XP40 thermal image IP hybrid series
- UL range

PTZ camera station, hazardous location

Overview

The Oxalis XP40 thermal imager is an explosion protected PTZ camera station for use in hazardous areas in onshore, offshore, marine and heavy industrial environments where thermal imaging is required for specific process or security applications.

The camera housings are designed specifically for the Americas markets or where UL standards on Class and Division have been specified.

The base unit carries dual NPT cable entries with easy access for cable termination during installation as standard, maximising compatibility and ease of use with existing fixed conduit installations.

Our camera stations are designed and manufactured for longevity in harsh environments, require minimal maintenance and are fully certified to UL standards as required by OSHA in both safe and hazardous areas.

See separate datasheet for ATEX/IECEx & other zone certification ranges.

Features

• Class 1 Division 1 and Zone 1 certified
• Electro-polished 316L stainless steel on all welded assemblies
• Camera station window in toughened glass
• Pole or wall mounting options (see separate datasheets)
• NPT entries as standard
• 5 different size lens options
• 4 resolution/frequency rating options
• Various camera module options
• Options also available for IP, analogue, hybrid, IP over Coax and direct fibre out* - see specific data sheet
• Supply voltage options (24 VAC, 110 or 230 VAC, 50/60Hz)
• Certified temperature from -58˚F to +158˚F* (ranging from T4 - T6)
• IP66/67

*Model dependent
Specifications

Certification part number  P&T OXALIS-UL2420-01, Housing options OXALIS-UL1410-10-TI-50, 1410-10-TI

Features

Sun shield  Standard stainless steel 316L mirror finish
Integral demister  Standard
Pan speed (maximum)  45° per second
Tilt speed (maximum)  24° per second
Pre-set positional accuracy  64 presets: positional accuracy ±0.1°
Telemetry receiver  Integral - Pelco D protocol (others to specification)
Rotation  Continuous pan or 350° rotation (+/- 175° from straight ahead)
Integral IP encoder  Includes integral video encoder, H.264 / M-JPEG/MPEG-4, low latency, triple streaming, D1, 2CIF, CIF and VGA resolution, 25fps (30fps - NTSC) for use with analogue camera modules
Optional nonstandard encoder, subject to acceptance, conformity to regulation and testing
IP over coax  Optional integrated IP ethernet-over-coax converter (must be used with compatible Rx equipment)
Direct fibre out  Optional ,simplex singlemode 9/125μm or multimode 50/125μm, 10/100Mb ethernet, IEEE 802.3

Electrical

Supply voltage options  24 VAC, 110 or 230 VAC, 50/60Hz
Power consumption  85W maximum (143W with low temperature operation)
Electrical connections  Terminal block for power, data and video specific to camera configuration
Cable entry  2 x ¾"NPT located in base

Mechanical

Body material  Electro-polished 316L stainless steel on all welded assemblies
Fixings material  A4 stainless steel
Camera station window  Internal AR and external carbon coated germanium (50 or 102mm Ø) with protective grill
Mounting options  Pole or wall (see separate datasheets)
Operating temperature  From -58°F to +158°F (model dependent)
Weight (lb)  Up to 117lb depending on configuration
Ingress protection rating  IP66/67

Thermal core module options

T336 7.5-8.3Hz  Uncooled VOx microbolometer thermal imaging camera, including TCI Interface PCB for functionality over standard RS485 protocol Commands 336 x 256 resolution, 17μ pixel size, 75Hz NTSC/8.3Hz PAL exportable frame rate, digital detail enhancement
T640 7.5-8.3Hz  Uncooled VOx microbolometer thermal imaging camera, including TCI Interface PCB for functionality over standard RS485 protocol Commands 640 x 512 resolution (PAL), 17μ pixel size, 75Hz NTSC/8.3Hz PAL exportable frame rate, digital detail enhancement
T336 25-30Hz  Uncooled VOx microbolometer thermal imaging camera, including TCI Interface PCB for functionality over standard RS485 protocol Commands 336 x 256 resolution, 17μ pixel size, 30Hz NTSC/25Hz PAL frame rate, digital detail enhancement. Subject to export restrictions and licensing
T640 25-30Hz  Uncooled VOx microbolometer thermal imaging camera, including TCI Interface PCB for functionality over standard RS485 protocol Commands 640 x 512 resolution (PAL), 17μ pixel size, 30Hz NTSC/25Hz PAL frame rate, digital detail enhancement. Subject to export restrictions and licensing

Thermal core lens options

19mm lens  FoV 17° x 13° (336 x 256) / FoV 32° x 26° (640 x 512) Detection of object 4m x 1.5m: Typical 1550m
25mm lens  FoV 13° x 10° (336 x 256) / FoV 25° x 20° (640 x 512) Detection of object 4m x 1.5m: Typical 2200m
35mm lens  FoV 9.3° x 7.1° (336 x 256) / FoV 18° x 14° (640 x 512) Detection of object 4m x 1.5m: Typical 3000m
50mm lens  FoV 6.5° x 5° (336 x 256) / FoV 12.4° x 9.9° (640 x 512) Detection of object 4m x 1.5m: Typical 3900m
100mm lens  FoV 3.3° x 2.5° (336 x 256) / FoV 6.2° x 5.0° (640 x 512) Detection of object 4m x 1.5m: Typical 6000m. Ø102 Germanium housings only
Ordering requirements
The following code is designed to help in selection of the correct unit. Build up the reference number by inserting the code for each component into the appropriate box.

**XP40**

<table>
<thead>
<tr>
<th>Code</th>
<th>Housing type</th>
<th>Video type</th>
<th>Day/night module</th>
<th>Thermal core module</th>
<th>Thermal core lens</th>
<th>Wiper options</th>
<th>Camera rotation</th>
<th>Supply voltage</th>
<th>Protocol requirements</th>
<th>Transmission type</th>
<th>Temperature type</th>
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<tbody>
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<td>Thermal imaging housing with 50mm germanium window</td>
<td>Integral IP video encoder</td>
<td>No D/N camera fitted</td>
<td>T336 75-8.3Hz</td>
<td>19mm lens</td>
<td>No wiper</td>
<td>Continuous rotation</td>
<td>24 VAC ±10% 50/60 Hz</td>
<td>Pelco D protocol, baud rate 2400bps</td>
<td>Standard electrical</td>
<td>T4A -4°F to +158°F</td>
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<td>Hybrid analogue IP system with nonstandard IP encoder</td>
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<td>Pan rotation restricted to +/- 175°</td>
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*Subject to restrictions

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