

XP40 thermal image analogue series

Explosion proof, PTZ
camera station



Overview

The Oxalis XP40 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.

Features

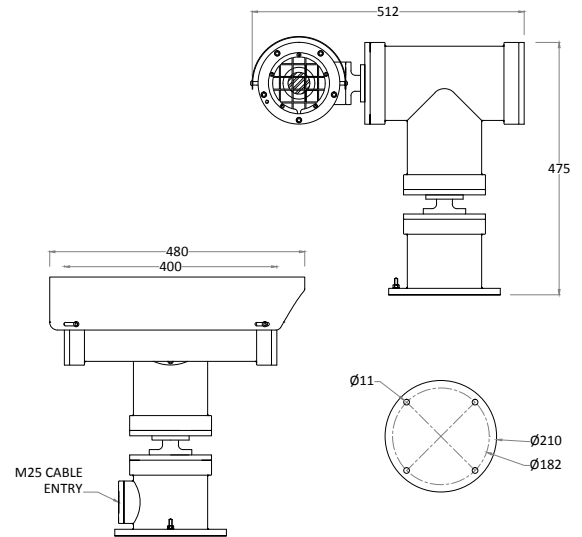
- ATEX, IECEx, Class 1 Division 1 and Zone 1 certified
- Electro-polished 316L stainless steel on all welded assemblies
- Supply voltage options (24 VAC, 110 or 230 VAC, 50/60Hz)
- Pole or wall mounting options (see separate datasheets)
- Operating temperature from -60°C to +70°C*
- IP66/67



Certifications

ATEX	II 2 G Ex db (op pr) IIC T4 (T5 & T6 On Request)Gb II 2 D Ex tb (op pr) IIIC T135°C Db IP6x Certificate Number: ITS16ATEX101021X
IECEX	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
INMETRO	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
LCus C1/Z1	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
cLCus C1/D1	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
cLC CSA	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
TR CU GOST	IEEx d IIC T4X (T5 & T6 On Request) -60° C ≤Ta ≤+60° C Ex tb IIIC T135° C Db IP67. Certificate Number: TCRUGB.r5.B00318
CCOE	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
CNEX	Ex d IIC T4/T5/T6 GB / Ex tb IIIC 135° C Db IP6X. Certificate Number: 132.2980X / 13.2981X
CERTEX	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

Certification part number	P&T 2420-01, Housing options 1410-10-TI-50, 1410-10-TI		
Features		Electrical	
Sun shield	Standard stainless steel 316L mirror finish	Supply voltage options	24 VAC, 110 or 230 VAC, 50/60Hz
Integral demister	Standard	Power consumption	85W Maximum (143W with low temperature operation)
Pan speed (maximum)	45° per second	Electrical connections	Terminal block for power, data and video specific to camera configuration
Tilt speed (maximum)	24° per second	Cable entry	Single M25 entry located in base
Pre-set positional accuracy	64 presets: positional accuracy±0.1°	Mechanical	
Telemetry receiver	Integral - Pelco D, P standard protocols (others to specification)	Body material	Electro-polished 316L stainless steel on all welded assemblies
Rotation	Continuous pan or 350° rotation (+/- 175° from straight ahead)	Fixings material	A4 stainless steel
Analogue direct fibre out	Optional singlemode 9/125µm or multimode 50/125µm video and data fibre optic transmission, mounted inside the camera station	Camera station window	Internal AR and external carbon coated germanium (50 or 102mm Ø) with protective grill
Ingress protection rating	IP66/67	Mounting options	Pole or wall (see separate datasheets)
Type approval	DNV 2.4 2006 ABCD (copper transmission only)	Operating temperature	From -60°C to +70°C (model dependent)
		Weight (Kg)	Up to 53 Kg depending on configuration

Thermal core module options

T320 7.5-8.3Hz	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
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
T320 25-30Hz	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
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 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)
25mm lens	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)
35mm lens	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)
50mm lens	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)
100mm lens	FoV 4.6° x 3.4° (324 x 256) / FoV 6.2° x 5.0° (640 x 512). Detection of object 4m x 1.5m: 5300m (324 x 256) / 6000m (640 x 512). 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														
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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

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

Wiper options	Code
No wiper	N

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

Video type	Code
Analogue video	I

Day/night module	Code
No D/N camera fitted	N

Thermal core module	Code
T320 7.5-8.3Hz	1
T640 7.5-8.3Hz	2
T320 25-30Hz	3
T640 25-30Hz	4
Customer specific thermal camera	C

*Subject to configuration restrictions

Thermal core lens	Code
19mm lens	1
25mm lens	2
35mm lens	3
50mm lens	4
100mm lens	5
Customer specific thermal imaging lens	C

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

Video system	Code
PAL	P
NTSC	N

Protocol requirements	Code
Pelco D protocol, baud rate 2400bps	D
Pelco P protocol, baud rate 4800bps	P
Vicon protocol, baud rate 4800bps	V
HERNISTM protocol	H
Coe protocol	C
Special - price on application	S
No control protocol	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
Special - price on application	S

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