



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 μ F
- Temperature with Type-K Thermocouple probe
- AC and DC Voltage to 600V
- Resistance to 40M Ω
- Continuity Buzzer
- Frequency measurement
- Diode test
- Hold and Maximum reading functions
- Inrush current
- Accommodates conductors up to 25 mm (1.0") in diameter
- Auto ranging
- Auto power off and low battery indication
- Rubber over-molded case

ACD-14 PLUS SPECIFICATIONS

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.



HARD AT WORK SINCE 1948.

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]	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.



HARD AT WORK SINCE 1948.

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	400.0Ω ± (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	<table border="1"> <thead> <tr> <th>Range</th> <th>Accuracy</th> <th>Burden Voltage</th> </tr> </thead> <tbody> <tr> <td>400.0μA</td> <td>± (2.0% rdg + 4 digits)</td> <td>2.8mV/μA</td> </tr> <tr> <td>2000μA</td> <td>± (1.5% rdg + 3 digits)</td> <td>2.8mV/μA</td> </tr> </tbody> </table>	Range	Accuracy	Burden Voltage	400.0μA	± (2.0% rdg + 4 digits)	2.8mV/μA	2000μA	± (1.5% rdg + 3 digits)	2.8mV/μA											
Range	Accuracy	Burden Voltage																			
400.0μA	± (2.0% rdg + 4 digits)	2.8mV/μA																			
2000μA	± (1.5% rdg + 3 digits)	2.8mV/μA																			
ACμA(50Hz-500Hz)	<table border="1"> <thead> <tr> <th>Range</th> <th>Accuracy</th> <th>Burden Voltage</th> </tr> </thead> <tbody> <tr> <td>400.0μA</td> <td>± (2.0% rdg + 5 digits)</td> <td>2.8mV/μA</td> </tr> <tr> <td>2000μA</td> <td>± (1.5% rdg + 5 digits)</td> <td>2.8mV/μA</td> </tr> </tbody> </table>	Range	Accuracy	Burden Voltage	400.0μA	± (2.0% rdg + 5 digits)	2.8mV/μA	2000μA	± (1.5% rdg + 5 digits)	2.8mV/μA											
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)	<table border="1"> <thead> <tr> <th>Volts</th> <th>Range</th> <th>Sensitivity</th> <th>Accuracy</th> </tr> </thead> <tbody> <tr> <td>400.0mV</td> <td>10Hz to 2kHz</td> <td>300mV</td> <td>± (0.5% rdg + 4 digits)</td> </tr> <tr> <td>4.000V</td> <td>5Hz to 40kHz</td> <td>4V</td> <td>± (0.5% rdg + 4 digits)</td> </tr> <tr> <td>40.00V</td> <td>5Hz to 100kHz</td> <td>28V</td> <td>± (0.5% rdg + 4 digits)</td> </tr> <tr> <td>400.0V</td> <td>5Hz to 40kHz</td> <td>100V</td> <td>± (0.5% rdg + 4 digits)</td> </tr> </tbody> </table>	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 40kHz	100V	± (0.5% rdg + 4 digits)
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 40kHz	100V	± (0.5% rdg + 4 digits)																		
Diode Tester	Open Circuit Voltage: < 1.6 VDC Test Current (Typical): 0.25mA																				
Temperature (Type-K Thermocouple)	<table border="1"> <thead> <tr> <th>Range</th> <th>Accuracy*</th> </tr> </thead> <tbody> <tr> <td>-20°C to 300°C</td> <td>± (2% rdg + 3 °C)</td> </tr> <tr> <td>301 °C ~ 537 °C</td> <td>± (3% rdg + 3 °C)</td> </tr> <tr> <td>-4°F to 572°F</td> <td>± (2% rdg + 6 °F)</td> </tr> <tr> <td>573 °F ~ 999 °F</td> <td>± (3% rdg + 6 °F)</td> </tr> </tbody> </table> *Type-K thermocouple range & accuracy not included	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)										
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)																				

Contact:
 Industrial Process Measurement, Inc.
 3910 Park Avenue, Unit 7
 Edison, NJ 08820
 732-632-6400
 support@instrumentation2000.com
<http://www.instrumentation2000.com>