

# XP40 dual imager analogue series

Explosion proof, PTZ  
camera station



## Overview

The Oxalis XP40 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 cover the dual imaging configuration for continued vision in ultra-low light or harsh environmental conditions such as fog or smoke.

## Features

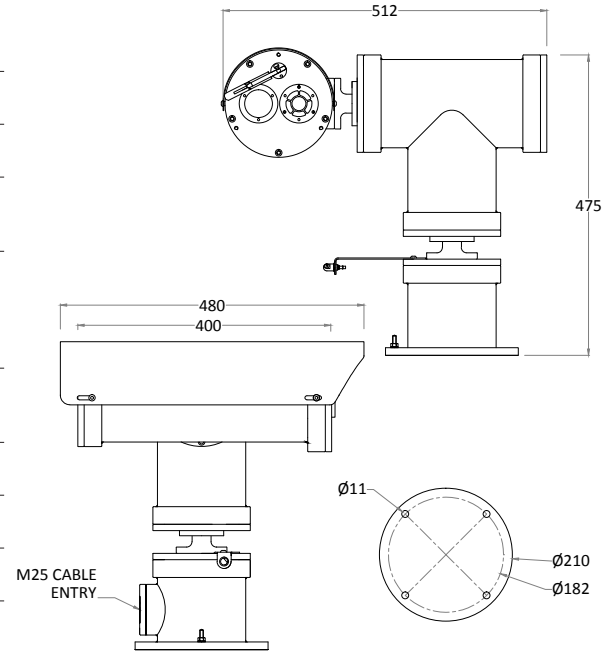
- ATEX, IECEx, Class 1 Division 1 and Zone 1 certified
  - Compatible with Oxalis XW or XWP washer tanks (see separate datasheets)
  - Electro-polished 316L stainless steel on all welded assemblies
  - Pole or wall mounting options (see separate datasheets)
  - Supply voltage options (24 VAC, 110 or 230 VAC, 50/60Hz)
  - Operating temperature -60°C to +70°C\*
  - IP66/67
- \*Model dependent



## Certifications

<b>ATEX</b>	II 2 G Ex db (op pr) IICT4 (T5 & T6 On Request)Gb II 2 D Ex tb (op pr) IIIC T135°C Db IP6x. Certificate Number: ITS16ATEX101021X
<b>IECEX</b>	Ex db (op pr) IIC T4 (T5 & T6 On Request)Gb. Ex tb (op pr) IIIC T135°C Db IP6x Certificate Number:IECEX ITS 15.0068X
<b>INMETRO</b>	Ex d IIC T4 (T5 On Request) Gb -60° C ≤Ta ≤+60°C Ex tb IIIC T135° C Db IP66/67 Certificate Number: TUV 12.1080X / TUV 12.1081X
<b>LCus CI/ZI</b>	Class 1 Zone 1 A Ex d IIC T4 (T5 On Request) LC13A11396 Gb -60° C ≤Ta ≤+60° C UL 60079-0:2009 & 60079-1:2009 Certificate Number: 11396-1S-UL
<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 Number: 11671-1S / 11677-1S
<b>cLC CSA</b>	Ex d IIC T4 (T5 On Request) LC1311396 -60° C ≤Ta ≤+60°C CAN CSA-C22.2 No.60079-0:2011 & 60079-1:2011 Certificate Number: 11396-1S-CSA
<b>TR CU GOST</b>	IEEx d IIC T4X (T5 & T6 On Request) -60° C ≤Ta ≤+60° C Ex tb IIIC T135° C Db IP67 Certificate Number: TCRUGB.᠖B.00318
<b>CCOE</b>	Ex d IIC (T5 & T6 On Request) -60° C ≤Ta ≤+60° C Gb Ex tb IIIC T130° C Db IP6x Certificate Number: P306928/1/2
<b>CNEX</b>	Ex d IIC T4/T5/T6 GB / Ex tb IIIC 135° C Db IP6X Certificate Number: 132.2980X / 13.2981X
<b>CERTEX</b>	II 2 G Ex d (op pr) IIC T4 (T5 & T6 On Request) II 2 D Ex tb IIIC T135° C Db IP6x Certificate Number: S-XPL-14.1340X

## 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) (for Day-Night camera window only)	<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 +70°C (model dependent)
<b>Analogue direct fibre out</b>	Optional singlemode 9/125µm or multimode 50/125µm video and data fibre optic transmission, mounted inside the camera station	<b>Weight (Kg)</b>	Up to 57 Kg depending on configuration
<b>Ingress protection rating</b>	IP66/67	<b>Type approval</b>	DNV 2.4 2006 ABCD (copper transmission only)
<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: 530 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>T320 7.5-8.3Hz</b>	Uncooled VOx microbolometer thermal imaging camera, including TCI Interface PCB for functionality over standard RS485 protocol Commands. 324 x 256 resolution, 25µ 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>T320 25-30Hz</b>	Uncooled VOx microbolometer thermal imaging camera, including TCI Interface PCB for functionality over standard RS485 protocol Commands. 324 x 256 resolution, 25µ 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 24° x 18° (324 x 256) / FoV 32° x 26° (640 x 512). Detection of object 4m x 1.5m: 1280m (324 x 256) / 1550m (640 x 512)		
<b>25mm lens</b>	FoV 18° x 14°(324 x 256) / FoV 25° x 20° (640 x 512). Detection of object 4m x 1.5m: 1650m (324 x 256) / 2200m (640 x 512 )		
<b>35mm lens</b>	FoV 13° x 10° (324 x 256) / FoV 18° x 14° (640 x 512). Detection of object 4m x 1.5m: 2250m (324 x 256) / 3000m (640 x 512 )		
<b>50mm lens</b>	FoV 9.1° x 6.9°(324 x 256) / FoV 12.4° x 9.9° (640 x 512). Detection of object 4m x 1.5m: 3100m (324 x 256) / 3900m (640 x 512)		

# 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														
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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
Analogue video	A

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

Thermal core module	Code
T320 7.5-8.3Hz	1
T640 7.5-8.3Hz	2
T320 25-30Hz	3
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 video/data	1
Simplex multimode 50/125µm video/data	2
Customer specific transmission device	C

Temperature type	Code
T4, -20°C to +70°C*	A
T4, -40°C to +70°C*	B
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 +65°C*	C
T5, -40°C to +65°C*	D
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
GOST-R	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