

Sensors Range

Temporary and permanent installation

HVPD's comprehensive range of sensors are available in both portable and permanent versions, and supplied with complete installation kits.

The use of permanent sensors helps reduce the time and cost of performing periodic OLPD diagnostic spot-testing as no outage is required after installation.

Power Cables

HFCT
SMART-TB3™

Switchgear (MV)

Air-Insulated

TEV
HFCT
AA

Solid-Insulated

TEV
HFCT

Gas-Insulated

TEV
HFCT

Rotating Machines

Cable-fed

HFCT
SMART-TB3™

Bus-fed

HVCC

VSD Machines

HVCC
HFCT
SMART-TB3™

Transformers

TEV
HFCT
Bushings Tap



NEW SMART-TB3™ TriBand Sensor

The SMART-TB3™ is a world first, OLPD sensor for holistic plant condition monitoring. It utilises the detection capability of the HFCT sensor to detect high frequency PD and incorporates lower frequency bands for detection of power frequency (50/60 Hz), power quality, harmonics and current signature analysis.



TEV Transient Earth Voltage

The TEV sensor is a capacitive probe designed to detect local, high-frequency PD pulses in switchgear, cable sealing ends, machine cable boxes, transformers and other plant. We supply both indoor (left) and outdoor (right) versions of the TEV sensor for a portable or permanent installation.



AA Airborne Acoustic

The ultrasonic AA sensor detects airborne acoustic signals from PD into air, including corona and surface discharges in indoor air-insulated switchgear (AIS). It can be installed either inside or outside the switchgear panel, with a clear line-of-sight to the PD source.

Sensors Range

HFCT - High Frequency Current Transformer

HFCT50



HFCT75



HFCT100



HFCT140



HFCT220



Internal Aperture	20 mm	40 x 25 mm	45 mm	94 mm	140 mm
External Aperture	50 x 64 mm	90 x 120 mm	110–150 mm	180 mm	237 mm
Installation Type	Permanent	Permanent	Portable & Permanent	Portable & Permanent	Portable & Permanent
High Current Version	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>
Aluminium housing version for improved screening from RF noise	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>
Outdoor Version	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Ex/ATEX Certified Version	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>

Permanent HFCT Installation kits

Permanent HFCT sensor kits are designed for sensor installation inside the cable boxes of the asset under test. Also available in Ex/ATEX versions.

A typical kit comprises:

- 3 HFCT sensors
- 3 silicone mounting collars
- Termination box
- RG223 coaxial cables
- Earth bonding cables
- TEV (optional)



Sensors Range

HVCC - High Voltage Coupling Capacitor (On-line)

7 kV 1000 pF



15 kV 500 pF



16 kV 80 pF



30 kV 1000 pF



Dimensions (mm) W x D x H

134 x 81 x 68

186 x 135 x 197.7

186 x 135 x 197.7

230 x 150 x 230

Ex/ATEX Certified Version



Permanent HFCT Installation kits

Permanent HVCC sensor kits are designed for installation within the cable termination boxes of the rotating HV machines. Also available in Ex/ATEX versions.

The kit comprises:

- 3x HVCC sensors
- Termination box
- RG223 coaxial cables
- Earth bonding cables
- HVCC capacitor boots
- HVCC jumper cables



High Voltage Coupling Capacitor (Off-line)

24 kV 1000 pF



36 kV 1000 pF



100 kV 100 pF



Dimensions (mm) W x D x H

250 x 290 x 430

250 x 290 x 430

250 x 300 x 750

Off-line PD testing up to:

24 kV

36 kV

100 kV