

VPFC Series

Crystal Infrared Windows



Environmental Safety

The VPFC Series of are constructed from switchgear-grade Nylon plastic with an aluminum cover and stainless steel mounting screws. Seamless custom gaskets ensure the NEMA4 / IP65 ingress protection rating is maintained.

Any Camera - Any Task

The IRISS Crystal optics work with all ranges of Infrared, Ultraviolet and Visual Inspection Cameras allows any thermographic camera to monitor completely undisturbed assets inside electrical equipment.

Tested and Certified

IRISS IR windows are the most certified windows in the industry, with IEEE, UL, cUL, Lloyds, CSA, DNV and ABS certifications.

The VPFC Series (Viewing Pane Fixed Crystal) IR windows are specially-coated to reduce the transmission drift due to moisture/humidity. However, industrial users are strongly encouraged to investigate the VPT Series of industrial-grade IR windows which are specifically designed for stability in harsh industrial environments and have an unconditional lifetime warranty. The transmission rate characteristics of CaF₂ are suitable for higher temperature applications, shortwave and midwave thermography, and for the visual spectrum. Medium to longwave transmission rates (7-14 micron) are typically between 40%-50% based on the infrared (IR) camera detector sensitivities at different wavelengths.



Specifications

Part Number	VPFC-50	VPFC-75	VPFC-100
General Specifications			
Overall Dimensions	9.1 cm (3.6 in) Ø	12.1 cm (4.8 in) Ø	15.1 cm (5.95 in) Ø
Overall Thickness	2.6 cm (1.0 in)	2.6 cm (1.0 in)	2.6 cm (1.0 in)
IP/ NEMA Environment Rating	IP67 / NEMA 6		
Operating Temperature	-40°C (-40°F) to 273°C (523°F)		
Body Material	UL 94 5VA Nylon (switchgear-grade plastic); -40°C (-40°F) to 273°C (523°F); aluminum cover		
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 Dimensions	5.1 cm (2.0 in) Ø	7.6 cm (3.0 in) Ø	10.2 cm (4.0 in) Ø
Optic Material	Calcium Fluoride Crystal (CaF ₂); -100°C (-148°F) to 1400°C (2555°F)		
Inspection Capabilities and Applications			
Midwave IR and Longwave IR; Visual Inspection; Medium/High Voltage Applications			
Certifications			
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			
IP65 / NEMA 4			
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			
IEC 62271-200, 60262271-200,60298 Appendix A, 60068-2-6:2007, 60068-2-3, 60068-2-78:2012			
Other			
Warranty	Limited 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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