

# MEASUREMENT

## 715 STATIC METER

The 715 Static Meter has been developed to enable industrial engineers to investigate static electricity problems.

**Its accuracy, stability and ease of use make it the leading instrument in its class.**

- > The 715 measures static electricity on the surface of a material, at a distance of 100 mm.
- > The meter can show where and how the static is generated, its magnitude and its polarity.
- > The 715 monitors the effectiveness of the action taken to solve the problem. If the solution involves static control equipment, the 715 shows its most effective position.
- > The 715 allows the engineer to set standards to avoid future problems. These can range from an acceptable level of charge in materials, to charge levels in products being produced by the process.
- > The 715 has two ranges selected automatically. The high range measures up to 200 kV with a resolution of 100 V. The low range measures up to 20 kV with a resolution of 10 V.
- > There is a "hold" facility to freeze the reading on the display.



### How the 715 works:

Static electricity is a potential problem in many industrial areas. It slows production, reduces product quality, attracts contaminants and gives shocks to operators. The 715 enables the engineer to investigate these static electricity problems scientifically. Static is a coulombic charge - forming current when it moves, but difficult to measure when it is not moving. The 715 measures the surface voltage using  $Q=CV$ : the 100 mm reading distance is the constant capacitance which allows the voltage to vary directly with the charge.

## Specification

<b>Range/Resolution/ Accuracy:</b>	0-200 kV / 100 V and 0-20 kV / 10 V. Automatic range selection. Accuracy at calibration is better than +/- 5%.
<b>Drift:</b>	<0.1% in 10secs.
<b>Standard:</b>	EN-500081-1 (EMC) and BS7506-2 (Construction).
<b>Calibration:</b>	On a 150mm x 150mm charge plate. Can be calibrated on other charge plate sizes to meet country standards e.g 450 mm x 450 mm for China.
<b>Size, Weight:</b>	124 mm x 24 mm x 64 mm. 175 g.
<b>Construction:</b>	Anodised aluminium case with recessed stainless steel sensing plate for maximum integrity and accuracy.
<b>Operation:</b>	Click button to zero and make readings. Click button again to "hold" the reading. Click again to resume readings. Automatic switch-off after 60 seconds. Low volt indicator shows condition of battery. Can be used in humidities up to 70% rH.
<b>Equipment:</b>	Supplied with carrying case, 9V PPS battery, earth lead and certificate of calibration.
<b>Humidity:</b>	<70 % rH non-condensing.

## Dimensions

### 'On' Button:

- One press turns ON
- Second press holds reading
- Third press reactivates reading
- Power turns off after 60 seconds

Recessed Sensing Head shielded from non-target electrical fields.

Clear 3½ digit LCD Display.

Battery cover secured by two screws.

Earth bonding connection.  
A 3 m curly earth cord with a crocodile clip / 4 mm bayonet connector is supplied.

