XP60 thermal image IP hybrid series

Explosion proof, PTZ camera station

Overview

The Oxalis XP60 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.

The large format housing allows the installation of custom specified camera, lens and 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

ATEX IECEx cLCus EAC CNEX INMETRO

Eaton
Unit B, Sutton Parkway
Oddicroft Lane
Sutton in Ashfield
United Kingdom
NG17 5FB

T: +44 (0) 1623 444 400
www.crouse-hinds.com/hac
MEDCSales@Eaton.com

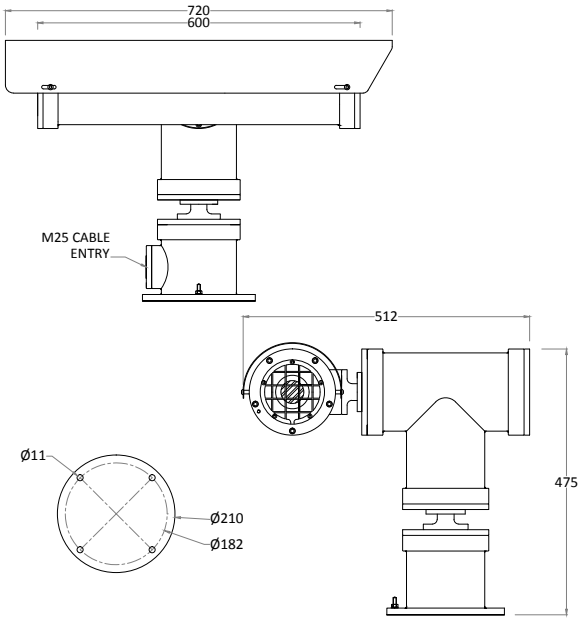
Powering Business Worldwide

Printed in UK
Publication
No.DSOX0009/F
October 2017

Certifications

ATEX	II 2 G Ex db (op pr) IIC T4 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 IIC T4 (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) IIC T4 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) IIC T4 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.T'E04.B00587
INMETRO	Ex db (op pr) IIC T4 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: UL-BR 17.0063X	**CCOE**	Ex db (op pr) IIC T4 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 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 & 60079-1:2010 Certificate: 11396-1S-UL	**CNEX**	Ex db (op pr) IIC T4 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 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: 11671-1S (Gas) / 11677-1S (Dust)	**CERTEX**	Ex db (op pr) IIC T4 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/17.0244X

General arrangement drawing (all dimensions in mm)



Specifications

Certification Part Number	P&T 2420-01, Housing options 2410-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, (others to specification)
Rotation	Continuous pan or 350° rotation (+/- 175° from straight ahead)
Integral IP encoder	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
IP direct fibre out	Optional 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	Single M25 entry 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 -60°C to +60°C (model dependent)
Weight (Kg)	Up to 57 Kg 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, 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
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

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

Wiper options	Code
No wiper	N

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

Day/night module	Code
No D/N camera fitted	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
Customer specific thermal camera	C

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

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
Special - price on application	S

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

Protocol requirements	Code
Pelco D protocol, baud rate 2400bps	D
Special - price on application	S

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

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

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