Overview

The Oxalis XP60 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 large format housing allows the installation of customised equipment (subject to conformity). 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-UL2410-TI-50, 2410-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 standard protocol (others to specification)

Rotation
Continuous pan or 350° rotation (+/- 175° from straight ahead)

Integral IP encoder
Includes integral video encoder, H.264 / MJPEG/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 direct fibre out
Optional integrated media converter, simplex singlemode 9/125μm or multimode 50/125μm, 10/100Mb ethernet, IEEE 802.3

IP over coax
Optional integrated IP ethernet-over-coax converter (must be used with compatible Rx equipment)

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 126lb 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

Certifications
UL CI/DI
Class I, Division 1, Groups B, C, D, T4+ -50°C to +70°C (-58°F to +158°F)
Class I, Division 1, Groups E, F, G IP62
Class 1 Zone 1 A Ex d IIB + Hydrogen T4 (TS On Request)
On Request: TS -50°C to +70°C (-58°F to +158°F), T6 -50°C to +50°C (-58°F to +122°F)
UL Listing: E477542
### 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.

<table>
<thead>
<tr>
<th>Component</th>
<th>Code</th>
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<tbody>
<tr>
<td>Housing type</td>
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<tr>
<td>Thermal imaging housing with 50mm germanium window</td>
<td>T</td>
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<tr>
<td>Thermal imaging housing with 102mm germanium window no camera</td>
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<tr>
<td>Video type</td>
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<td>Integral IP video encoder</td>
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<tr>
<td>Day/night module</td>
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<tr>
<td>No D/N camera fitted</td>
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<tr>
<td>Thermal core module</td>
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<td>Protocol requirements</td>
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*Subject to restrictions

Xp60

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*### Protocol requirements*

**Code**

- Pelco D protocol, baud rate 2400bps: D
- Special - price on application: S

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*### Certification*

**Code**

- UL Class I Div I: L

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*### Temperature type*

**Code**

- T4A -4°F to +158°F: E
- T4A -58°F to +158°F: F
- T6 -4°F to +122°F*: G
- T6 -58°F to +122°F*: H

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*### Transmission type*

**Code**

- Standard electrical: 0
- Simplex singlemode: 3
- Simplex multimode: 5
- 9/125μm ethernet: 4
- 50/125μm ethernet: C
- IP over coax: 5

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*### Supply voltage*

**Code**

- 24 VAC ±10% 50/60 Hz: 1
- 110 VAC ±10% 50/60 Hz: 2
- 230 VAC ±10% 50/60 Hz: 3
- Special - price on application: S

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*### Housing type*

**Code**

- Thermal imaging housing with 50mm germanium window: T
- Thermal imaging housing with 102mm germanium window no camera: H

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*### Video type*

**Code**

- Integral IP video encoder: I
- Hybrid analogue IP system with nonstandard IP encoder: H

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*### Day/night module*

**Code**

- No D/N camera fitted: N

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*### Wiper options*

**Code**

- No wiper: N