

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

Easy-To-Use

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 25 mm. Both meters also measure Capacitance and Frequency. Very versatile clamp multimeters to support all your daily measurement needs.

- 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 25 mm (1.0") in diameter
- Auto ranging
- Auto power off and low battery indication
- Rubber over-molded case

Specifications	Range		
Display	3-3/4 digits 4000 counts, dual LCD displays		
Update Rate	3 per second nominal		
Polarity	Automatic		
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)		
Power Supply	Two 3V alkaline button batteries (ANSI/NEDA-5004LC, IEC-CR2032).		
Battery Life	95 hours approx. (in DCV mode)		
Safety	CE EN61010-1, EN61010-2-032 - Pollution Degree 2		
E.M.C.	Meets EN61326		
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.)		
Included Accessories	Test Leads, Carrying Case, Bead Type, Thermocouple with banana plug, Users Manual		

For more detailed specifications see users manual.





## **ACD-14 PLUS DETAILED SPECIFICATIONS**

Specifications	Range		
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	25 (1.0") max		
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		

## **ELECTRICAL SPECIFICATIONS** 23°C ± 5°C (73°F ± 9°F) & < 75% R.H.

Specifications	Range	
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: 10MΩ, 30pF nominal (1000MΩ for 400.0mV range)	
AC Voltage [50Hz 500Hz] 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=1kΩ Input Impedance: 10MΩ, 30pF nominal	
AC Current (Clamp-on) [50Hz / 60Hz]		



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## ELECTRICAL SPECIFICATIONS (23 °C ± 5 °C & < 75% R.H.), cont.

Specifications	Range		
Max/Hold (AC Current only)	Specified accuracy ± 50 digits for changes > 25ms in duration		
Ohms	$400.0\Omega \pm (0.8\% \text{ rdg} + 8 \text{ digits})$ $4.000 \text{k}\Omega, 40.00 \text{k}\Omega, 400.0 \text{k}\Omega \pm (0.6\% \text{ rdg} + 4 \text{ digits})$ $4.000 \text{M}\Omega \pm (1.0\% \text{ rdg} + 4 \text{ digits})$ $40.00 \text{M}\Omega \pm (2.0\% \text{ rdg} + 4 \text{ digits})$ Open Circuit Voltage: 0.4VDC typical		
	Audible Continuity Tester: Audible threshold: between $10\Omega$ and $120\Omega$ .		
Capacitance	500.0nF, 5.000µF, 50.00µF, 500.0µF, 3000µF* ± (3.5% rdg + 6 digits)*** *Additional 50.00nF range accuracy is not specified		
	**Accuracies with film capacitor or better ***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		
DC µA	Range   Accuracy     400.0µA   ± (2.0% rdg + 4 digits)     2000µA   ± (1.5% rdg + 3 digits)	Burden Voltage 2.8mV/µA 2.8mV/µA	
AC μA (50Hz - 500Hz)	Range   Accuracy     400.0µA   ± (2.0% rdg + 5 digits)     2000µA   ± (1.5% rdg + 5 digits)	Burden Voltage 2.8mV/µA 2.8mV/µA	
Frequency (Voltage input only)	Volts   Range   Sensitivit     400.0mV   10Hz to 2kHz   300mV     4.000V   5Hz to 40kHz   4V     40.00V   5Hz to 100kHz   28V     400.0V   5Hz to 40kHz   100V	y Accuracy ± (0.5% rdg + 4 digits) ± (0.5% rdg + 4 digits)	
Diode Tester	Open Circuit Voltage: < 1.6 VDC Test Current (Typical): 0.25mA		
Temperature (Type-K Thermocouple)	Range Accuracy*   -20°C to 300°C ± (2% rdg + 3 °C)   301 °C ~ 537 °C ± (3% rdg + 3 °C)   -4°F to 572°F ± (2% rdg + 6 °F)   573 °F ~ 999 °F ± (3% rdg + 6 °F)   *Type-K thermocouple range & accuracy not included		

For complete specs please download the product datasheet and the product manual on www.Amprobe.com.

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