

IRISS Inc.



#### 1. Product Name

 CAP-CT Platinum Series Infrared Visual Inspection Window with cover

#### 2. Manufacturer

IRISS Inc.

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# 3. Product Description

## **CAP-CT Platinum Series Visual Inspection Windows**

The CAP-CT Platinum Series has the largest visually clear infrared (IR) transmissive viewing window area with a protective cover. The exclusive patented, industrial-grade, reinforced Poly-View System™ polymer can be used by any make or model of infrared and ultraviolet camera.

#### **Basic Use**

The essential element for electrical safety is to protect personnel by ensuring that all equipment is in an electrically safe condition before any maintenance tasks are commenced. The CAP-CT Platinum Series is primarily used as viewing windows that allows essential maintenance tasks such as infrared, ultraviolet and visual inspections of electrical equipment to be completed while the energized equipment remains closed and in a safe condition ensuring workers are never exposed to the dangers of arc flash or electrocution.

#### **Materials and Finishes**

The window housing and cover are constructed of aluminum with 316 stainless steel hardware. Custom materials are also available. Gasket material is HT-800 closed cell, medium density silicone.

Infrared lens material is an aluminum reinforced visual, UV and IR transmissive polymer complying with UL and CSA requirements for infrared inspection windows.



#### **Benefits**

- Durable
- Fixed and stable transmission (FAST)
- Covered window for additional protection
- IR window construction materials and colors can be customized to clients specification
- The larger rectangular viewing area provides an unparalleled field of view when compared to traditional round IR windows.
- The exclusive industrial-grade, reinforced Poly-View System polymer allows any model of IR and UV camera to monitor completely undisturbed energized components inside electrical equipment
- The larger rectangular viewing area provides an unparalleled field of view (FOV) when compared to traditional round IR windows
- Can be used both indoors and outdoors
- The CAP-CT offers locking covers for areas of high traffic and protection from impacts, flying debris moisture and dust
- Water and dust ingress complies with IEC IP65 and NEMA 250 Type 4

#### **Product Limitations**

Do not use in temperatures less than -40 degrees F (-40 degrees C) or greater than 617 degrees F (325 degrees C).

#### **Dimensions**

See Table 1.

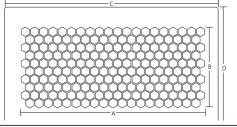






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#### Table 1—CAP-CT Dimensions



	Window Dimensions [inches (mm)]		Overall Dimensions [inches (mm)]	
Model	A	В	C	D
CAP-CT-4	3.81" (96.8 mm)	3.85" (97.7 mm)	6" (152.3 mm)	6" (152.3 mm)
CAP-CT-6	3.6" (91 mm)	5.9" (150 mm)	6.3" (160 mm)	8.6" (218 mm)
CAP-CT-12	9.3" (236 mm)	5" (127 mm)	12" (305 mm)	8.1" (206 mm)
CAP-CT-24	20.9" (530 mm)	5.9" (150 mm)	24" (610 mm)	8.6" (218 mm)



#### 4. Technical Data

#### **Applicable Standards**

#### American Bureau of Shipping [ABS] Approved

Certificate No. 11-HS807296-PDA

#### American Society of Testing and Materials (ASTM)

■ **ASTM F2281-2004(2012)** Standard Specification for Stainless Steel and Nickel Alloy Bolts, Hex Cap Screws and Studs, for Heat Resistance and High Temperature Applications

#### Canadian Standards Association (CSA)

- CSA-C22.2 No. 14-13 Industrial Control Equipment 12th Ed.
- CSA-C22.2 No. 94-M91 Special Purpose Enclosures 4th Ed.
- CSA-C22.2 No. 94.1-07 Enclosures for Electrical Equipment
- CSA-C22.2 No. 94.2-07 Enclosures for Electrical Equipment

#### Det Norske Veritas (DNV) GL

■ P261.1E Maritime, Vessel and Offshore Applications Approved

#### Institute of Electrical and Electronics Engineers (IEEE)

■ IEEE C37.20.2.a.3.6 mandatory impact and load test requirements for visual viewing panes for Metal-Clad and Station Type Cubicle Switchgear

#### International Electrochemical Commission (IEC, IP Code)

- **IP65/NEMA 4** Enclosures constructed for either indoor or outdoor use to provide a degree of protection to personnel against incidental contact with the enclosed equipment
- IP22/IP2X Minimum requirements for the design of electrical accessories for indoor use
- ANSI/IEC 60529-2004 (R2011) Degrees of Protection Provided by Enclosures (IP Code 65)

#### **International Standards Organization (ISO)**

■ ISO 9001:2008 Certificate No. 74 300 3797

#### Lloyd's of London

Certificate No. 05/00026

## National Electrical Manufacturers Association (NEMA)

- Type 1
- Type 3: Viewport may be marked Raintight
- Type 3R: Viewport may be marked Rainproof
- Type 2, 5, 12, 12K and 13: Viewport may be marked driptight or Dusttight.

Ratings above are when installed on a flat surface of a suitably rated enclosure.

# Underwriter's Laboratories (UL) and Canadian Underwriters Laboratories (cUL)

- **UL 50V** Infrared Viewports
- UL 50E Enclosures for Electrical Equipment, Environmental Considerations
- UL 746C Polymeric Materials Use in Electrical Equipment Evaluations
- **UL 1558** Metal-Enclosed Low-Voltage Power Circuit Breaker Switchgear
- UL 508A/ANSI UL 508A Industrial Control Panels
- UL 94-2013 Tests for Flammability of Plastic Materials for Parts in Devices and Appliances
- **UL 746A-20**12 Polymeric Materials Short Term Property Evaluations







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### **Environmental Considerations**

IRISS Inc. uses recycled aluminum in the production of CAP-CT Series frames.

## 5. Installation

- Install the CAP-CT Platinum Series visual inspection window in accordance with the CAP Series Installation Guide
- Once an installation location has been selected, apply the supplied cutting template to the side of the panel where the window is to be fitted
- Using a center punch, mark all the fixing holes
- Use a <sup>9</sup>/<sub>32</sub> inch (7 mm) drill bit to drill the center punched holes and if using a nibbler, drill a pilot hole along line
- Cut appropriate sized hole to meet project requirements and CAP-CT model being installed
- De-burr cut edges and peel away the remaining portion of the cutting template
- Treat all bare metal with a protective anti-corrosion coating before installing the CAP-CT unit
- Place the body of the CAP-CT in the panel hole and secure with  $\frac{7}{16}$  inch nuts
- Tighten nuts in accordance with the CAP Series Installation Guide

#### **Delivery, Storage and Handling**

Deliver CAP-CT Platinum Series visual inspection window and accessories in manufacturer's original packaging with project identification information clearly shown. Instruction for storage and handling will be provided upon shipment.

# 6. Availability and Cost Availability

Standard stock sizes and materials are generally available within five days. Custom products are delivered within 10–15 business days. Contact IRISS Inc. directly for delivery times for products using custom materials or sizes.

#### Cost

Contact IRISS Inc. directly for material cost.

# 7. Warranty

Unconditional lifetime warranty for the period of the installation applies not only to the workmanship of the window housing but also applies to the durability and stability of the optic in the proposed environment.

#### 8. Maintenance

Regular cleaning to ensure glazed area is clear. Little maintenance is required if the door is kept closed.



## 9. Technical Services

As well as offering the CAP-CT Series in standard stock materials, IRISS Inc. will construct view windows or ports with custom materials to meet clients' needs.

# 10. Filing Systems

- CMD
- Additional product information is available from the manufacturer upon request



