



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.

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

US
+1 (941) 907 9128

LATAM
+1 (941) 704-4445

EMEA
+1 (941) 704-4445

Specifications

Model	CAP-ENV-PDS-4	CAP-ENV-PDS-6	CAP-ENV-PDS-12	CAP-ENV-PDS-18	CAP-ENV-PDS-24
General Specifications					
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 Capabilities and Applications					
Midwave IR	Yes				
Longwave IR	Yes				
Ultraviolet (UV)	Yes				
Ultrasound	Yes				
Visual Inspection	Yes				
Medium/ High Voltage Applications	Yes				
Outdoor Applications	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				
Other					
Warranty	Unconditional Lifetime Warranty				

©2018 IRISS, Inc. All rights reserved. Imagery for illustration purposes only. Specifications are subject to change without notice. Modification of this document is not permitted without written permission from IRISS Inc.

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 NO. 94-M91
- CSA C22.2 NO. 94.1-07
- CSA C22.2 NO. 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



US: +1 (941) 907 9128

LATAM: +1 (941) 704-4445

EMEA : +1 (941) 704-4445

iriss.com