

# The VPFC Series

## Crystal Infrared Windows



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. 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.

### Any Camera - Any Task

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

### Features



Environmental Design



Proudly Made in the United States



Limited Lifetime Warranty



## Specifications

Model	VPFC-50	VPFC-75	VPFC-100
<b>General Specifications</b>			
NEMA Rating	IP65 / NEMA 4		
Voltage Range	Any		
Operating Temperature	-40°C (-40°F) to 273°C (523°F)		
Body and Cover Material	UL 94 5VA Nylon (switchgear-grade plastic); -40°C (-40°F) to 273°C (523°F); aluminum cover		
Hardware	316 Stainless Steel		
Gaskets	UL 94 5VA TPE; -40°C (-40°F) to 273°C (523°F)		
<b>Dimension and Optic Specifications</b>			
Optic Material	Calcium Fluoride Crystal (CaF <sub>2</sub> ); -100°C (-148°F) to 1400°C (2555°F)		
Viewing Aperture Dimensions	5.1 cm (2.0 in) Ø	7.6 cm (3.0 in) Ø	10.2 cm (4.0 in) Ø
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)
<b>Inspection Capabilities and Applications</b>			
Midwave IR	Yes		
Longwave IR	Yes		
Ultraviolet (UV)	Yes		
Visual Inspection	Yes		
Medium/High Voltage Applications	Yes		
Outdoor Applications*	Yes		
High Temperature Applications	Yes		
<b>Other</b>			
Warranty	Limited Lifetime Warranty		

\* The VPFC is suitable for outdoor applications however, the calcium fluoride crystals IR transmission will degrade faster in outdoor environments.

## 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 N0. 94-M91
- CSA C22.2 N0. 94.1-07
- CSA C22.2 N0. 94.2-07

### IEEE Certifications:

- IEEE C37.20.7 Type 2B

### IEC Certifications:

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

### Other:

- IP65/NEMA 4
- American Bureau of Shipping (ABS)
- DNV P261.1E Maritime, Vessel and Offshore
- Lloyds of London Type Approval



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