

# 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 to monitor completely undisturbed assets inside electrical equipment.

### UL Listed

Having passed rigorous standards and testing, our inspection windows are UL Listed (E491496). This demonstrates our dedication to continued safety and security in the ever-changing world of electrical power and distribution.

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 CaF<sub>2</sub> 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

Model	VPFC-50	VPFC-75	VPFC-100
<b>General Specifications</b>			
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		
<b>Optic Specifications</b>			
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 <sub>2</sub> ); -100°C (-148°F) to 1400°C (2555°F)		
<b>Inspection Capabilities and Applications</b>			
Midwave IR and Longwave IR; Visual Inspection; Medium/High Voltage Applications			
<b>Certifications</b>			
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			
IEC 62271-200, 60262271-200,60298 Appendix A, 60068-2-6:2007, 60068-2-3, 60068-2-78:2012			
<b>Other</b>			
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](http://www.iriss.com)

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