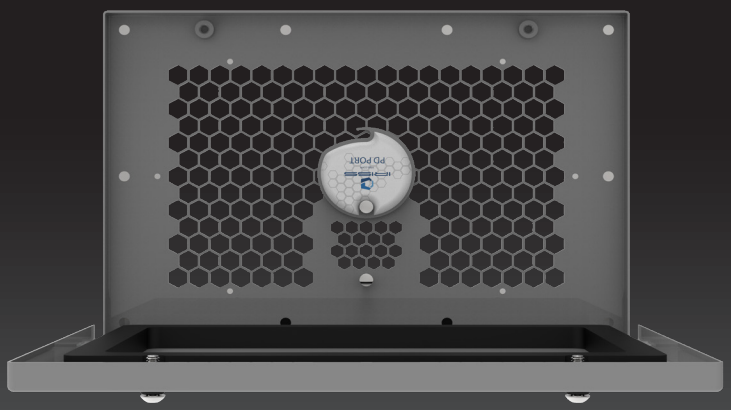
IRISS CAP-ENV-PD Series

Environmentally Sealed Large Format Rectangular Infrared and Ultrasound Inspection Windows

Overview

The CAP-ENV-PD features a reinforced environmentally sealed door design while also providing a large visually-clear infrared (IR) transmissive viewing area. The CAP-ENV-PD also comes equipped with a versatile port for ultrasound inspections – an ideal way to identify electrical faults. Initially developed for MV transformer and switchgear applications, the CAP-ENV-PD is a perfect combination solution for medium and high voltage applications where both IR and Ultrasound inspections are desired.



Key Features

Unparalleled Field of View

Over 6x the FOV of a 4-inch diameter round window, giving the thermographer the ability of infinite viewing angles inside the switchgear.

Built-in Ultrasound Inspection Port

Quickly and safely perform closed panel airborne ultrasound inspections of electrical equipment.

Fixed & Stable Transmission

The polymer IR window systems will maintain fixed and stable transmission (FAST) for the life of the installation.

Patented Poly-View Optic

Our exclusive polymer technology is unaffected by environmental stresses, and enables visual, IR, and UV inspections.

UL Listed

Having passed rigorous standards and testing, our inspection windows are UL Listed (E 491496).

Unconditional Lifetime Warranty

The IRISS unconditional lifetime warranty is unique in the IR industry applying to both the IR window housing and optic.

Specifications

Model	CAP-ENV-12-PD	CAP-ENV-18-PD	CAP-ENV-24-PD
General Specifications			
Overall Height	21.56 cm (8.49 in)	23.19 cm (9.13 in)	22.76 cm (8.96 in)
Overall Width	31.27 cm (12.31 in)	47.02 cm (18.51 in)	61.75 cm (24.31 in)
IP/ NEMA Environment Rating	IP67 / NEMA 6		
Operating Temperature	-40°C (-40°F) to 273°C (523°F)		
Body Material	Powder Coated Stainless Steel		
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		
Optic Specifications			
Viewing Aperture Height	14.02 cm (5.52 in)	14.02 cm (5.52 in)	14.02 cm (5.52 in)
Viewing Aperture Width	23.19 cm (9.13 in)	39.14 cm (15.41 in)	53.85 cm (21.20 in)
Optic Material	Poly-View™ UL 746 compliant, visual, UV and IR transmissive polymer; -40°C (-40°F) to 273°C (523°F)		
Optic Reinforcing Grill Material	Stainless Steel Reinforcing Grill (IP22/ IP2x Standard)		
Inspection Capabilities and Applications			
Midwave IR and Longwave IR; Ultraviolet (UV); Ultrasound; Visual Inspection; Medium/High Voltage Applications			
Certifications			
UL Listed (E491496)			
Certified by UL (USA) & cUL (Canada) 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			
Lloyds of London Type Approval			
American Bureau of Shipping (ABS)			
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			
IEEE 60980-344:2020 Seismic Qualification			
IEC 62271-200, 60262271-200,60298 Appendix A, 60068-2-6:2007, 60068-2-3, 60068-2-78:2012			
Other			
Warranty	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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