2000A DCA/ACA CLAMP+DMM

Model: CM-9930 *ISO-9001, CE, IEC1010*







FEATURES

- * 2 in 1, 2000 A clamp meter + Digital multimeter.
- * Meet IEC 1010 CATIII 1000V safety requirement.
- * True rms reading for ACV & ACA measurement.
- * 4000 counts, Auto range,
 multi-functions for ACA, DCA,
 ACV, DCV, Ohms, Capacitance,
 Hz, Diode, Duty cycle and
 continuity check.
- * LSI circuit provides high reliability and durability.
- * Wide ranges (2000A, 400 A) clamp on current measurement both for ACA & DCA.
- * 4 ranges (400 uA, 4000 uA, 40 mA, 400 mA) direct current input measurement both for ACA & DCA.
- * Overload protection circuit is provided for all ranges.
- * Data hold, Relative key, Back light.

The Art of Measurement

2000A DCA /ACA CLAMP METER + DMM, 2 in 1 Model : CM-9930

FEATURES				
* 2 in 1, 2000 A clamp meter + Digital multimeter.	* Wide ranges (2000A, 400 A) clamp on current			
* Meet IEC 1010 CATIII 1000V safety requirement.	measurement both for ACA & DCA.			
* True rms reading for ACV & ACA measurement.	* 4 ranges (400 uA, 4000 uA, 40 mA, 400 mA) direct			
* 4000 counts, Auto range, multi-functions for ACA,	current input measurement both for ACA & DCA.			
DCA, ACV, DCV, Ohms, Capacitance, Hz, Diode,	* Overload protection circuit is provided for all ranges.			
Duty cycle and continuity check.	* Data hold, Relative key, Back light.			
* LSI circuit provides high reliability and durability.	* Compact & heavy duty ABS and fireproof plastic case.			

GENERAL SPECIFICATIONS						
Display	15 mm (0.6") LCD, 4 digits,	Operating Temp.	0 °C to 50 °C (32 °F to 122 °F).			
	Max. indication 5000.	Operating	Less than 80% RH.			
Measurement	ACA, DCA, ACV, DCV, Ohms, Diode, Hz,	Humidity				
Range	Capacitance, Duty cycle, Continuity beeper.	Weight	380 g/0.85 LB (including battery).			
Polarity	Automatic Switching, "-" indicates	Dimension	HWD: 255 x 73 x 38 mm.			
	negative polarity.		(10 x 2.9 x 1.5 inch)			
Current Sensor	Hall effect sensor.	Max. Conductor	60 mm (2.36 inch) Dia.			
Zero adjustment	DCA: Push bottom adjustment.	Size				
	Other ranges: Automatic adjustment.	Accessories	Operation manual 1 PC			
Over-input	Indication of "1" or "-1".	Included	Test lead (red & black)1 Set			
Sampling Time	Approx. 0.35 second.		Fuse (500 mA, 5 mm dia. x 20 mm) 1 PC			
Battery	DC 9V battery, heavy duty or Alkaline type,	Optional	Carrying case, Temperature Adapter,			
	006P, MN1604 (PP3) or equivalent.	Accessories &	Light Adapter, Anemometer Adapter,			
Power	Approx. DC 5 mA.	Adapters	Pressure Adapter, RH Adapter,			
Consumption			Tachometer Adapter, High Voltage Probe.			

Function Range Resolution Accuracy Deveload Protection		E	LECTRICAL SPECI	FICATIONS (23±5°C)		
DC only 4 V 0.001V DCV:	Function	Range	Resolution	Accuracy	Overload Protection	
4 V 0.001V DCV: 40 V 0.01V ± (1 % + 2d) AC/DC 1000 V.	DC/AC	400 mV	0.1 mV	± (0.5 % + 2d)		
40 V	Voltage	(DC only)				
ACV 1000V		4 V	0.001V	DCV:	AC/DC 1000 V.	
1000V		40 V	0.01V	± (1 % + 2d)		
DC		400 V	0.1 V	ACV:		
AC/DC 500 mA		1000V	1 V	± (1.2 % + 5d)		
(Direct input) 40 mA 0.01 mA ± (1.2% + 5d) (Fuse)	DC / AC	400 uA	0.1 uA			
A00 mA	Current	4000 uA	1 uA		AC/DC 500 mA	
DC / AC Current C(Clamp on) 2000 A		40 mA	0.01 mA	± (1.2% + 5d)	(Fuse)	
Clamp on 2000 A		400 mA	0.1 mA			
C(lamp on) 2000 A	DC /AC	400 A	0.1 A	± (2% + 5d)		
* True rms measurement both for ACV, ACA function. * Input impedance for ACV & DCV range is 10 Mega ohm. * ACA, ACV frequency response is from 45 to 1 KHz. * ACA, ACV specification be tested on sine wave 50/60 Hz. Function Range Resolution	current				AC/DC	
* Input impedance for ACV & DCV range is 10 Mega ohm. * ACA, ACV frequency response is from 45 to 1 KHz. * ACA, ACV specification be tested on sine wave 50/60 Hz. Function Range Resolution Accuracy Overload Protection 400 ohm 0.1 ohm 4 K ohm 1 ohm 4 K ohm 10 ohm 4 M oh Moh 10 ohm 4 M ohm 1 K ohm 4 M ohm 1 K ohm 4 M ohm 10Kohm 50 nF 10 pF 500 nF 100 pF 5 uF 0.001 uF 50 uF 0.01 uF 50 uF 0.01 uF 50 Hz 0.01 Hz 500 Hz 0.1 Hz 500 Hz 0.1 Hz 500 Hz 0.01 KHz 500 KHz 0.01 KHz 500 KHz 0.1 KHz	(Clamp on)	2000 A	1 A	± (2% + 8d)	2000A/1000V	
Function Range Resolution Accuracy Overload Protection Ohms 400 ohm 0.1 ohm 4 K ohm 1 ohm 4 K ohm 1 ohm ± (1 % + 5 d) AC / DC 400V 40 K ohm 100 ohm ± (2 % + 2 d) AC / DC 400V 40 M ohm 1 K ohm ± (3 % + 5 d) AC / DC 400V Capacitance 50 nF 10 pF 100 pF ± (3 % + 5 d) AC / DC 400V Frequency 5 Hz 0.001 uF * See Remark * AC / DC 400V Frequency 5 Hz 0.001 Hz * See Remark AC / DC 400V Frequency 5 Hz 0.01 Hz * See Remark AC / DC 1000V Frequency 5 KHz 0.1 Hz ± (1 % + 5 d) AC / DC 1000V Foo Hz 0.01 KHz ± (1 % + 5 d) AC / DC 1000V	Remark	* Input impeda * ACA, ACV fre	nce for ACV & DCV ran quency response is fron	ge is 10 Mega ohm. n 45 to 1 KHz.		
Ohms 4 K ohm 1 ohm 4 K ohm 10 ohm 4 M ohm 100 ohm 4 M ohm 11 K ohm 40 M ohm 10Kohm 10Kohm 100 pF 500 nF 100 pF 50 uF 50 uF 50 uF 50 uF 50 uF 50 Hz 50 KHz 50 C1 KHz 50 KHz 50 C1 KHz 50 KHz 50 C1 KHz 50 C1 KHz 50 KHz 50 C1 KHz						
4 K ohm 1 ohm 40 K ohm 10 ohm 40 K ohm 100 ohm 4 M ohm 1 K ohm 4 M ohm 1 K ohm 40 M ohm 10 pF 50 nF 10 pF 50 nF 100 pF 5 uF 0.001 uF 50 uF 0.01 uF * See Remark AC / DC 400V **See Remark AC / DC 400V **See Remark AC / DC 400V **See Remark AC / DC 400V **See Remark AC / DC 400V **See Remark AC / DC 400V **See Remark AC / DC 1000V **DC 1000V AC / DC 1000V **DC 1000V **D				Accuracy	Overload Protection	
40 K ohm 10 ohm	Ohms					
400 K ohm 100 ohm 4 M ohm 1 K ohm ± (2 % + 2 d) 40 M ohm 10Kohm ± (3.5 % + 5d) Capacitance 50 nF 100 pF 500 nF 100 pF 5 uF 0.001 uF 50 uF 0.01 uF *See Remark Frequency 5 Hz 0.001 Hz 500 Hz 0.1 Hz 500 Hz 0.1 Hz 500 KHz 0.01 KHz 500 KHz 0.1 KHz Duty cycle 1 % to 99 %					AC / DC 400V	
4 M ohm 1 K ohm ± (2 % + 2 d) 40 M ohm 10Kohm ± (3.5 % + 5d) Capacitance 50 nF 10 pF 500 nF 100 pF 5 uF 0.001 uF ± (3 % + 5d) Frequency 5 Hz 0.001 Hz 50 Hz 0.01 Hz 500 Hz 0.1 Hz 500 Hz 0.1 Hz 50 KHz 0.01 KHz 500 KHz 0.1 KHz Duty cycle 1 % to 99 %				± (1% + 5d)		
40 M ohm						
Capacitance 50 nF 10 pF 500 nF 100 pF 5 uF 0.001 uF \$\frac{5}{5} \text{ uF} 0.001 uF \$\frac{1}{5} \text{ uF} 0.001 uF \$\frac{1}{5} \text{ uF} 0.001 uF \$\frac{1}{5} \text{ see Remark}\$ Frequency 5 Hz 0.001 Hz 500 Hz 0.01 Hz 500 Hz 0.1 Hz 500 Hz 1 Hz 500 KHz 0.01 KHz 500 KHz 0.1						
500 nF 100 pF		40 M ohm		± (3.5 % + 5d)		
5 uF 0.001 uF ± (3 % + 5d) AC / DC 400V Frequency 5 Hz 0.01 Hz (> 5 V) 50 Hz 0.01 Hz 500 Hz 0.1 Hz 5 KHz 1 Hz ± (1 % + 5 d) 50 KHz 0.01 KHz 500 KHz 0.1 KHz Duty cycle 1 % to 99 % 0.1 %	Capacitance					
50 uF		500 nF	100 pF			
Frequency 5 Hz 0.001 Hz 50 Hz 50 Hz 0.01 Hz 500 Hz 500 Hz 500 Hz 5 KHz 1 Hz 500 KHz 0.01 KHz 500 KHz 0.1 KHz 500 KHz 0.1 KHz 500 KHz 0.1 KHz 500 KHz 0.1 % 5		5 uF	0.001 uF	± (3 % + 5d)	AC / DC 400V	
(> 5 V) 50 Hz 0.01 Hz 500 Hz 0.1 Hz ± (1 % + 5 d) AC / DC 1000V 50 KHz 0.1 KHz 500 KHz 0.1 KHz 500 KHz 0.1 KHz 500 KHz 0.1 % 699 %		50 uF	0.01 uF	* See Remark		
500 Hz	Frequency	5 Hz	0.001 Hz			
5 KHz 1 Hz ± (1 % + 5 d) AC / DC 1000V 50 KHz 0.01 KHz 500 KHz 0.1 KHz Duty cycle 1 % to 99 %	(> 5 V)	50 Hz	0.01 Hz			
50 KHz 0.01 KHz 500 KHz 0.1 KHz Duty cycle 1 % to 0.1 % 99 %		500 Hz	0.1 Hz			
500 KHz 0.1 KHz Duty cycle 1 % to 0.1 % 99 %		5 KHz	1 Hz	± (1 % + 5 d)	AC / DC 1000V	
Duty cycle 1 % to 99 % 0.1 %		50 KHz	0.01 KHz			
99 %		500 KHz	0.1 KHz			
Diode Short/non conductance good/defect test	Duty cycle		0.1 %			
DI OGO JOHO I MINIT CONGUCTANO GOOGLACIOCE LOSE	Diode	Short/non conductance, good/defect test				
Continuity If rmeasuring esistance is less than 10 ohm, the beeper will sound.						

^{*} Appearance and specifications listed in this brochure are subject to change without notice.