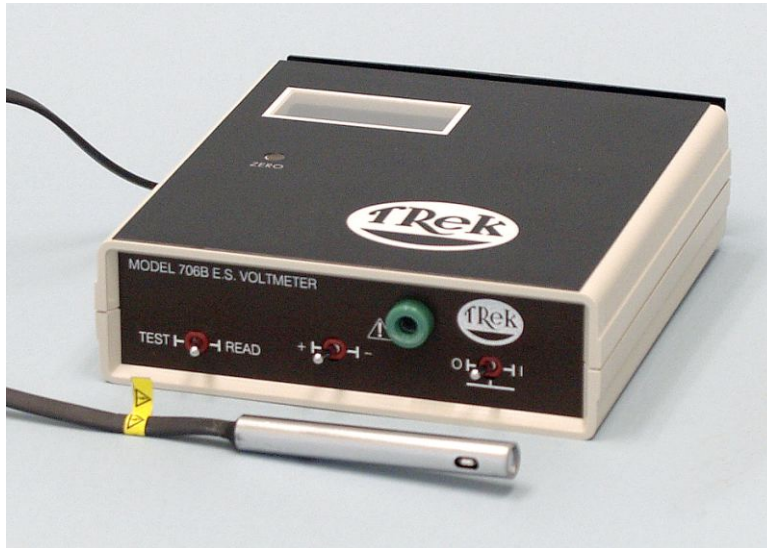


# Model 706B

## Portable Electrostatic Voltmeter



**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 706B 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.

- **Switch Selectable Ranges:**  
0 to +1 kV DC  
or  
0 to -1 kV DC
- **3½ Digit LCD Display**
- **Battery Test Switch**
- **DC-Stable Probe with Side Viewing Aperture Orientation**
- **Low Noise**
- **Durable Design**

# Model 706B Specifications

All specifications are at a probe-to-surface separation of 3 mm unless otherwise noted.

PERFORMANCE	FEATURES	GENERAL
<b>Measurement Range</b> 0 to +1 kV or -1 kV DC (switch selectable).	<b>Range Switch</b> A two-position switch is used to select the measurement range of either 0 to +1 kV or 0 to -1 kV.	<b>Power Requirements</b> Two (2) 9-volt alkaline batteries.
<b>Accuracy</b> Better than 0.5% of full scale.	<b>TEST/READ Switch</b> 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.	<b>Operating Time</b> 10 hours after battery replacement.
<b>PROBE</b>		<b>Operating Conditions</b>
<b>Recommended Probe-to-Surface Separation Distance</b> 1 mm to 5 mm.	<b>Voltage Display</b> 3½ digit liquid crystal display.	<b>Temperature</b> 5 °C to 35 °C.
<b>Trek Model 701P-76S Probe</b>	<b>Range</b> 0 to ±1000 V.	<b>Relative Humidity</b> To 85%, noncondensing.
<b>Dimensions</b> 8.7 mm diameter x 70 mm L (0.35" diameter x 2.75" L).	<b>Resolution</b> 1 V.	<b>Dimensions</b> 39 mm H x 130 mm W x 134 mm D, (1.6" H x 5.2" W x 5.3"L).
<b>Caution:</b> The metallic components of the probe are driven to the measured surface voltage level with a current capability of ±0.5 milliamperes. These metallic surfaces should not be connected to ground or touched during operation.	<b>Zero Offset</b> Less than ±1 count.	<b>Weight</b> 455 g (1 lb), with batteries.
<b>Cable Length</b> 1830 mm (72").	<b>Sampling Rate</b> 3 readings per second.	<b>Ground Receptacle</b> The green banana jack must be connected to ground to maintain measurement accuracy.
<b>Aperture Size (oval shaped)</b> 3.18 mm W x 6.35 mm L (0.125" W x 0.25" L).	<div><b>NOTE: The Model 706B is designed to make electrostatic voltage measurements only!</b>  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.</div>	<b>Power On/Off</b> A two-position toggle switch.
<b>Aperture Orientation</b> Side viewing.		<b>Certification</b>  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.
		<small>Copyright © 2011 TREK, INC. All specifications are subject to change. 1122/DEC</small>

Model 706B Included Accessories	Certification (cont.)										
<table><tr><th>Item</th><th>Part No.</th></tr><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></table>	Item	Part No.	Portable Electrostatic Voltmeter .....	706B	Operator's Manual .....	23389	Two (2) (9 V) Alkaline Batteries .....	F1003R	Ground Patch Cord .....	N9044	<div>Low Voltage Safety Compliance (IEC 61010)</div> <div>Overvoltage Category CAT I: Peripheral level outputs (less than 60 volts).</div> <div>Pollution Category Degree 1: Operate in environments where no pollution or only dry, nonconductive pollution occurs.</div>
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