

The Sonus PD

Handheld Switchgear Partial Discharge Detector



The SONUS PD is specifically designed for Partial Discharge (PD) and Airborne Emission (AE) detection on Medium and High Voltage Switchgear. The unit detects Transient Earth Voltage (TEV) signals generated by internal partial discharge as well as ultrasound acoustic discharge generated by surface tracking, arcing or corona. PD detection can be utilized to detect early warning signs of equipment insulation failure. Inspections can be performed quickly and safely by maintenance personnel with minimal training. Fast and accurate diagnosis of problems using the SONUS PD will help you prevent unexpected outages.

TEV and Ultrasound Detection in One Unit

With the ability of the unit to detect either TEV (Transient Earth Voltage) or AE (Airborne Emission), the Sonus PD is ideal for use in facilities with higher voltages. The TEV feature is an effective tool for detection of defects and micro voids in insulation that yield partial discharge while the AE feature allows for the detection of Corona, Treeing (Tracking), Arcing and Loose Connections in electrical gear.

Built-In Bluetooth Functionality

The SONUS PD is unique in PD detection by using a built-in Bluetooth module which allows the SONUS PD to connect with an Android smartphone running the SONUS PD App. The user may then take and store readings in real time. For clients with concerns about security of blue-tooth connections, a version of the SONUS PD is available without blue-tooth connectivity.

Features



Sonus PD
Companion
App



Compatible
With IRISS
PDS & VPDS
Ports



Built-in
Speaker



Compatible
with the
Sonus Vue
App



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Specifications

Model	Sonus PD
TEV Measurements	
Sensor	Capacitive
Measurement Range	0 to 80 dBmV
Resolution	1 dB
Accuracy	±1 dB
Noise Rejection	Yes
Ultrasonic Measurements	
Measurement Range	-6dB μ V to + 70dB μ V
Resolution	1 dB
Accuracy	±1 dB
Transducer Sensitivity	-65dB (0dB = 1 volt/ μ bar RMS SPL)
Transducer Center Frequency	40 kHz
Application	
Communication	Bluetooth & Customer Server
Data Access	Web front end
Capability	Android
Reporting	Yes
Results	dB, PRPD, Noise
Hardware	
Enclosure	Injection molded plastic case
Display	OLED display with 6 display LEDs (PD level)
Control	Membrane keypad
Connectors	Power, Headphones and External Acoustic Sensor
Operating Environment	
Operating Temp	5°C (41°F) to 55°C (131°F)
Humidity	0 to 90% RH non-condensing
IP Rating	IP54
Unit Dimensions	
Dimensions	175 x 89 x 46mm (6.89 x 3.5 x 1.81in)
Weight	300g (0.66lb)
Power	
Internal Battery	Lithium Ion, 3.75V, 2.2Ah
Operating Time	Approx. 8 hours
Battery Charger	
Rated Voltage	90 to 264 V AC, 5V, 2.6A
Frequency	47 to 63Hz
Country Adapters	UK, EU, Australia, USA
Charge Time	2 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

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