

CC-TEV PD Sensor Capacitively Coupled TEV Sensor



Transient Earth Voltage

Partial Discharge activity inside metal clad high voltage plant induces small voltage impulses (called Transient Earth Voltages) on the surface of the metal cladding. TEV's travel around the cladding surface to the outside of the switchgear panel where they can be picked up externally using capacitively coupled transducers (see picture above).

Capacitive Coupler

The Capacitive Coupler sensor detects TEVs as they pass over the cladding of the high voltage plant. The very fast output signals are recorded by the IPEC ASM Monitor. The sensor is enclosed in a durable silicon body for added protection. The body has powerful magnets embedded within it for mechanical coupling to steel enclosures.

Embedded Sensing

Depending on the switchgear type, more accurate signals can be obtained by embedding the sensors inside the switchgear to be monitored.

Note: The sensor is applicable to multiple locations outside / inside switchgear panels, the exact ideal positioning depends upon the switchgear type.

Technical Specification

CC-TEV PD Sensor

www.ipec.co.uk

Ultrasonic Measurements

Frequency Response	5MHz – 80MHz
Recommended Load Impedance	50Ω

Hardware

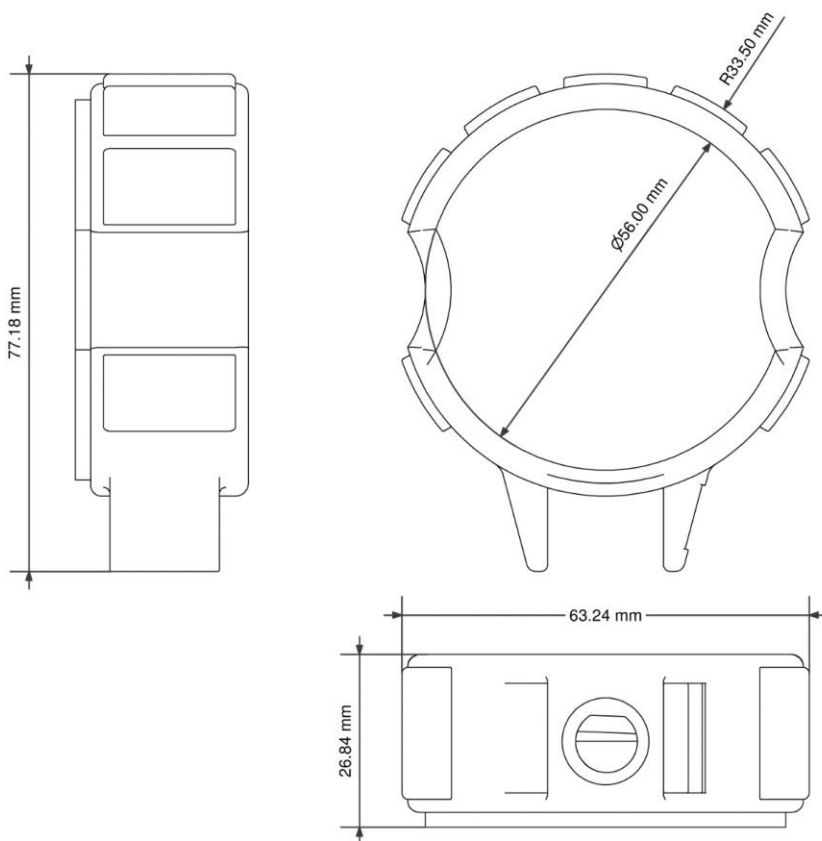
Body Moulding	High temperature silicone rubber
Output Connector	BNC female
Coupling	Magnetic
Power requirements	12VDC, up to 150mA

Dimensions

Size	78 x 64 x 27 mm
Weight	80 g

Safety and EMC	CE-compliant in accordance with Low Voltage Directive (2014/35/EU) and EMC Directive (2014/30/EU)
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Designed and manufactured in the United Kingdom



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