



Transient Earth Voltage (TEV) Sensor

On-line PD measurements of air insulated and solid insulated switchgear as been around for over 30 years using TEV (Transient Earth Voltage) sensors. These are small Radio Frequency (RF) Aerials which detect the high frequency PD pulses emanating from the discharge site in the switchgear. These pulses tend to have pulse widths of a few tens of nanoseconds, and act as a good medium for non-intrusive PD detection in switchgear. Detection of these pulses can also be used for localisation of the PD site. The **Transient Earth Voltage (TEV) Sensor** is recommended for this application. The Sensor is magnetically latched to the earthed, metal-casing of the switchgear panel and can therefore be used for on-line testing.



TEV Sensor and Application

Frequency Response	1MHz – 40MHz
Droop time	0.4 μ Sec (5%)
Typical risetime response	Better than 5nSec
Sensor Head Dimension	60mm Diameter x 25mm high
Conductor Material	Brass
Insulator – Material	PVC
Equivalent Capacitance	150pF
Recommended Load	50 Ω
Impedance	
Colour	Black
Output Connector	BNC female
Weight	0.20kg
Coupling	Permanent Magnet

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