



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 1½ 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 over-engineered 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

Dimensions:

Measurement	IR Aperture	Footprint	Thickness
XPM-AP-10-K#	9.9 x 2.5 in (251.5 x 63.5 mm)	10.9 x 3.5 in (277 x 88.9 mm)	0.5 in (12.7mm)
XPM-AP-5-K#	5.0 x 2.5 in (127.0 x 63.5 mm)	6.0 x 3.5 in (152.5 x 88.9 mm)	0.5 in (12.7mm)
XPM-AP-5-K#-0500/0500	5.0 x 5.0 in (127.0 x 127.0 mm)	6.0 x 6.0 in (152.4 x 152.4 mm)	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:

Body	Aluminum (machined from 1/2" bar stock), powder coated
Cover	Mild-steel, powder coated (stainless available)
Finger Guard	Stainless steel, powder coated
Optic	Proprietary transmissive polymer
Cover Screws	Knurled aluminum grip around stainless steel philips-head screw, captive and sprung
Mounting Hardware	Stainless Steel, #10 with thread-locking patch
Reinforcement Plate	(optional) Stainless Steel
Gaskets (base & cover)	(optional) Silicone

Compatibility & Operation:

IR Transmission	Compatible with all brands of mid-wave and longwave IR cameras (3µm to 13.5µm)
Environmental	Unaffected by vibration, moisture, humidity, broad spectrum of acids/alkalis
Temperature	Operating Temperature -40°F (-40°C) to 300°F (150°C)
Voltage	Suitable for low, medium & high voltage applications

Standards / Testing / Certifications:

UL	50V, 50, 508 (incl. 746C, 90V, etc.)
CSA	C22.2 (nos. 14-10; 13-14; 94.1.15; 94.2.15) - cUL
IEEE	C37.20.2 (impact and load resistance)
NEMA / Type	Type 1 (Indoor use); IP 20
NFPA 70E	Inspection windows are a higher order control, compliant with NFPA 70E, CSA Z462 and OSHA mandates



Other:

Warranty	Unconditional Lifetime Warranty for materials and workmanship when used for intended purpose
Patents	Pending
Grounding	Automatically grounds when mounted to a grounded door/panel
Installation	Saw-cut, nibbler, plasma cutter / Also available pre-installed on replacement panels/doors
Origin	Proudly Made in the USA

Part Numbering:

XPM -- **Construction** -- **Size** -- **Cover** -- **Custom**

Construction:

- AP = Aluminum Base, Mild Steel Cover (UL Listed)
- AS = Aluminum Base, Stainless Steel Cover (UL Listed)
- A = Aluminum Base, No Cover (UL Recognized)

Size / Optic Length:

- 10 = 10"
- 5 = 5"
- 2 = 2"

Cover:

- KD = Knurled cover screw, opening Downward
- KL = Knurled cover screw, opening Left (book-style)
- KR = Knurled cover screw, opening Right
- KU = Knurled cover screw, opening Upward
- O = No Cover

Custom Configurations:

- R = Reinforcement Plate
- G = Gasket (base & door)
- 0500/0500 = 5" x 5" Optic Dimensions (applies to the XPM-##-5-## series only)

Example1: XPM-AP-10-KL = 10" IR Window, aluminum base, steel cover, opening left

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