

VDS Sensor

Voltage detection system

The Voltage Detection System (VDS) and Voltage Presence Indicating System (VPIS) are safety devices commonly preinstalled in both air and gas insulated switchgear. The ports are capacitively coupled to the HV. By using a voltage divider to step down the voltage to a safe level, they are used to indicate the presence of Voltage via external equipment.



VDS/VPIS Sensor

Partial discharges (PD) emit small, high-frequency signals that propagate along metallic surfaces and travel through VDS/VPIS ports. This is particularly useful for GIS or vacuum sealed switchgear where traditionally measured TEV signals cannot escaped the sealed chambers .IPEC's compact VDS sensor, used in conjunction with a PD Detector Pro, detects, characterises, and measures the presence and severity of PD activity within switchgear.



The Benefits

- **Easy Access:** The sensor connects to LV ports on the switchgear, allowing consistent, per phase measurements
- **Increased Coverage:** Additional test points means better coverage of each asset, when used in conjunction with the in-built TEV and Ultrasonic sensors, a comprehensive survey of AIS can be carried out.
- **More Compatible Assets:** The sensor can be used on any asset with a VDS/VPIS port, this allows quick surveys of sealed HV assets that have traditionally been difficult to carry out.

Technical Specification

Electrical

Measurement Range	2MHz to 80MHz
Measurement Bandwidth	0 to 80 dBmV
Accuracy	± 1dB
Resolution	± 1dB

Dimensions

Size	60 x 42 x 22 mm
Weight	100g

Physical

Input type	Banana type connector
Output Connector	Multi Sensor Plug