

CVM-780 Contact Voltmeter

61-100-0002

The CVM-780 Contact Voltmeter combines the ease of use of a digital voltmeter with the high input impedance and low input capacitance of a true electrostatic voltmeter in a small, portable, battery operated package. It reads real voltage, without confusing it with electrostatic field strength.



Specifications:

Basic Description:	High impedance contact voltmeter with active probe
DC Characteristics:	Intended Operating Range: 0 to ± 525 volts Resolution: 1 volt, 3 digit display Circuit accuracy: $< \pm 1\%$ Note: Maximum measurement range is ± 575 Volts for brief periods
Dynamic Characteristics:	Response Time: Approximately 1ms for a voltage step of 200V at the probe tip to the monitor output. Digital display update: 3 readings per second.
Input charge/measurement:	Approximately 100 femptocoulomb/volt (1.0×10^{-13} C/V)
Input Impedance:	$\geq 10^{14}$ ohm in parallel with < 1 pF Capacitance
Monitor Output:	Scale Factor: 10,000:1; 100uV/V Recording Deviation: Typically $< \pm 10$ volts at ± 500 Volts



Measurement Tolerances: When measuring DC voltage reference

500 V $\leq \pm 2$ V
100 V $\leq \pm 2$ V
50 V $\leq \pm 2$ V
10 V $\leq \pm 1$ V

When measuring floating conductors:

500 V $\leq \pm 5\% \pm 2$ Counts
100 V $\leq \pm 5\% \pm 2$ Counts
50 V $\leq \pm 5\% \pm 2$ Counts
10 V $\leq \pm 10\% \pm 2$ Counts

Probe Tips:	Metal: Nominally 0.95 and 0.45 inch Ceramic 0.90 and 0.40 inch ± 0.05 "
Portable Operation:	Approximately 3.5 Hours on Full Battery Charge (Operates during Battery Charge)
Power:	4 each Energizer NH15-2500 Nickel-Metal Hydride rechargeable batteries (AA Size)
Charger:	Universal 90 to 264 Volts, 47 to 63 Hz
Dimension	7.5" (19.1 cm) L x 4.25" (10.8 cm) I x 2.36" (6.0 cm) H
Probe Dimension:	8.9 in (22.5 cm) L x 1.5 in (3.7 cm) W x 0.78 in (2.0 cm) H
Meter Weight:	1.5 lbs (680 g)
Probe Weight:	3.6 oz (100 g)