Sonus PD Pro

On-line PD Detection of HV Assets with Data Synchronisation

Hear More Clearly

System detects PD in higher noise environments, reducing the possibility false positives

Rapidly Survey Whole Substation

Detects MV and HV problems before developing into tangible failure risks

Sync Your Data

Sync data locally to your PC with the included software, or sync remotely to the cloud for access across devices

Partial Discharge activity inside metal clad high voltage plant induces small voltage impulses called Transient Earth Voltages on the surface of the metal panels. TEVs travel around the surface to the outside of the switchgear, where they can be picked up externally using the SonusPD Pro. Defects on the surface of high voltage insulators are prone to a phenomenon known as surface tracking. Tracking causes carbon deposits that build up over time, ultimately leading to flashover and insulation failure. The Sonus PD Pro Detector is highly sensitive to the ultrasonic emissions produced by tracking and enables early detection before insulation failure.

IRISS' UHF (Ultra High Frequency) sensor is used to detect PD in EHV cable terminations, GIS (Gas Insulated Switchgear), GIL (Gas Insulated transmission Lines) & GIT (Gas Insulated Transformers). The sensors pick up signals in the UHF range (200MHz-2.0GHz) and are mounted against the insulating barrier spacers that separate components of the HV asset.

Specifications

Part Number	Sonus PD Pro
General Specifications	
Overall Dimensions	190 x 90 x 55 mm (7.48 x 3.54 x 2.17in)
Weight	210 g (0.66lb)
IP/ NEMA Environment Rating	IP54 / NEMA 1
Body Material	Injection molded plastic case
Display	OLED with level LEDs
Connectors and interfaces	Power, Headphones and optional sensors
Control	Membrane keypad
Operating Temperature	0°C (32°F) to 60°C (140°F)
Humidity	0 to 95% RH non-condensing
TEV Specifications	
Measurement Range	0 to 80 dBmV
Measurement Bandwidth	3 to 200MHz (with FM Bandstop)
Resolution and Accuracy	1 dB, +/- 1 dB
Noise Rejection	Yes, with PRPD
Ultrasonic Specifications	
Measurement Range	-6dBµV to + 68dBµV
Resolution and Accuracy	1 dB, +/- 1 dB
Transducer Sensitivity	-65dB (0dB = 1volt/µbar RMS SPL)
Transducer Center Frequency	40 kHz
HFCT Specifications	
Measurement Range	0dB-75dB
Measurement Bandwidth	100kHz to 70MHz
Resolution and Accuracy	5 pC, +/- 5 pC
UHF Specifications	
Measurement Range	0 to 50,000pC
Resolution and Accuracy	1 dB, +/- 1 dB
Bandwidth	200MHz – 2.0GHz
Power	
Internal Battery	Lithium Ion, 3.75V, 2.2Ah, 8.25Wh
Operating Time	5 hours
Battery Charger	
Rated Voltage	100 to 250 VAC, 5V, 3A
Frequency	47 to 63Hz
Country Adapters	UK, EU, Australia, USA
Charge Time	3 hours
Certification	
Safety and EMC	CE-compliant in accordance with Low Voltage Directive (2014/35/EU) EMC Directive (2014/30/EU)
Other	
Warranty	12 Month Limited Warranty

Phone and Web Application	
Communication	Bluetooth
Data Storage	Customer Server
Data Access	Web front end, SAP, Oracle, etc.
Capability	Android, iOS
Reporting	Yes
Results	PD Level, Noise Level, PRPD
PD Detector Kit Contains	
PD Detector	
Headphones	
Function Tester	
Mains Charger	
USB Charger	
Hard wearing PELI™ case	
Optional Accessories	
HFCT Sensor	
UHF Sensor	

Specifications are subject to change without notice.
For the most up-to-date specs, go to www.iriss.com

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