The Trek Model 706B portable electrostatic voltmeter is designed to perform highly accurate noncontacting surface electrostatic voltage measurements. Applications include measurement of photoreceptor surfaces in copiers and laser printers.

The Trek Model 706 B.E.S. [Electrostatic] Voltmeter provides measurement ranges of 0 to +1 kV or 0 to -1 kV (switch selectable) and employs an easy to read 3½ digit liquid crystal display to indicate the measured electrostatic voltage. Accurate electrostatic measurements can be performed over a probe to test surface spacing of 1 mm to 5 mm.

A voltage-nulling technique is employed in the Model 706B that achieves DC stability and high accuracy even if the probe-to-measured surface spacing varies during use, this permits measurement of rotating electrophotography drums without concern for the effects of measurement accuracy due to drum eccentricities.

The probe design provides low noise and drift performance even in the presence of contaminating toner particles or under conditions of high humidity and temperature. The small durable probe has a cable length of 183 cm (72”).

The Model 706B is lightweight, battery operated, and packaged in a rugged enclosure that provides a convenient probe storage area.
PERFORMANCE

Measurement Range
0 to +1 kV or -1 kV DC (switch selectable).

Accuracy
Better than 0.5% of full scale.

FEATURES

Range Switch
A two-position switch is used to select the measurement range of either 0 to +1 kV or 0 to -1 kV.

TEST/READ Switch
In the TEST position, if the digital display indicates a value lower than 1100, the batteries should be replaced. In the READ position, the measurements are displayed.

Voltage Display
3½ digit liquid crystal display.
Range
0 to ±1000 V.
Resolution
1 V.
Zero Offset
Less than ±1 count.
Sampling Rate
3 readings per second.

NOTE: The Model 706B is designed to make electrostatic voltage measurements only!

To ensure safety, the Model 706B should never be used to perform measurements of “hard” voltage sources or voltage sources which can deliver currents high enough to cause harmful shocks or personal injury.

GENERAL

Power Requirements
Two (2) 9-volt alkaline batteries.

Operating Time
10 hours after battery replacement.

Operating Conditions
Temperature
5 °C to 35 °C.
Relative Humidity
To 85%, noncondensing.

Dimensions
39 mm H x 130 mm W x 134 mm D, (1.6” H x 5.2” W x 5.3” L).

Weight
455 g (1 lb), with batteries.

Ground Receptacle
The green banana jack must be connected to ground to maintain measurement accuracy.

Power On/Off
A two-position toggle switch.

Certification
TREK, INC. certifies that each Model 706B is tested and calibrated to specifications using measurement equipment traceable to the National Institute of Standards and Technology.

Model 706B Included Accessories

<table>
<thead>
<tr>
<th>Item</th>
<th>Part No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Portable Electrostatic Voltmeter</td>
<td>706B</td>
</tr>
<tr>
<td>Operator's Manual</td>
<td>23389</td>
</tr>
<tr>
<td>Two (2) (9 V) Alkaline Batteries</td>
<td>F1003R</td>
</tr>
<tr>
<td>Ground Patch Cord</td>
<td>N9044</td>
</tr>
</tbody>
</table>

Certification (cont.)

RoHS compliant
Low Voltage Safety Compliance (IEC 61010)

Overvoltage Category
CAT I: Peripheral level outputs (less than 60 volts).

Pollution Category
Degree 1: Operate in environments where no pollution or only dry, nonconductive pollution occurs.