

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

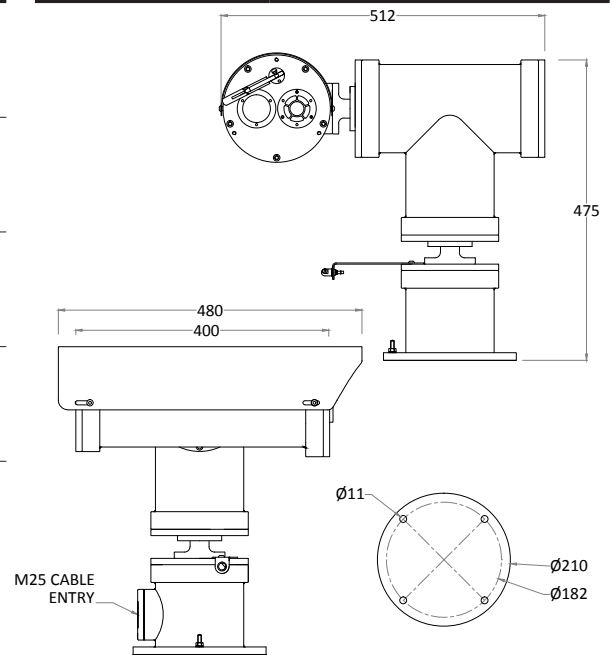
- ATEX, IECEx, Class 1 Division 1 and Zone 1 certified
 - Compatible with Oxalis XW or XWP washer tanks (see separate datasheets)
 - Electro-polished 316L stainless steel on all welded assemblies
 - Pole or wall mounting options (see separate datasheets)
 - Supply voltage options (24 VAC, 110 or 230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



Certifications

ATEX	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	cLC CSA	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
IECEX	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	TR CU, EAC	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
INMETRO	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	CCOE	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
LCus CI/ZI	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	CNEX	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
cLCus CI/DI	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)	CERTEX	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

Certification part number	P&T 2420-01, Housing options 2410-DI-00, 2410-DI-01		
Features		Electrical	
Sun shield	Standard stainless steel 316L mirror finish	Supply voltage options	24 VAC, 110 or 230 VAC, 50/60Hz
Integral wiper	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)	Power consumption	85W maximum (143W with low temperature operation)
Integral demister	Standard	Electrical connections	Terminal block for power, data and video specific to camera configuration
Integral washer pump	Optional	Cable entry	Single M25 entry located in base
Washer systems	Compatible with Oxalis XW or XWP washer tanks (see separate datasheets)	Mechanical	
Pan speed (maximum)	45° per second	Body material	Electro-polished 316L stainless steel on all welded assemblies
Tilt speed (maximum)	24° per second	Fixings material	A4 stainless steel
Pre-set positional accuracy	64 presets: positional accuracy±0.1°	Camera station window	Toughened glass / Internal AR and external carbon coated germanium with protective grill
Telemetry receiver	Integral - Pelco D	Mounting options	Pole or wall (see separate datasheets)
Rotation	Continuous pan or 350° rotation (+/- 175° from straight ahead)	Operating temperature	From -60°C to +70°C (model dependent)
Analogue direct fibre out	Optional singlemode 9/125µm or multimode 50/125µm video and data fibre optic transmission, mounted inside the camera station	Weight (Kg)	Up to 57 Kg depending on configuration
Ingress protection rating	IP66/67	Type approval	DNVGL-CG-0339, 2016 (copper transmission only)
Camera options			
¼" CCD 36x zoom camera			
Image sensor	1/4" EXview HAD CCD (progressive scan)		
Resolution	High Resolution Mode On: 530 TV lines (default)		
Lens	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		
Min. illumination	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		
S/N ratio	>50dB		
Features	ATW, day & night auto/colour / BW (IR-Cut filter removable), camera title ON/OFF		
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, 7.5Hz 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, 7.5Hz 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		

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

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
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 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
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