual Display

Data Sheet

Included Accessories

Test Leads, Carrying Case, Bead Type, Thermocouple with banana plug, Users Manual

Optional Accessories

ELS2A Line splitter

ACF-3000AK 3000A AC Flexible Clamp-On Attachment

TA-1A Temperature Adapter

TL36A Heavy Duty Test Leads with Threaded Alligator Clips





©2008 Amprobe Test Tools. All rights reserved. 1/2008 3128489 Rev A

