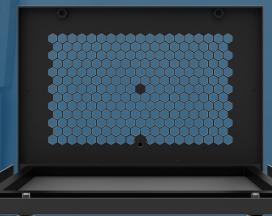


# The CAP-ENV-PDS Series

The Toughest and Most Reliable IR, **Ultrasound & Partial Discharge Inspection** Window



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.

US +1 (941) 907 9128 LATAM +1(941)704-4445 **EMEA** +1(941)704-4445



Unconditional Lifetime Warranty





Customizable



Proudly Made in the **United States** 



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**Features** 



Poly-View<sup>™</sup>

Reinforced

Design

Environmental

Optic



**Fixed & Stable** 

Transmission



E Sentry Connect Asset Management

Anti-Fogging

Optic

Containment







Arc

Tested

## 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	IP54 / NEMA 3R				
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 Capat	oilities 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				
	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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## **Design Standards**

#### UL & cUL:

- UL 50V & UL 50E (Pending)
- UL 746C & UL 746A-2012
- UL 1558 (Pending)

## **IEEE Standards:**

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

### IEC Compliance:

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

### Other:

IP54/NEMA 3R



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