

The CAP-CT-PDS Series

The Most Versatile & Reliable IR, Ultrasound & Partial Discharge Inspection Window

The industrial-grade reinforced CAP-CT-PDS is a revolutionary inspection window. It combines the power of Thermal imaging, Visual, UV, Ultrasound and Partial Discharge inspections. Industrial applications require solutions that meet numerous criteria where safety and performance are of the upmost importance. The exclusive pharmaceutical-grade reinforced polymer system allows any thermography camera to monitor completely undisturbed assets inside energized electrical equipment in the visual, UV and shortwave, midwave and longwave IR spectrums.

Embedded 40KHz Airborne Ultrasonic Transducer

Quickly and Safely perform closed panel airborne Ultrasound inspections of your critical electrical equipment. The CAP-CT-PDS has an embedded 40KHz Airborne Ultrasonic Ceramic Transducer with 3.5mm jack socket. It is compatible with IRISS PD and TEV testing devices such as the Sonus XT and Sonus PD to detect early warning signs such as Arcing, Tracking and Corona.

Unparalleled Field of View

Unlike the round infrared windows, the large format IRISS CAP series and custom infrared windows have a far superior field of view (FOV). The CAP-CT-PDS-24 series has over 6 times the FOV of a 4 inch diameter round window which gives the thermographer the ability of infinite viewing angles inside the switchgear.

Features



Fixed & Stable
Transmission



Arc
Containment
Tested



Durable and
Rugged



E Sentry
Connect
Asset
Management



Poly-View™
Optic



Anti-Fogging
Optic



Customizable



Proudly
Made in the
United States



Unconditional
Lifetime
Warranty

Specifications

Model	CAP-CT-PDS-4	CAP-CT-PDS-6	CAP-CT-PDS-12	CAP-CT-PDS-18	CAP-CT-PDS-24
General Specifications					
NEMA Rating	IP65 / NEMA 4				
Voltage Range	Any				
Operating Temperature	-40°C (-40°F) to 273°C (523°F)				
Body and Cover Material	Powder Coated 5052 Aluminum				
Hardware	316 Stainless Steel				
Gaskets	UL 94 5VA TPE; -40°C (-40°F) to 273°C (523°F)				
Dimension and Optic Specifications					
Optic Material	UL 746 compliant, visual, UV and IR transmissive polymer; -40°C (-40°F) to 325°C (617°F)				
Optic Reinforcing Grill Material	Aluminum Reinforcing Grill (IP22/ IP2x Standard)				
Viewing Aperture Dimensions	L= 9.68 cm (3.81 in) H= 9.77 cm (3.85 in)	L= 9.1 cm (3.6 in) H= 15 cm (5.9 in)	L= 23.6 cm (9.3 in) H= 12.7 cm (5.0 in)	L= 39 cm (15.4 in) H= 15 cm (5.9 in)	L= 53 cm (20.9 in) H= 15 cm (5.9 in)
Overall Dimensions	L= 15.24 cm (6 in) H= 15.24 cm (6 in)	L= 16 cm (6.3 in) H= 21.8 cm (8.6 in)	L= 30.5 cm (12.0 in) H= 20.6 cm (8.1 in)	L= 45.7 cm (20.9 in) H= 21.8 cm (8.6 in)	L= 61 cm (24.0 in) H= 21.8 cm (8.6 in)
Inspection Capabilities and Applications					
Midwave IR	Yes				
Longwave IR	Yes				
Ultraviolet (UV)	Yes				
Ultrasound	Yes				
Visual Inspection	Yes				
Medium/ High Voltage Applications	Yes				
Ultrasonic Receiver Specifications					
Center Frequency	40.0± 1.0KHz				
Bandwidth (-6dB)	2.5KHz				
Capacitance at 1KHz ±20%	2400 pF				
Max. Driving Voltage (cont.)	20 Vrms				
Total Beam Angle -6dB	50° typical				
Receiver Housing Material	Aluminum				
Other					
Warranty	Unconditional Lifetime Warranty				

Certifications

UL & cUL Certifications:

- UL 50V & UL 50E
- UL 746C & UL 746A-2012
- UL 1558
- UL 508A/ ANSI 508A

CSA Certifications:

- CSA C22.2 No. 14-13
- CSA C22.2 No. 14-10
- CSA C22.2 N0. 94-M91
- CSA C22.2 N0. 94.1-07
- CSA C22.2 N0. 94.2-07

IEEE Certifications:

- IEEE C37.20.7 Type 2B
- IEEE C37 20.2.a.3.6

IEC Certifications:

- IEC 62271-200
- IEC 60262271-200
- IEC 60298 Appendix A
- IEC 60068-2-6:2007
- IEC 60068-2-3
- IEC 60068-2-78:2012

Other:

- IP65/NEMA 4
- American Bureau of Shipping (ABS)
- DNV P261.1E Maritime, Vessel and Offshore
- Lloyds of London Type Approval



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