

Rotatable IR Port™

Powersmiths Rotatable IR (Infrared) Port enables safe, non-invasive thermographic imaging of live equipment without exposing maintenance personnel to electrical hazards, including Arc-Flash.

APPLICATION

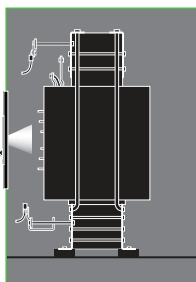
The 360° Rotatable IR Port significantly increases the viewing area of equipment enclosures compared to fixed IR windows. It is designed for use on: switchgear, motors, drivers, transformers, power distribution units and any other type of equipment that produces heat under normal or abnormal operating conditions.

By installing the Rotatable IR Port on electrical equipment owners can:

- Reduce risk of injury by eliminating the need for operators to be exposed to live electrical parts
- Save time by allowing quick and comprehensive viewing of an enclosure through a single rotating port
- Save money by providing technicians quick and easy access without an accompanying electrician
- Enhance equipment reliability by facilitating more frequent preventative maintenance inspections

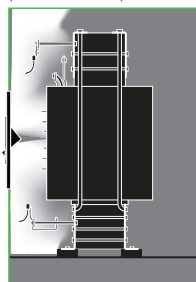
ByThe Rotatable IR Port can be retrofitted onto existing equipment; or can be factory-installed by original equipment manufacturers.

Traditional Fixed IR Window



Viewable area shown in white.

Powersmiths Rotatable IR Port
(recessed model)



Rotatable IR Port™



Rotatable IR Port™ on
Energy Station™ PDU



Rotatable IR Port™ on
OPAL™ Transformer

DESCRIPTION

Traditionally, thermal imaging requires technicians to open and inspect live operating equipment. Arc Flash legislation requires that persons exposed to live electrical equipment wear specialized protective equipment and follow strict working conditions. To comply with legislation, considerable cost and time are required for predictive and preventative thermographic inspections.

An alternate approach relies on the installation of infrared viewing windows on equipment enclosures. These allow operators to thermal-scan interior surfaces without opening the enclosure, but their fixed position can leave some areas of the enclosure hidden from view.

Powersmiths Rotatable IR Port overcomes the limitations of both traditional approaches by providing a full 360 degree viewing radius; substantially expanding the viewing scope of fixed IR windows while eliminating the need for technicians to engage in the risky and costly practice of opening enclosures to conduct inspections.

KEY FEATURES

- Enables thorough (360°) thermographic inspections without exposing personnel to live electrical components and associated Arc Flash hazards
- Substantially increased the viewing area and resulting maintenance effectiveness compared to fixed IR windows
- Makes preventative and predictive maintenance programs easier and less costly to implement
- Safeguards equipment assets
- Helps avoid operational disruptions



Technician scans the interior of a Powersmiths Energy Station™ PDU through the Rotatable IR Port with recessed mount as part of a preventative maintenance program.

TECHNICAL SPECIFICATIONS

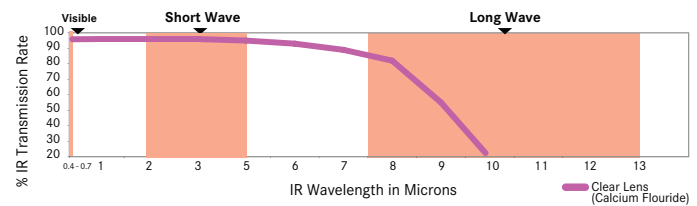
PHYSICAL

Mounted on the exterior housing of equipment, the Rotatable IR Port provides technicians with a 360 degree view of the interior compartments of live equipment.

The unit comprises of three components:

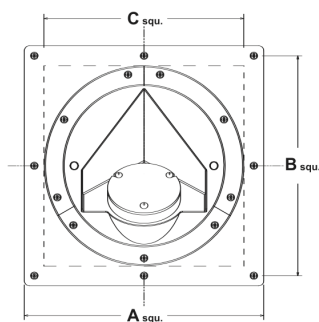
- A fixed base that is mounted to the enclosure wall
- A rotatable (360 degree) assembly mounted to the base via a bezel
- An IR viewing port mounted to a rotatable assembly for the actual thermographic imaging

IR Port Material Transmission Rates

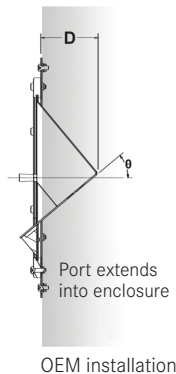


AVAILABLE MODELS

Figure 1.1



RECESSED MOUNT:



FLUSH MOUNT:

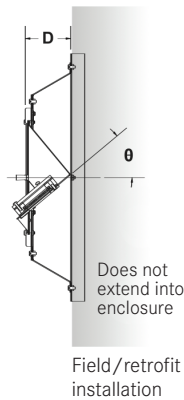


Figure 1.1 - Dimensions

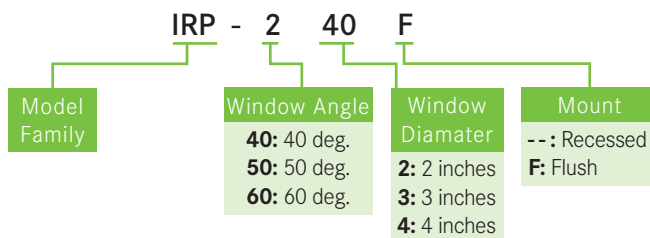
RECESSED MOUNT PORT:

Model	A	B	C	D	O
IRP - 240	12"	11"	10"	2.8"	40°
IRP - 340	14"	13"	12"	3.6"	40°
IRP - 350	14"	13"	12"	3.0"	50°
IRP - 370	14"	13"	12"	3.1"	60°

FLUSH MOUNT PORT:

Model	A	B	C	D	O
IRP - 350F	19.5"	18.8"	18"	3.67"	50°
IRP - 460F	19.5"	18.8"	18"	3.67"	60°

ORDERING INFORMATION



NOTE: The recessed mount unit is intended for OEM applications due to reduction of mechanical and electrical clearances which require evaluation by the original equipment manufacturer. The flush mount is intended for both OEM and field installations as the unit does not protrude into the enclosure.

IRP CERTIFICATIONS:

UL and cUL recognized to UL50. File No. E329179

VIEWING WINDOW CERTIFICATIONS:

UL recognized to UL508A and CSA C222.2 No. 14 and Lloyd's Register type approved

WARRANTY:

10 year pro-rated



Technical specifications subject to change without notice.

Copyright © 2019, Powersmiths International Corp. All rights reserved. Energy Station and Rotatable IR Port are trademarks of Powersmiths International Corp.

All other trademarks are those of their respective owners.

Please print responsibly.

POWERSMITHS

POWERSMITHS INTERNATIONAL CORP.

Phone: (905) 791-1493

Toll-free: (800) 747-9627

8985 Airport Road, Brampton, ON L6T 5T2 Canada

Fax: (905) 791-8870

Email: info@powersmiths.com

www.powersmiths.com