

Window

# The CAP-ENV-PDS Series The Toughest and Most Reliable IR, Ultrasound & Partial Discharge Inspection

The environmentally reinforced CAP-ENV-PDS is a revolutionary inspection window. It combines the power of Thermal imaging, Visual, UV, Ultrasound and Partial Discharge inspections. Industrial applications require solutions that meet numerous criteria where safety and performance are of the utmost importance. The exclusive pharmaceutical-grade reinforced polymer system allows any thermography camera to monitor completely undisturbed assets inside energized electrical equipment in the visual, UV and shortwave, midwave and longwave IR spectrums.

# Embedded 40KHz Airborne Ultrasonic Transducer

Quickly and Safely perform closed panel airborne Ultrasound inspections of your critical electrical equipment. The CAP-ENV-PDS has an embedded 40KHz Airborne Ultrasonic Ceramic Transducer with 3.5mm jack socket. It is compatible with IRISS PD and TEV testing devices such as the Sonus XT and Sonus PD to detect early warning signs such as Arcing, Tracking, Corona and Partial Discharge.

# Unparalleled Field of View

Unlike the round infrared windows, the large format IRISS CAP series and custom infrared windows have a far superior field of view (FOV). The CAP-ENV-PDS-24 series has over 6 times the FOV of a 4 inch diameter round window which gives the thermographer the ability of infinite viewing angles inside the switchgear.

### **Features**



Fixed & Stable Transmission



Arc Containment Tested



Durable and Rugged



E Sentry Connect Asset Management



Poly-View™ Optic



Anti-Fogging Optic



Reinforced Environmental Design



Customizable



Unconditional Lifetime Warranty



Proudly Made in the United States

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## **Specifications**

Model	CAP-ENV- PDS-4	CAP-ENV- PDS-6	CAP-ENV- PDS-12	CAP-ENV- PDS-18	CAP-ENV- PDS-24	
General Specifica	ations					
NEMA Rating	IP67 / NEMA 6					
Voltage Range	Any					
Operating Temperature	-40°C (-40°F) to 273°C (523°F)					
Body and Cover Material	Powder Coated Stainless Steel					
Hardware	316 Stainless Steel					
Gaskets	UL 94 5VA TPE; -40°C (-40°F) to 273°C (523°F)					
Dimension and Optic Specifications						
Optic Material	UL 746 compliant, visual, UV and IR transmissive polymer; -40°C (-40°F) to 325°C (617°F)					
Optic Reinforcing Grill Material	Stainless Steel Reinforcing Grill (IP22/ IP2x Standard)					
Viewing Aperture Dimensions	L= 9.68 cm (3.81 in) H= 9.77 cm (3.85 in)	L= 9.1 cm (3.6 in) H= 15 cm (5.9 in)	L= 23.6 cm (9.3 in) H= 12.7 cm (5.0 in)	L= 39 cm (15.4 in) H= 15 cm (5.9 in)	L= 53 cm (20.9 in) H= 15 cm (5.9 in)	
Overall Dimensions	L= 15.24 cm (6 in) H= 15.24 cm (6 in)	L= 16 cm (6.3 in) H= 21.8 cm (8.6 in)	L= 30.5 cm (12.0 in) H= 20.6 cm (8.1 in)	L= 45.7 cm (20.9 in) H= 21.8 cm (8.6 in)	L= 61 cm (24.0 in) H= 21.8 cm (8.6 in)	
Inspection Capal	pilities and Applica	ations				
Midwave IR	Yes					
Longwave IR	Yes					
Ultraviolet (UV)	Yes					
Ultrasound	Yes					
Visual Inspection	Yes					
Medium/ High Voltage Applications	Yes					
Outdoor Applications	Yes					
Ultrasonic Receiv	ver 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					
Other						
Warranty		Unconditional Lifetime Warranty				

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### Certifications

### **UL & cUL Certifications:**

- UL 50V & UL 50E
- UL 746C & UL 746A-2012
- UL 1558
- UL 508A/ ANSI 508A

### **CSA Certifications:**

- CSA C22.2 No. 14-13
- CSA C22.2 No. 14-10
- CSA C22.2 N0. 94-M91
- CSA C22.2 N0. 94.1-07
- CSA C22.2 N0. 94.2-07

### **IEEE Certifications:**

- IEEE C37.20.7 Type 2B
- IEEE C37 20.2.a.3.6

### **IEC Certifications:**

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

### Other:

- IP67/NEMA 6
- American Bureau of Shipping (ABS)
- DNV P261.1E Maritime, Vessel and Offshore
- Lloyds of London Type Approval



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