EX-TC620 PTZ

Explosion proof thermal PT camera station

DESCRIPTION

The EX-TC620 PTZ is a pan and tilt camera station designed for use in hazardous areas in onshore, offshore, marine and heavy industrial environments. The camera housing is constructed from electro-polished 316L stainless steel for maximum corrosion protection and is fitted as standard with sunshield. The camera station is fitted with a 336 x 256 pixel thermal IP camera for night-vision or intrusion detection. Optionally the camera can be connected direct to optical fiber.

FEATURES

ATEX and IECEx certified for gas and dust

336x256 thermal camera with Perimeter Intrusion Detection

Complete range of thermal lenses available

Dual stream H264/MJPEG

360° Continuous rotation

Variable pan and tilt speed

Integrated flexible conduit tail

Optional: Direct Ethernet over Fiber

ONVIF profile S compliant

ATEX and IECEx certified
The EX-TC620 PTZ is an Ex d (flame proof) housing suited to be used in hazardous areas, zone 1, 2 for gas and zone 21 and 22 for dust environments.

Integrated thermal camera
The thermal camera makes video surveillance possible in all weather, no-light and difficult lighting conditions. It is built around an uncooled micro bolometer with a resolution of 336x256 pixels. No additional lightning is necessary to detect a person in the absolute dark.

Multi-stream
The integrated camera has multi-stream capability for simultaneous streaming of H.264/H.264 or H.264/MJPEG. Multiple combinations of resolution and frame rate can be configured to satisfy different live viewing and recording scenarios.

Security Solution
In combination with Sense, a multi-purpose Video Management System, the Ex cameras create a versatile CCTV solution for hazardous areas. Compatibility with other video management systems is realized by the camera's ONVIF Profile S compliance.

Conduit choices
To simplify installation in hazardous areas the Ex-PTZ is standard fitted with a 3, 5, or 10 m conduit, including wiring. Together with Siqura's 316L Ex e Termination Box the camera installation is quick and according EN-IEC 60079-14.

Direct to fiber
As an option the camera can be fitted with a 100FX optical fiber connection (2SM). The duplex single mode fibers come with dual LC connectors.

Camera housing

Certification	ATEX, IECEx
	II 2 G Ex d op pr IIC T6
	II 2 D Ex tb IIIC T85°C Db IP66/67
Ingress protection rating	IP66 and IP67
Body material	Electro-polished 316L stainless steel
Rotation	360° Continuous rotation
Tilt angle	+90° to -90°
Variable speed	up to 40°/sec pan and 20°/sec tilt (peak)
Max Torque	80 Nm pan, 107 Nm tilt
Backlash	
Preset accuracy	0.04°
Conduit	25 mm low fire hazard, liquid tight conduit
	Galvanised steel core. Zero halogen
Glands	2x M25 Brass flameproof barrier glands, pre-assembled
Length	3, 5, or 10 m
Sunshield	Standard
Wiper	Standard
Washer system	Optional (EX-WP10 Ex e 24 or EX-WP10 Ex d 24)
Operating temperature	-20 °C to +60 °C
Dry heat test	+75 °C, 2 days
Weight	approx. 34 kg

Electrical

Supply voltage	24 Vac 50/60 Hz; Optional 115 Vac 50/60 Hz; 230 Vac 50/60 Hz
Power consumption	95 W maximum
Electrical connections	3 wire power cable from the conduit, 0.75 mm2

Thermal imager

Imager	Uncooled micro-bolometer						
Pixel pitch	17 µm						
Resolution	336 x 256 pixels						
Focal length	7.5 mm	9 mm	13 mm	19 mm	25 mm	35 mm	50 mm
Field of view	45°x35°	| 35°x27°	25°x19°	17°x13°	13°x10°	9.3°x7.1°	6.5°x5°
f-number	f/1.4	| f/1.25	f/1.25	f/1.25	f/1.1	f/1.5	f/1.2
Spectral bandwidth	7.5 µm to 13.5 µm (LWIR)						
Frame rate	8.3 fps (xx-S version); 30 fps (xx-F version)						
Sensitivity (NEdT)	< 50 mK @ f/1.0						
Measuring range	-40 °C to 550°C						
Accuracy	+/- 20 °C (T< 100 °C) or +/- 20% (T> 100 °C)						
Time to image	10 s						
Digital zoom	No						

Analytics (Fixed position only)

Specs

Analytics (Fixed position only)

Detection ones or lines	2x in stand-alone (Web configured)	
	up to 8x with the VCA Configuration Server or Sense VMS	
Event type	Detection line	Touch, Cross (directional sensitive), Cross
	Detection zone	Touch, Enter, Inside, Exit
Event time	0 to 10 s	
Event output	generic ONVIF, digital I/O, SPI	

Video

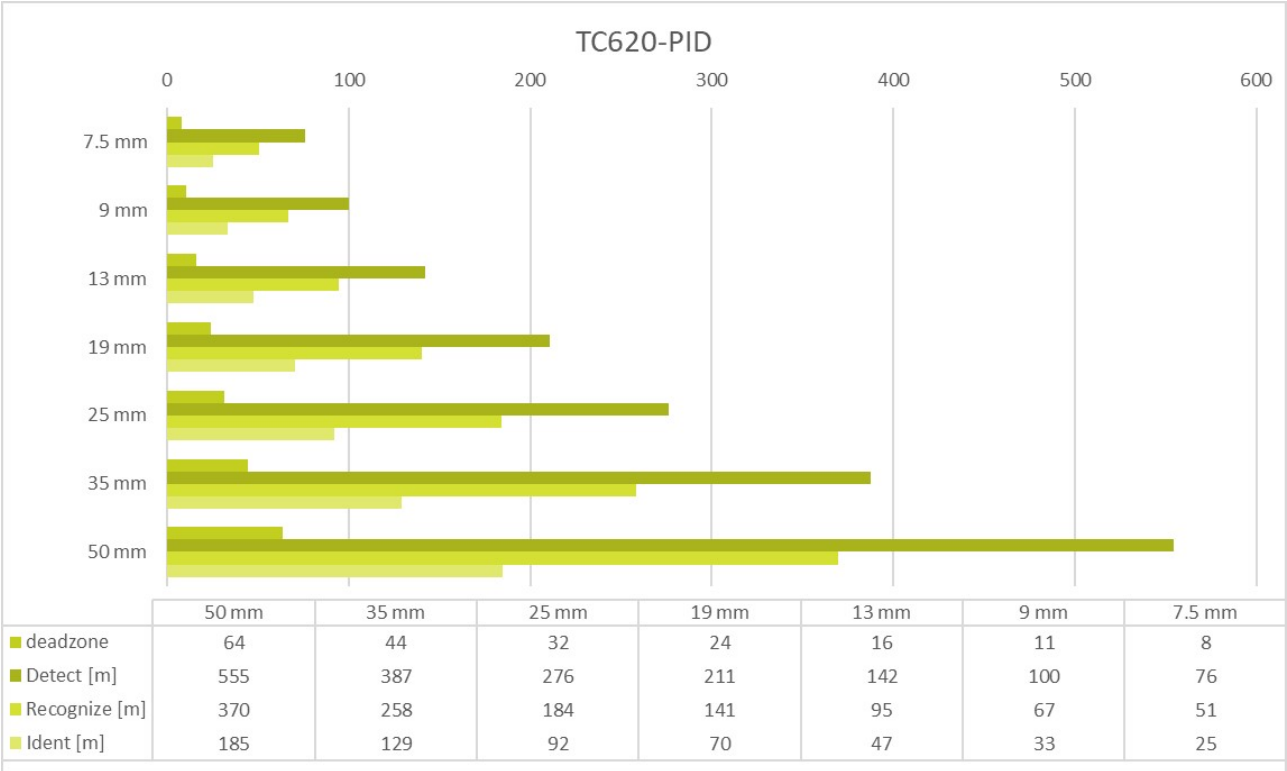|	
Number of video streams	2x H.264/MJPEG
Max resolution	720 x 512 @ 25/30fps (upsampled)
Number of output streams	Up to 20 (RTSP)
Compression algorithm(s)	H.264 (H.264/MPEG-4 AVC), MJPEG
Encoder bit rate control	Constant bit rate (CBR), variable bit rate (VBR)
Output bit rate (per H.264 stream)	Up to 6 Mbit/s
Total output data rate	Up to 32 Mbit/s
Video overlay	3x Text, 1x bitmap (BMP, GIF); PID Object data (blue blob), event data (red box);

Network

Interface(s)	10/100 Mb Ethernet (4-wires 0.5 mm2 from conduit)
2SM option	100FX fiber (2SM, duplex single mode fiber with dual LC from conduit)
Protocols	IPv4, TCP/IP, UDP, RTP, RTSP, HTTP, HTTPS, ICMP, FTP, SMTP, DHCP, UPnP, IGMP, SNMP, QoS, ON
Password levels	User and Administrator
Supported browsers	Internet Explorer (9.0+), Chrome, Firefox, Safari
User accounts	20

Order information

EX-TC620 7.5-S PTZ 24 3C	Ex 316L PTZ IP Ti 7.5mm 9Hz 336 24Vac 3m conduit 25 mm M25
EX-TC620 7.5-S PTZ 24 2SM 3C	Ex 316L PTZ IP Ti 7.5mm 9Hz 336 24Vac 2SM 3m conduit 25 mm M25, Direct to Fiber.
EX-xxxxx 7.5-x xxx	Lens type in mm: 7.5, 9.0, 13, 19, 25, 35, or 50
EX-xxxxx xx-S xxx	-S for Slow (8.3 fps) or -F for fast (30 fps)
EX-xxxxx xx-x 24 xx	Replace 24 with 115 or 230 respectively for 115 or 230 Vac power
EX-xxxxx xx-x xx 3C	Replace 3C with 5C or 10C respectively for 5 or 10 meter conduit

DSI CHART.

TC620-PID

	50 mm	35 mm	25 mm	19 mm	13 mm	9 mm	7.5 mm
■ deadzone	64	44	32	24	16	11	8
■ Detect [m]	555	387	276	211	142	100	76
■ Recognize [m]	370	258	184	141	95	67	51
■ Ident [m]	185	129	92	70	47	33	25

SIQURA

VIRTUAL FENCE - INTRUSION DETECTION