



## ACD-14 FX Digital Clamp-On Multimeter

The ACD-14 FX is the professionals' choice for both HVAC & Electrical applications due to its complete set of measuring features. Its dual displays allows viewing amperage and voltage simultaneously.

- Dual Displays - Permits simultaneous reading of Amperage & Voltage
- Micro Amps measurement for testing Flame Sensors
- Capacitance to 3000  $\mu$ F
- Temperature with Type-K Thermocouple
- AC and DC Voltage to 600V
- AC Current to 400A
- Resistance to 40M $\Omega$
- Continuity Buzzer
- Frequency measurement
- Diode test
- Hold and Maximum reading functions
- In rush current
- Accommodates conductors up to 26mm (1.02") in diameter
- Auto ranging
- Auto power off and low battery indication
- Rubber over-molded case
- Overload protected
- Safety: CE, UL, CAT III 600V



ACD-14 FX

### 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)



## ACD-14 FX Digital Clamp-On Multimeter

## Data Sheet

### General Specifications

<b>Display:</b>	3-3/4 digits 4000 counts, dual LCD displays
<b>Update Rate:</b>	3 per second nominal
<b>Polarity:</b>	Automatic
<b>Low Battery Indication:</b>	Below approx. 2.4V
<b>Operating Temperature:</b>	0°C to 40°C (32°F to 104°F)
<b>Relative Humidity:</b>	Maximum relative humidity 80% for temperatures up to 31°C (88°F) decreasing linearly to 50% relative humidity at 40°C (104°F)
<b>Altitude:</b>	Indoor operation below 2000m (6,562 ft)
<b>Storage Temperature:</b>	-20°C to 60°C (-4°F to 140°F), < 80% R.H. (with battery removed)
<b>Temperature Coefficient:</b>	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
<b>Sensing:</b>	Average sensing for ACD-14 FX
<b>Power Supply:</b>	Two 3V alkaline button batteries (ANSI/NEDA-5004LC, IEC-CR2032).
<b>Battery Life:</b>	95 hours approx. (in DCV mode)
<b>Power Consumption:</b>	2.5 mA typical for ACD-14 FX
<b>Low Battery Indication:</b>	Below approx. 2.4V (battery symbol appears in upper right)
<b>Auto Power Off:</b>	After being idle for 30 minutes
<b>APO Consumption:</b>	ACD-14 FX: 0.8µA typical except 25µA typical for temperature function
<b>Safety:</b>	CE EN61010-1, EN61010-2-032 - Pollution Degree 2
<b>Transient Protection:</b>	6.5kV (1.2/50µs surge) for all models
<b>E.M.C.:</b>	Meets EN61326
<b>Overload Protections:</b>	ACA Clamp-on jaws: AC 400A RMS continuous "+" & "COM" terminals (all functions): 600VDC/ VAC RMS
<b>Dimension:</b>	L190mm X W 63mm X H 32mm (L 7.48" X W 2.48" X H 1.25")
<b>Weight:</b>	204 g (0.450 lb approx.)
<b>Jaw opening &amp; Conductor diameter:</b>	26mm (1.02") max
<b>Electrical Specifications:</b>	23°C ± 5°C (73°F ± 9°F) & less than 75% R.H.

### Specifications

Function	Range	Accuracy
<b>DC Voltage</b>		
	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)		
<b>AC Voltage</b>		
	50Hz -- 500Hz	
	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		

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# Data Sheet

## Specifications, cont.

Function	Range	Accuracy		
<b>ACA Current (Clamp-on)</b>				
	50Hz / 60Hz			
	40.00A	± 1.9% rdg + 8 digits		
	400.0A	± 1.9% rdg + 8 digits*		
	600A**	± 1.9% rdg + 8 digits		
*Accuracy specified to 350A continuous, and 400A for 60-second max with 5 minutes cool down interval.				
**Added range to indicate instantaneous over-range current values TRMS model ACD-14 TRMS FX accuracy is specified from 10% to 100% of range.				
<b>Max Hold (where applicable)</b>	Specified accuracy ± 50 digits for changes > 25ms in duration			
<b>Audible Continuity Tester</b>	<b>Audible threshold: between 10W and 120W.</b>			
<b>Ohms</b>				
	400.0Ω	± 0.8% rdg + 6 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				
<b>Capacitance</b>				
	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				
<b>DC μA</b>				
	<b>Range</b>	<b>Accuracy</b>	<b>Burden Voltage</b>	
	400.0μA	± 1.5% rdg + 4 digits	2.8mV/μA	
	2000μA	± 1.2% rdg + 3 digits	2.8mV/μA	
<b>AC μA (50Hz - 500Hz)</b>				
	<b>Range</b>	<b>Accuracy</b>	<b>Burden Voltage</b>	
	400.0μA	± 2.0% rdg + 5 digits	2.8mV/μA	
	2000μA	± 1.5% rdg + 5 digits	2.8mV/μA	
<b>Hz Frequency</b>				
<b>Volts</b>	400.0mV	10Hz -- 2kHz	300mV	± 0.5% rdg + 4 digits
	4.000V	5Hz -- 40kHz	4V	± 0.5% rdg + 4 digits
	40.00V	5Hz -- 100kHz	28V	± 0.5% rdg + 4 digits
	400.0V	5Hz -- 100kHz	100V	± 0.5% rdg + 4 digits
	600V	5Hz -- 5kHz	500V	± 0.5% rdg + 4 digits
<b>Amps</b>	400.0μA	10Hz -- 30kHz	500μA	± 0.5% rdg + 4 digits
	2000μA	10Hz -- 30kHz	500μA	± 0.5% rdg + 4 digits
<b>Diode Tester</b>				
	<b>Open Circuit Voltage</b>	<b>Test Current (Typical)</b>		
	< 1.6 VDC	0.25mA		
<b>Type-K Temperature</b>				
	<b>Range</b>	<b>Accuracy*</b>		
	-20°C to 300°C	± 2% rdg + 3°C		
	-4°F to 572°F	± 2% rdg + 6°F		
*Type-K thermocouple range & accuracy not included				



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### Included Accessories

Test Leads, Carrying Case, Bead Type-K Thermocouple with banana plugs for, Users Manual

### Optional Accessories

<b>A47L</b>	Line splitter (Energizer)
<b>ACF-3000AK</b>	3000A AC Flexible Clamp-On Attachment
<b>TMA-K</b>	Temperature Adapter
<b>TL36A</b>	Industry Test Leads with Threaded Alligator Clips

### Amprobe® Test Tools

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9/2007 3129113 Rev A