



ACD-14 TRMS-FX Digital Clamp-On Multimeter

The ACD-14 TRMS-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 μ F
- Temperature / Type-K Thermocouple
- AC and DC Voltage to 600V
- AC Current to 400A
- Resistance to 40M Ω with Continuity Buzzer
- Frequency measurement
- Diode test
- Hold and Maximum reading functions
- 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
- In rush current



ACD-14 TRMS-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)





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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:	Operating 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 True RMS for ACD-14 TRMS-FX
Power Supply:	Two 3V alkaline button batteries (ANSI/NEDA-5004LC, IEC-CR2032).
Battery Life:	95 hours approx. (in DCV mode)
Power Consumption:	2.9mA typical for ACD-14 TRMS-FX
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 TRMS-FX: 10µA 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
Other Function Ranges:	Total Accuracy = Specified Accuracy + 45 digits Performance above 3V/m is not specified
Overload Protections:	ACA Clamp-on jaws: AC 400A RMS continuous "+" & "COM" terminals (all functions): 600VDC/ VAC RMS
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:	26mm (1.02" max)
Electrical Specifications:	23°C ± 5°C (73°F ± 9°F) & less than 75% R.H. True RMS Model ACD-14 TRMS FX ACV, ACmA & ACA clamp-on accuracies are specified from 5% to 100% of range or otherwise specified. Maximum Crest Factor are < 1.96 at full scale & < 3.92 at half scale, and with frequency spectrums, besides fundamentals, fall within the meter specified AC bandwidth for non-sinusoidal waveforms.

Specifications

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	
	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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Specifications, cont.

Function	Range	Accuracy		
ACA Current (Clamp-on)				
	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.				
Max Hold (where applicable)	Specified accuracy ± 50 digits for changes > 25ms in duration			
Audible Continuity Tester	Audible threshold: between 10W and 120W.			
Ohms				
	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				
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	± 1.5% 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	
Hz Frequency				
Volts	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
Amps	400.0μA	10Hz -- 30kHz	500μA	± 0.5% rdg + 4 digits
	2000μA	10Hz -- 30kHz	500μA	± 0.5% rdg + 4 digits
Diode Tester				
	Open Circuit Voltage	Test Current (Typical)		
	< 1.6 VDC	0.25mA		
Type-K Temperature				
	Range	Accuracy*		
	-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, Instruction Manual

Optional Accessories

A47L	Line splitter (Energizer)
ACF-3000AK	3000A AC Flexible Clamp-On Attachment
TMA-K	Temperature Adapter
VRC-320	Alligator Clips (For test leads)

Amprobe® Test Tools

website: www.Amprobe.com
email: info@amprobe.com
Everett, WA 98203
Tel: 877-AMPROBE

Amprobe® Test Tools Europe

In den Engematten 14
79286 Glottertal, Germany
Tel.: +49 (0) 7684 8009 - 0

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