Infrared Window Solutions
I Series – Intelligent IR Windows

IRtech
www.irtec.it

I

"Installing Intelligent IR Windows is a cost effective method for performing thermal surveys in accordance with NFPA70E requirements."

Thomas Swan, UK & US

"We highly recommend Intelligent IR Windows as they save time and money whilst keeping personnel safe."

L H Group, UK

CERTIFIED BY
sira CERTIFICATION

c**RU**us

IRtech
Infrared Technology

I Seres – Intellgent IR Wndows

Get More For Less

[SAFE]

Manufactured using time proven broadband crystal and aluminum materials.

Certified by Underwriters Laboratories (UL) to the latest UL50V standards for type 3/12 equipment.

Fully grounded design eliminates the risk of electric shock.

[EFFICIENT]

Incorporating a patent pending quick release spring loaded cover needing only 1/4 turn to open, the I Series Windows saves you dollars every time you use it!

Supplied fully assembled from the factory, the I Series Window does not require on-site gasket assembly.

Removable/Reusable design means you can reuse fthe I Series Intellgent IR Window on new/replacement switchgear.

[INTELLIGENT]

Downloadable transmission correction information gives maximum accuracy.

Embedded RFID tag and barcode enables individual Window identification.

Reference images, temperature correction,

I Series – Intelligent IR Windows

Benefits

The latest generafion off Intelligent IR Windows take electrical inspection and predictive maintenance to a new level of safety, efficiency and accuracy. Every IW Series Intelligent IR Window comes with the following great features;

[SAFETY]

Manufactured from industrial grade materials proven to withstand electric arcs, the IW Series Intelligent IR Windows help maximise your inspection safety. The IW Series Intelligent IR Windows are also Underwriters Laboratories (UL) recognized to the latest IR window standards.

[SPEED]

No more wasting time removing multiple bolts. Using a simple quarter turn fixing and spring loaded hinged cover, the time taken to perform an inspection is dramatically reduced saving you both time and money.

[COMPATIBILITY]

The I Series Intelligent IR Windows are supplied wfifth downfloadabfle CONNECT ™ cross platform database and RoutePLANNIR™ PDA software allowing users to; create route based schedules, annotated reports, correct transmission and export data cross linked to each individual Intelligent IR Window.

[FLEXIBILITY]

Maximize your investment, don't let IR Windows retire with your old equipment, the IW Series Intelligent IR Windows are completely removable and reusable, helping reduce future capital costs.

[INTELLIGENCE]

Every I Series Intelligent IR Wfindow includes a unique multiple tagging system allowing users to download specific calibration maps, transmission correction data and algorithms for each IR Window.

[LONGEVITY]

Each I Series Intelligent IR Window uses broadband IR crystal optics with HydroGARD™ protective coating to prevent moisture degradation. Rigorously tested to International Standards, the I Series Intelligent IR Windows will remain crystal clear for the life of the installation.

I Series – Intelligent IR Windows

Key Features

With over 60 years combined experience in the infrared windows and thermography market, understands your IR Window needs. In the I Series Intelligent IR Windows, it provides a **Safe, Intelligent** and **Efficient** solution to your electrical inspection requirements.

6 reasons why you should choose the I Series Intelligent IR Windows:-

1
Spring Loaded hinged cover with ¼ turn access key

2
Unique IR Window identifiers using RFID, Barcodes and Serial Numbering

3
TriGround instant earthing

4
Three pillar shock absorbing ring

5
Compatible with all Thermal/UV/Fusion & Visual inspections

6
Custom designed o-ring gasket for enhanced fit and seal

I Series – Intelligent IR Windows

Features

Durable

Certification
The I3000 and I4000 Wfindows are ffuflfly cerfified and ftesfted to the following standards: UL50, UL50V, UL1558
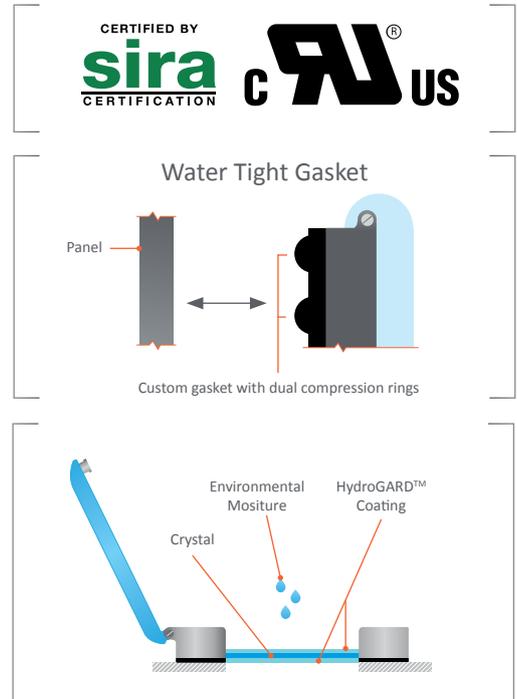
Intrinsic fit O-ring Gasket
The O-rfing gaskeft on fthe I Series Intellgent IR Windows uses a unique design to give the gasket an intrinsic fit. With dual ridge design, the O-ring gaskets fit closer and tighter into the unit, giving a greatly improved fit to your panel.

HydroGARD™ Coated broadband crystal
HydroGARD™ – The I3000 and I4000 Windows are specially coated with an advanced formula designed to protect the crystal from moisture degradation. The protective coating allows the windows to be used both indoor and outdoor without the need for differing models or part numbers.

We are so confident about the I3000 and I4000 Windows that we offer a lifetime warranty against any manufacturing defects.
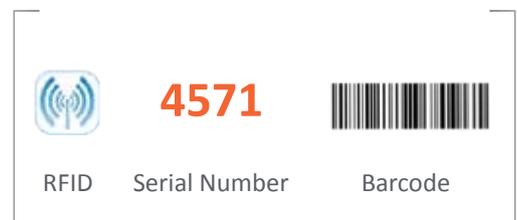
Water Tight Gasket

Panel

Custom gasket with dual compression rings

Environmental Mositure

HydroGARD™ Coating

Crystal

Intelligent

Intelligent Window Identity
Each I3000 and I4000 Window is easily identifiable through three different methods:

» Serial No Identification
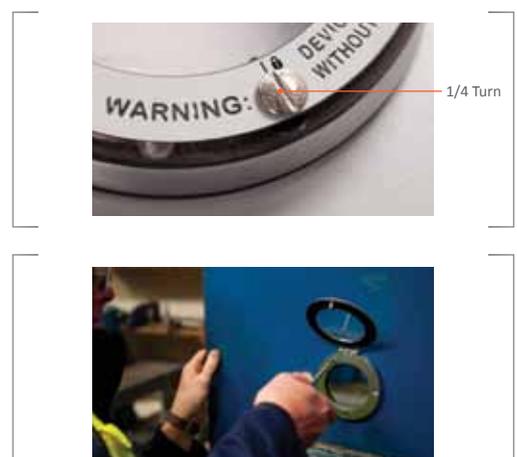» Barcode Identification
» In-built 13.56 MHz RFID tag

4571

RFID   Serial Number   Barcode

Efficient

1/4 turn locking system
1/4 turn locking system, allows for quick and easy access, saving up to 10 seconds per I Series Window when compared with other IR window manufacturers. The I3000 and I4000 Windows also include a spring loaded cover, reducing the risk of losing or damaging the Window cover.

WARNING: 1/4 Turn

Easy-to-install design
From removing the Window out of its packaging to fitting it in the panel the I Series Window will save you time and money. The Windows come as pre-built units and only need to be attached to the panel.

I Series – Intelligent IR Windows

Accuracy made easy

Transmission Correction Curves

The I Series Infrared Windows undergo a stringent calibration sequence. Each individual Window is thoroughly tested in a transmission calibration chamber, using a calibrated thermal imager and blackbody sources to determine correction data for that window.

Using data collected in the transmission chamber software automatically records the data collected and creates a unique transmission correction algorithm. The software then produces a graph showing the actual and best fit lines. Correction curves are then made available to thermographers via the internet using RFID Tags, Barcodes or Serial Numbers.

I Series – Intelligent IR Windows
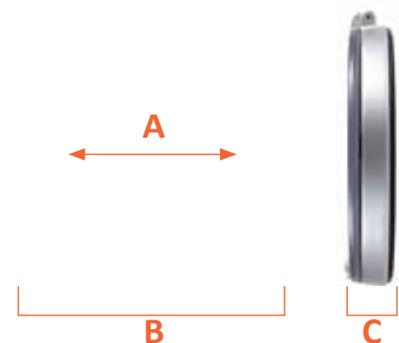
I3000 & I4000

Description

The I3000 and I4000 Series of Intelligent IR Windows are the next step forward in infrared (IR), ultraviolet (UV), Fusion and visual inspection of live electrical components. The I Series Intelligent IR Windows expand on industry proven techniques and materials to bring a rugged but flexible Intelligent IR Window incorporating transmission correction information and routeplanning software in one high value package.

Features

The I3000/I4000 IR WIndows are packed with the following features;

- » UL recognised for type 3/12 installations both indoor and outdoor
- » Broadband crystal allows Thermal/UV/Fusion and Visual inspections
- » Data correction maps available

Specifications		
Crystal Insert Diameter	80mm (3.2in)	100mm (3.9in)
Viewing aperture diameter	73mm (2.9in)	93mm (3.7in)
Viewing aperture area	4186m² (5.6in²)	6794mm² (9.79in²)
Thickness	2mm (0.08in)	4mm (0.16in)
HydroGARD Coating	Yes	
Shortwave IR capable	Yes	
Midwave IR capable	Yes	
Longwave IR capable	Yes	
Ultraviolet (UV) capable	Yes	
Visual capable	Yes	
Fusion capable	Yes	
Ingress Protection	Yes	
Certification		
Underwriters laboratories (UL) recognised	Yes	
UL50	Type 3/12	
UL746C	Yes	
UL94	Yes	
UL50V	Yes	
UL1558	Yes	
General Specifications		
Maximum Temperature	Gaskets: 250˚C (482˚F)	
	Body: 659˚C (1218˚F)	
	Optic: 1400˚C (2552˚F)	
NEMA rating	Type 3/12 (UL Third Party Certified)	
Vibration rating	IEC60068-2-6	
Humidity rating	IEC60068-2-3	
Warranty	Lifetime replacement against manufacturing defects	

	A	B	C
I3000	73mm (2.9in)	103mm (4.1in)	19.5mm (0.8in)
I4000	92mm (3.7in)	123mm (4.9in)	21.5mm (0.85in)

Supplied with

- » I3000/I4000 (order dependant) » Installation Instructions
- » Installation Drill template
- »
- » Fixing Screws