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 40MΩ
- 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

CAT III 600V c UL us CE N10140

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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:	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]		
	40.00A	± (1.5% rdg + 8 digits)
	400.0A	± (1.5% rdg + 8 digits)
	600A	± (1.5% rdg + 8 digits)*

***Accuracy specified to 600A continuous.**

Electrical Specification Accuracy (23 °C ± 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)	
	4.000MΩ	± (1.0% rdg + 4 digits)	
	40.00MΩ	± (2.0% rdg + 4 digits)	
Open Circuit Voltage:	0.4VDC typical		
Audible Continuity Tester	Audible threshold: between 10Ω and 120Ω.		
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	Burden Voltage	
400.0µA	± (2.0% rdg + 4 digits)	2.8mV/µA	
2000µA	± (1.2% rdg + 3 digits)	2.8mV/µA	
AC µA (50Hz - 500Hz)			
Range	Accuracy	Burden Voltage	
400.0µA	± (2.0% rdg + 5 digits)	2.8mV/µA	
2000µA	± (1.5% rdg + 5 digits)	2.8mV/µA	
Frequency (Voltage input only)			
Volts	Range	Sensitivity	Accuracy
400.0mV	10Hz to 2kHz	300mV	± (0.5% rdg + 4 digits
4.000V	5Hz to 40kHz	4V	± (0.5% rdg + 4 digits)
40.00V	5Hz to 100kHz	28V	± (0.5% rdg + 4 digits)
400.0V	5Hz to 100kHz	100V	± (0.5% rdg + 4 digits)
600V	5Hz to 5kHz	500V	± (0.5% rdg + 4 digits)
Diode Tester			
Open Circuit Voltage	Test Current (Typical)		
< 1.6 VDC	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			

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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

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