

FlexIR-Clear Solutions

A Clear Solution to an Everyday Problem

IRISS is the only global infrared (IR) window manufacturer with customizable solutions for unique applications. The FlexIR-Clear range of products is another innovative addition to the Custom Solutions from IRISS to ensure that your inspection windows meet your needs and applications.

One of the most difficult things to overcome in infrared inspections of electrical systems is imaging through the clear polycarbonate safety guards that are typically installed in front of electrical connections and which completely block the transmission of infrared radiation (see Fig 2). These guards have a very important function as they maintain the IP20 touch-safe requirement by ensuring that no one can accidentally touch the energized components when the panel cover is removed.

The FlexIR-Clear range of products are a clear polycarbonate grill that is IP20 compliant and allows direct temperature measurement of energized components for infrared and visual inspections while ensuring the operators cannot come in contact with the energized components. They are available in custom sizes allowing inspections to be completed on those unique applications without the increased risk associated with removing covers or guards.

Consult with your IRISS representative to design a custom FlexIR-Clear solution that will protect your personnel, critical equipment and processes.



IRISS FlexIR solutions behind standard IR Windows allow safer closed panel energized inspections of Electrical Distribution Equipment

FlexIR-Clear Solutions Features:

- Sized to fit your application
- Manufactured from Makrolon® Polycarbonate materials enables viewing in the visual, UV, shortwave, midwave and longwave IR spectrums
- Supplied with plastic fixing hardware and cutting templates
- Thermographers gain full access to view connections, absent of the risks associated with internal guard removal
- Proven compatibility with acids, alkalis, UV, moisture, humidity and vibration
- Patented design complies with IP2x standard for safe maximum hole size and fail-safe design
- Inspection procedure is non-invasive, faster and safer, saving you time and money
- Data collection under peak load makes identification of faults more accurate and easier
- Durable

Easily Monitor:

- UPS Systems
- Main lug connections on Motor Control Centers, Switchboards and Panelboards
- Long Rows of Connections
- Multiple Connections Located Close to Window
- Commutator Slippage
- Couplings Under Guards
- Mechanical Systems Behind Polycarbonate or Metal Guards

Protected by our unconditional lifetime warranty



Fig 1. IR image of Blackbody at 149°F with no obstructions



Fig 2. IR image taken through Plexiglas – Note inability to read Blackbody temperature source

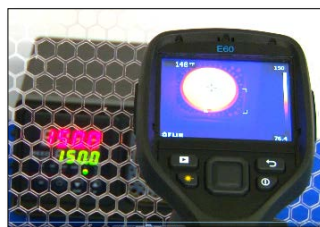


Fig 3. IR image taken through FlexIR-Clear viewing Grill. IR camera is able to view and measure the Blackbody temperature source

Material

FlexIR-Clear Series of Products are made from Makrolon® with the following characteristics:

•Tensile Strength (Yield)	9,000 psi per ASTM D638 test method
•Tensile Strength (Ultimate)	9,500 psi per ASTM D638 test method
•Compressive Strength	12,500 psi per ASTM D695 test method
•Flexural Strength	13,500 psi per ASTM D790 test method
•Dielectric Constant (60 Hz)	3.17 per ASTM D150 test method
•UL 94 Flammability Rating	V0 @ 0.060"; V0 5VA @ 0.118

US : +1 (941) 907 9128

APAC : +61 (0) 3 9872 3000

EMEA : +44 (0) 1245 399 713

iriss.com