

Data Sheet: XPM Series Panel-Mount IR Window

Why Infrared Windows?

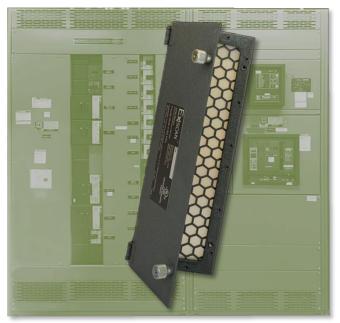
- **Risk Control:** Opening an enclosure to perform periodic infrared scans increases risk of triggering an arc flash incident. Using inspection windows eliminates that high-risk task.
- **Safety:** Closed-panel IR inspection is safer for personnel, plant assets and downstream processes.
- Standards Compliance: NFPA 70E and CSA Z462 prioritize "higher order controls" (like inspection windows) that proactively remove or reduce risk, rather than using PPE to protect against activities that are a known risk.
- Efficiency: Inspect more points in less time with fewer people. The closed-panel process is up to 95% more efficient than opening panels. Saving man-hours saves money.
- **ROI:** Typical IR Window installations will pay for themselves within 1¹/₂ to three inspection cycles.
- **Better Data:** Inspect under high-load, more frequently, without background "noise" (from differential temperatures).
- Inspect the "Uninspectable:" Don't let critical assets go uninspected. How does your facility inspect equipment that is labeled "Dangerous" or is protected by switched interlocks? IR windows provide safe access for infrared scans of otherwise uninspectable assets.

IR Transmission & Accuracy:

- 57% Transmission: Exiscan[™] IR windows feature advanced polymer optics capable of delivering accurate Delta T data.
- **Stable:** Optic is non-reactive with industrial environments, so transmission is stable for decades, for trendable data points.
- Better Data: Accuracy and longevity are two key benefits of Exiscan's[™] polymer optics over traditional crystals.

Monitor Distribution Panels:

XPM IR Windows were created for 600V class Distribution Panels. The long rectangular optic is perfect for scanning the terminals on multiple branch breakers, or across the top/bottom of the main breaker.



Features & Options:

- Structural Integrity: Exiscan IR windows are overengineered for your protection. They are designed and manufactured to be stronger than the enclosures they are mounted to.
 - Stout construction
 - Reinforced optics and mount
 - Impact resistant, load resistant, flame resistant
 - Stainless steel hardware
- Ease of Use: XPM cover is easily opened or secured via captive, knurled thumbscrews with Phillips-head socket. (Also available without cover if locating window behind hinged door/panel as UL Recognized.)
- **Options:** Add gaskets, reinforcement plate or upgrade the door to stainless steel.
- **Pre-Installed:** Ask your Representative how Exiscan[™] can pre-install your XPM IR windows on *replacement panels* or doors for quick installation.

Specifications:

XPM Series / Panel-Mount IR Windows

Measurement				
XPM-AP-10-K# XPM-AP-5-K# XPM-AP-5-K#-(IR Aperture 9.9 x 2.5 in (251.5 x 63.5 mm) 5.0 x 2.5 in (127.0 x 63.5 mm) 5.0 x 5.0 in (127.0 x 127.0 mm)	· · · · · · · · · · · · · · · · · · ·	Thickness 0.5 in (12.7mm) 0.5 in (12.7mm) 0.5 in (12.7mm)
XPM-AP-2-K#		2.0 x 2.5 in (50.8 x 63.5 mm)	3.0 x 3.5 in (76.2 x 88.9 mm)	0.5 in (12.7mm)
Materials & Finish	1:			
Body Cover Finger Guard Optic Cover Screws Mounting Hardware Reinforcement Plate Gaskets (base & cover)		Aluminum (machined from ½" bar stock), powder coated Mild-steel, powder coated (stainless available) Stainless steel, powder coated Proprietary transmissive polymer Knurled aluminum grip around stainless steel philips-head screw, captive and sprung Stainless Steel, #10 with thread-locking patch (optional) Stainless Steel (optional) Silicone		
Compatibility & O				
IR Transmission Environmental Temperature Voltage		Compatible with all brands of mid-wave and longwave IR cameras (3µm to 13.5µm) Unaffected by vibration, moisture, humidty, broad spectrum of acids/alkalis Operating Temperature -40°F (-40°C) to 300°F (150°C) Suitable for low, medium & high voltage applications		
<u> Standards / Testir</u>				
UL CSA IEEE NEMA / Type NFPA 70E	C22.2 (nos C37.20.2 (ii Type 1 (Ind Inspection)	08 (incl. 746C, 90V, etc.) . 14-10; 13-14; 94.1.15; 94.2.15) mpact and load resistance) loor use); IP 20 windows are a higher order contro 70E, CSA Z462 and OSHA mand	ol, compliant	CULUS LISTED #E484231
Other:				#E404231
Warranty Patents Grounding Installation Origin	Pending Automatica Saw-cut, ni	Ily grounds when mounted to a gr	s and workmanship when used for in ounded door/panel le pre-installed on replacement pan	
Part Numbering:				
Part Numbering: <u>XPM</u> Cor	nstruction	Size Cover Cu	stom	
XPM Cor Construction: AP = Alumin AS = Alumin	num Base, M num Base, Si	IIId Steel Cover (UL Listed) tainless Steel Cover (UL Listed) o Cover (UL Recognized)	stom <i>Size / Optic Length:</i> 10 = 10" 5 = 5" 2 = 2"	

Example2: XPM-AS-5-KD-R0500/0500 = 5"x5" IR Window, aluminum base, stainless cover, opening down, w/ reinforcement plate