





### 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 TRMS-PLUS 600A Clamp-On Multimeter with Dual Display

The ACD-14 TRMS-PLUS 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. True RMS voltage and current measurements for more precise results when measuring in noisy AC environments.

- Dual Displays Permits simultaneous reading of Amperage & Voltage
- Micro Amps measurement for testing Flame Sensors
- True RMS for precise measurement results
- Capacitance to 3000 μF
- New thin jaws, 5mm thinner than others to access tight measurement spaces
- Temperature with Type-K Thermocouple
- AC and DC Voltage to 600V
- AC Current to 600A
- 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



#### **Amprobe® Test Tools**

#### www.Amprobe.com



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

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:	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 FX		
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 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-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:	ACA Clamp-on jaws: AC 600A 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:	28 mm ( 1.1") max		
	· ·		

### Electrical Specification Accuracy (23 °C ± 5 °C & < 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]		
	4.000V, 40.00V, 400.0V	± (1.5% rdg + 5 digits)
	600V	± (2.0% rdg + 5 digits)
	CMRR:	>60dB @ DC to 60Hz, Rs=1k $\Omega$
	Input Impedance:	10MΩ, 30pF nominal
TRMS sensing from 10% to 100% of range.	· · ·	· · · · · · · · · · · · · · · · · · ·
AC Current (Clamp-on) [50Hz / 60Hz]		
<u>-</u>	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		5 5

\*Accuracy specified to 600A continuous. TRMS sensing from 10% to 100% of range.

### **Amprobe® Test Tools**



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

Data Sheet

### 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			
Resistance				
	400.0Ω	± (0.8% rdg	g + 8 digits)	
	4.000kΩ, 40.00kΩ, 400.0kΩ	2 ± (0.6% rdg	g + 4 digits)	
	4.000ΜΩ	± (1.0% rdg	ı + 4 digits)	
	40.00MΩ	± (2.0% rdg	g + 4 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	g + 6 digits)***	
*Additional 50.00nF range accuracy is not	specified			
**Accuracies with film capacitor or better				
***Specified with battery voltage above ing voltage of approximately 2.4V	2.8V (approximately half full bat	tery). Accuracy decreas	ses gradually to 12% at low battery war	
DC μΑ				
Range	Accuracy	Burden Vol	tage	
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 Vol	tage	
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*			
· J ·	· (20/ rda · 2 °C)			
-20°C to 300°C	± (2% rdg + 3 °C)			
-	± (2% rdg + 3°C) ± (3% rdg + 3°C)			
-20°C to 300°C	-			



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

#### **Included Accessories**

Test Leads, Carrying Case, Bead Type-K 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





#### 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

©2008 Amprobe Test Tools. All rights reserved. 01/2008 3128492 Rev A

#### **Amprobe® Test Tools**

## **Mouser Electronics**

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

AMPROBE: ACD-14 TRMS-PLUS