The New 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.

Being a true electrostatic voltmeter, not a field meter means that it reads real voltage, without confusing it with electrostatic field strength, which can be distinctly different.

### 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: <±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 femtocoulomb/volt (1.0x10^{-13} C/V)

**Input Impedance:** ≥10^{14} ohm in parallel with <1pF Capacitance

**Monitor Output:**
- Scale Factor: 10,000:1; 100uV/V (Compatible with Prostat™ PGA-710 Autoanalysis System™)
- Recording Deviation: Typically < ±10 volts at ± 500 Volts

**Measurement Tolerances:** When measuring DC voltage reference

<table>
<thead>
<tr>
<th>Voltage</th>
<th>Tolerance</th>
</tr>
</thead>
<tbody>
<tr>
<td>500 V</td>
<td>±2 V</td>
</tr>
<tr>
<td>100 V</td>
<td>±2 V</td>
</tr>
<tr>
<td>50 V</td>
<td>±2 V</td>
</tr>
<tr>
<td>10 V</td>
<td>±1 V</td>
</tr>
</tbody>
</table>
When measuring floating conductors:

<table>
<thead>
<tr>
<th>Voltage</th>
<th>Accuracy</th>
<th>Count Variation</th>
</tr>
</thead>
<tbody>
<tr>
<td>500 V</td>
<td>±5%</td>
<td>±2 Counts</td>
</tr>
<tr>
<td>100 V</td>
<td>±5%</td>
<td>±2 Counts</td>
</tr>
<tr>
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<td>±2 Counts</td>
</tr>
<tr>
<td>10 V</td>
<td>±10%</td>
<td>±2 Counts</td>
</tr>
</tbody>
</table>

**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

**Meter Dimension (without boot):**
- 6.5 in (16.5 cm) L x 4.25 in (10.8 cm) W x 1.57 in (4.0 cm) H

**Meter Dimension (with boot):**
- 7.5 in (19.1 cm) L x 4.25 in (10.8 cm) W x 2.36 in (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, with boot

**Probe Weight:**
- 3.6 oz