

# PDS Series

Partial Discharge Sensor Port

### Listen Through Panels

Quickly and Safely perform closed panel airborne Ultrasound inspections of electrical equipment including Switchgear, Switchboards, Panelboards, Transformers, Motor Control Centers and Process Equipment Panels.

## Safety Without PPE

The PDS gives inspectors the ability to safely perform closedpanel energized inspections, removing the need to open the gear and dress in full, heavy PPE.

#### Save Time and Money

With the installation of these ports the inspector has the ability to use a single point to listen into the cabinet instead of tracing the seam and removing any diffraction of signal that may occur.

Partial Discharge Sensor Ports (PDS) are used in conjunction with a handheld Ultrasound measurement device, allowing the end user to take closed panel Ultrasound decibel readings and listen to the audible signals coming from a piece of equipment. In this way, problems like Arcing, Tracking and Corona can be detected without the need for maintenance personnel to wear PPE. The PDS is a small square plate with no cover with IP10 (NEMA1) rating and has a 3.5mm female adapter for connection to a handheld ultrasound. Note that a special adapter cable may be required depending on the brand and model of handheld being used. Adapter cables for SONUS-XT and SONUS-PD are available from IRISS. Increase your Reliability with our technology!





# Specifications

Specifications	
Part Number	PDS
General Specifications	
Overall Height	7.62 cm (3 in)
Overall Width	7.62 cm (3 in)
IP/ NEMA Environment Rating	IP10 / NEMA 1
Operating Temperature	-40°C (-40°F) to 273°C (523°F)
Body Material	Powder Coated 5052 Aluminum
Gasket Material	UL 94 5VA TPE; -40°C (-40°F) to 273°C (523°F)
Hardware Material	316 Stainless Steel
Voltage Range	Any
Automatically Grounded	Yes
Ultrasonic Receiver Specifications	
Center Frequency	40.0± 1.0KHz
Bandwidth (-6dB)	2.5KHz
Capacitance at 1KHz ±20%	2400 pF
Max. Driving Voltage (cont.)	20 Vrms
Total Beam Angle -6dB	50° typical
Receiver Housing Material	Aluminum
Inspection Capabilities and Application	ns
Ultrasound; Medium/High Voltage Applications	
Certifications	
Certified by UL (USA) & cUL (Can	ada) to the following standards: 50V, 50E, 756C: Impact and Flammability, 746C & 746A-2012, 1558: Impact and Load Resistance, 508A: ANSI 508A
CSA	C22.2 No. 14-13, C22.2 No. 14-10, C22.2 No. 94-M91, C22.2 No.94.1-07, C22.2 No. 94.2-07
IP10 / NEMA 1	
Lloyds of London Type Approval	
American Bureau of Shipping (ABS)	
DNV (Det Norske Varitas) P261 1E Maritime, Vessel and Offshore Applications	

DNV (Det Norske Veritas) P261.1E Maritime, Vessel and Offshore Applications

IEEE C37 20.7 Type 2B, C37 20.2.a.3.6: Impact and Load

IEC 62271-200, 60262271-200,60298 Appendix A, 60068-2-6:2007, 60068-2-3, 60068-2-78:2012

Unconditional Lifetime Warranty

\*Caution: These dimensions are not installation dimensions. Do NOT cut prior to receiving your IRISS IR window and installation template.

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

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Other

Warranty

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