

# XP60 dual imager IP hybrid series

Explosion proof, PTZ  
camera station



## Overview

The Oxalis XP60 platform is an explosion protected PTZ camera station for use in hazardous areas in onshore, offshore, marine and heavy industrial environments.

The camera stations are designed for longevity in harsh environments with minimal maintenance.

This datasheet covers the dual imaging configuration for continued vision in ultra-low light or harsh environmental conditions such as fog or smoke.

The large format housing allows the installation of custom specified transmission equipment subject to conformity to certification, physical fit and acceptance.

## Features

- ATEX, IECEx, Class 1 Division 1 and Zone 1 certified
- Electro-polished 316L stainless steel on all welded assemblies
- Pole or wall mounting options (see separate datasheets)
- Supply voltage options (24 VAC, 110 or 230 VAC, 50/60Hz)
- Operating temperature from -60°C to +60°C\*
- IP66/67

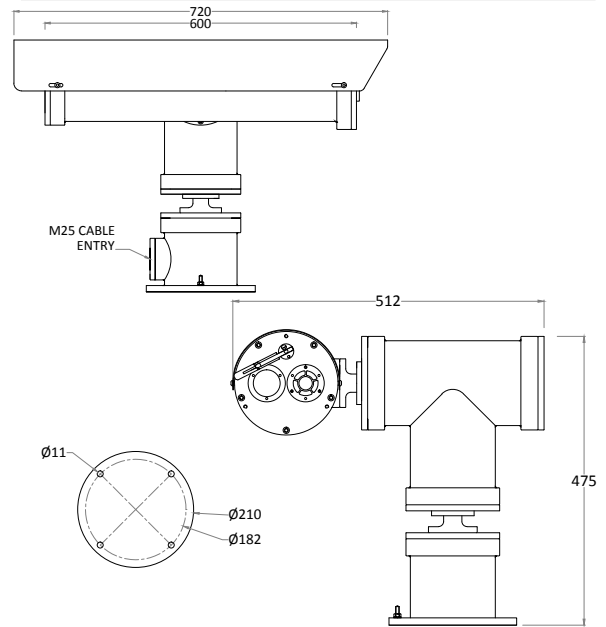
\*Model dependent



## Certifications

<b>ATEX</b>	II 2 G Ex db (op pr) IICT4 Gb -60°C to +70°C II 2 D Ex tb (op pr) IIIC T140°C Db IP6x On Request: T5 -60°C to +65°C, T6 -60°C to +40°C On request: T135 -60°C to +65°C Certificate: ITS16ATEX101021X	<b>cLC CSA</b>	Ex d IICT4 (T5 On Request) LC1311396 -60°C ≤Ta ≤ +60°C. CAN CSA-C22.2 No.60079-0:2011 & 60079-1-2012 Certificate: 11396-1S-CSA
<b>IECEX</b>	Ex db (op pr) IICT4 Gb -60°C to +70°C Ex tb (op pr) IIIC T140°C Db IP6x On Request: T5 -60°C to +65°C, T6 -60°C to +40°C On request: T135 -60°C to +65°C Certificate: IECEX ITS 15.0068X	<b>TR CU, EAC</b>	1 Ex db (op pr) IICT4 Gb -60°C to +70°C Ex tb (op pr) IIIC T140°C Db IP6x On Request: T5 -60°C to +65°C, T6 -60°C to +40°C On request: T135 -60°C to +65°C Certificate: TCRUCGB.ITB04.B00587
<b>INMETRO</b>	Ex db (op pr) IICT4 Gb -60°C to +70°C Ex tb (op pr) IIIC T140°C Db IP6x On Request: T5 -60°C to +65°C, T6 -60°C to +40°C On request: T135 -60°C to +65°C Certificate: ULBR 17.0063X	<b>CCOE</b>	Ex db (op pr) IICT4 Gb -60°C to +70°C Ex tb (op pr) IIIC T140°C Db IP6x On Request: T5 -60°C to +65°C, T6 -60°C to +40°C On request: T135 -60°C to +65°C Certificate: P400546/1
<b>LCus CI/ZI</b>	Class 1 Zone 1 A Ex d IICT4 (T5 On Request) LC13A11396 Gb -60°C ≤Ta ≤ +60°C. UL 60079-0:2009 & 60079-1:2010 Certificate: 11396-1S-UL	<b>CNEX</b>	Ex db (op pr) IICT4 Gb -60°C to +70°C Ex tb (op pr) IIIC T140°C Db IP6x On Request: T5 -60°C to +65°C, T6 -60°C to +40°C On request: T135 -60°C to +65°C Certificate: 17.1235X
<b>cLCus CI/DI</b>	Class I, Division 1, Groups B, C, D, -60°C ≤Ta ≤ 60°C T4 Class II, Division 1, Groups E, F, G IP67 CSA-C22.2 No:30-M1986 No:25-1966(R2009) CSA-C22.2 No:60065-03(R2012) & UL1203,UL60065(ED.7) Certificate: 11671-1S (Gas) / 11677-1S (Dust)	<b>CERTEX</b>	Ex db (op pr) IICT4 Gb -60°C to +70°C Ex tb (op pr) IIIC T140°C Db IP6x On Request: T5 -60°C to +65°C, T6 -60°C to +40°C On request: T135 -60°C to +65°C Certificate: S-XLP/170244X

## General arrangement drawing (all dimensions in mm)



## Specifications

<b>Certification part number</b>	P&T 2420-01, Housing options 2410-DI-00, 2410-DI-01		
<b>Features</b>	<b>Electrical</b>		
<b>Sun shield</b>	Standard stainless steel 316L mirror finish	<b>Supply voltage options</b>	24 VAC, 110 or 230 VAC, 50/60Hz
<b>Integral wiper</b>	Optional (silicone wiper blades that are resistant and do not perish after long exposure to ozone, UV, ice, snow, heat or cold)	<b>Power consumption</b>	85W Maximum (143W with low temperature operation)
<b>Integral demister</b>	Standard	<b>Electrical connections</b>	Terminal block for power, data and video specific to camera configuration
<b>Integral washer pump</b>	Optional	<b>Cable entry</b>	Single M25 entry located in base
<b>Washer systems</b>	Compatible with Oxalis XW or XWP washer tanks (see separate datasheets)	<b>Mechanical</b>	
<b>Pan speed (maximum)</b>	45° per second	<b>Body material</b>	Electro-polished 316L stainless steel on all welded assemblies
<b>Tilt speed (maximum)</b>	24° per second	<b>Fixings material</b>	A4 stainless steel
<b>Pre-set positional accuracy</b>	64 presets: positional accuracy±0.1°	<b>Camera station window</b>	Toughened glass / Internal AR and external carbon coated germanium with protective grill
<b>Telemetry receiver</b>	Integral - Pelco D	<b>Mounting options</b>	Pole or wall (see separate datasheets)
<b>Rotation</b>	Continuous pan or 350° rotation (+/- 175° from straight ahead)	<b>Operating temperature</b>	From -60°C to +60°C (model dependent)
<b>Integral IP encoder</b>	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	<b>Weight (Kg)</b>	Up to 57 Kg depending on configuration
<b>IP direct fibre out</b>	Optional media converter, simplex singlemode 9/125 or multimode 50/125µm, 10/100Mb ethernet, IEEE 802.3	<b>Ingress protection rating</b>	IP66/67
<b>IP over coax</b>	Optional integrated IP ethernet-over-coax converter (must be used with compatible Rx equipment)		
<b>Camera options</b>			
<b>¼" CCD 36x zoom camera</b>			
<b>Image sensor</b>	1/4" EXview HAD CCD (progressive scan)		
<b>Resolution</b>	High resolution mode on: 550 TV lines (default)		
<b>Lens</b>	36x zoom 3.4-122.4 mm F1.6 to F4.5, horizontal angle of view 57.8° -1.7°, 12X digital zoom, auto focus, auto iris		
<b>Min. illumination</b>	1/60 s, 1/50 s mode: 1.4 Lux, 1/4 s, 1/3 s mode: 0.1 Lux, 1/4 s, 1/3 s mode& ICR On: 0.01 Lux		
<b>S/N Ratio</b>	>50dB		
<b>Features</b>	ATW, day & night auto/colour / BW (IR-cut filter removable), camera title ON/OFF		
<b>Thermal core module options</b>			
<b>T336 7.5-8.3Hz</b>	Uncooled VOx microbolometer thermal imaging camera, including TCI Interface PCB for functionality over standard RS485 protocol Commands 336 x 256 resolution, 17µ pixel size, 7.5Hz NTSC/8.3Hz PAL exportable frame rate, digital detail enhancement		
<b>T640 7.5-8.3Hz</b>	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, 7.5Hz NTSC/8.3Hz PAL exportable frame rate, digital detail enhancement		
<b>T336 25-30Hz</b>	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		
<b>T640 25-30Hz</b>	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		
<b>Thermal core lens options</b>			
<b>19mm lens</b>	FoV 17° x 13° (336 x 256) / FoV 32° x 26° (640 x 512) Detection of object 4m x 1.5m: Typical 1550m		
<b>25mm lens</b>	FoV 13° x 10° (336 x 256) / FoV 25° x 20° (640 x 512) Detection of object 4m x 1.5m: Typical 2200m		
<b>35mm lens</b>	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		
<b>50mm lens</b>	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		

# 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

XP60

Housing type	Code
Dual imaging housing	D
Dual imaging housing with integral washer pump	Q

Wiper options	Code
Integral wiper with switched 24VAC for external washer pump	E
Integral wiper	W
No wiper	N

Video type	Code
Integral IP video encoder	H
Hybrid analogue IP system with nonstandard IP encoder	S

Day/night module	Code
1/4" CCD 36x zoom camera	N

Thermal core module	Code
T336 7.5-8.3Hz	8
T640 7.5-8.3Hz	2
T336 25-30Hz	9
T640 25-30Hz	4

Thermal core lens	Code
19mm lens	1
25mm lens	2
35mm lens	3
50mm lens	4

Video system	Code
PAL	P
NTSC	N

Supply voltage	Code
24 VAC ±10% 50/60 Hz	1
110 VAC ±10% 50/60 Hz	2
230 VAC ±10% 50/60 Hz	3

Transmission type	Code
Standard electrical	0
Simplex singlemode 9/125µm ethernet	3
Simplex multimode 50/125µm ethernet	4
IP over coax	5
Customer specific transmission device	C

Temperature type	Code
T4, -20°C to +60°C	1
T4, -40°C to +60°C	2
T4, -60°C to +40°C	3
T5, -20°C to +60°C*	4
T5, -40°C to +60°C*	5
T5, -60°C to +40°C*	6
T6, -20°C to +40°C*	7
T6, -40°C to +40°C*	8
T6, -60°C to +40°C*	9

\*Subject to configuration restrictions

Certification	Code
ATEX	A
IECEX	I
INMETRO	M
LCus C1, Z1	U
cLCus C1, D1	Z
cLC CSA	C
TR CU, EAC	R
CCOE	D
CNEX	X
CERTEX	T

Protocol requirements	Code
Pelco D protocol, baud rate 2400bps	D

Camera rotation	Code
Continuous rotation	1
Pan rotation restricted to +/- 175°	2