MARTINDALE

Specification CM56 Clamp Meter



Display: 3½ 17mm large LCD, maximum reading 3200 with function and units sign annunciators. Display update rate 2 times per second, nominal.

Analogue bar graph: 34 segments with measurements 12 times per second

Polarity Indication: Automatic, positive implied, negative indicated.

Overrange Indication: (OL) is displayed.

Low Battery Indication: The " " is displayed when the battery voltage drops below accurate operating level

Auto Power Off: Clampmeter automatically shuts down after approx 10 minutes of inactivity.

Operating Environment: 0°C to 50°C at <70% Relative Humidity.

Storage Environment: -20°C to 60°C at <80% Relative Humidity with battery removed from meter.

Temperature Coefficient: 0.1 X (specified accuracy) / °C (<18°C or >28°C)

Altitude: 6561.7 Feet (2000M)

Power: Standard 9-volt battery, NEDA 1604, IEC 6F22, JIS 006P PP3.

Battery Life: 300 hours typical with alkaline battery.

Jaw Opening Capability: 57mm conductor, 70 X 18mm bus bar.

Size (H x W x D): 10.9 x 4.0 x 1.9 inches (277 x 102 x 49mm)

Weight: Approx: 18.9 OZ/ 540grams (including battery).

* Accuracy is given as \pm ([% of reading]+[number of least significant digits]) at 18°C to 28°C with relative humidity up to 70%.

Resistance

Range	Resolution	Accuracy	Test Current
320Ω	0.1Ω	±(1.0% rdg+3d)	<0.7mA
3.2kΩ	1Ω	$\pm(1.0\% \text{ rdg}+3d)$	<0.13mA
32kΩ	10Ω	$\pm(1.0\% \text{ rdg}+3d)$	<13µA
320kΩ	100Ω	$\pm(1.0\% \text{ rdg}+3d)$	<1.3µA
3.2MΩ	1kΩ	$\pm(1.5\% \text{ rdg}+3d)$	<0.13µA
30MΩ	10kΩ	±(2.5% rdg+5d)	<0.13µA

Overload Protection: 500V DC or RMS AC

Diode Test

Range	Resolution	Accuracy	Test Current	Open Circuit Volts
3.2V	1mV	±(10% rdg + 2d)	0.6mA	3.0VDC typical

Overload Protection: 500V DC or RMS AC

Frequency

Range: 320Hz. 3200Hz, 32KHz

Resoloution: 0.1Hz

Accuracy: ±(1.0% rdg + 4dgts) on all ranges

Sensitivity: 3.5V rms min at >20% and <80% duty cycle

Effect Reading: More than 100 digits at pulse width >2µsec

Overload Protection: 500V DC or RMS AC

DC Volts

Range	Resolution	Accuracy	Input Impedance
320mV	100µV	$\begin{array}{c} \pm (0.5\% \ rdg + 1d) \\ \pm (0.5\% \ rdg + 1d) \end{array}$	>1000ΜΩ
3.2V	1mV		11ΜΩ
32V	10mV		10ΜΩ
320V	100mV		10ΜΩ
1000V	1V		10ΜΩ

Overload protection: 1000V DC / 750VRMS on all other range

AC Volts (Average sensing RMS indicating) Frequency Response: 50Hz to 300Hz

Range	Resolution	Accuracy	Input Impedance
3.2V 32V 320V 750V	1mV 10mV 100mV 1V	\pm (1.5% rdg+4d) \pm (1.5% rdg +1d) \pm (1.5% rdg +1d) \pm (1.5% rdg +1d) \pm (1.5% rdg +1d)	11MΩ / 20PF 10MΩ / 20PF 10MΩ / 20PF 10MΩ / 20PF

Overload protection: 1000V DC or 750V AC rms

AC Current (Average sensing RMS indicating)

Range	Resolution	Accuracy (50Hz-60Hz)
32A 320A 1000A	10mA 100mA 1A	0-600A±(1.5% rdg+5d)50-60Hz >600A±(2.0% rdg+5d)50-60Hz 0-600A±(3.0%rdg+5d)61-400Hz >600A±(3.5%rdg+5d)61-400Hz

Overload Protection: 1200A for 60 seconds Maximum

Continuity Test

Range	Audible Threshold	Response Time	Test Current
320Ω	Less than 20Ω	Approx. 500ms	<0.7mA

Overload Protection: 500V DC or AC rms