



EXTPTZ2500

HAZARDOUS LOCATIONS CERTIFIED STAINLESS STEEL VISUAL AND THERMAL/GAS DETECTION MONITORING SYSTEM

FEATURES

- Dual visual plus thermal monitoring in a single camera
- AISI316L stainless steel PTZ
- Automated temperature monitoring
- Automated gas detection
- Monitor multiple temperature points/assets
- Weatherproof standard IP66/IP67
- Operating temperature -40°C to +60°C

KEY BENEFITS

- Thermal temperature readings with visual confirmation to monitor equipment, flame detection, and tank monitoring
- Gas Leak Detection and quantification for continuous monitoring of environments involving many industrial gases.
- More reliable continuous temperature readings under all system load conditions
- Reduced downtime due to unplanned outages by detection of problems before failures occur
- Reduced monitoring requirements for operations personnel
- Reduced product losses
- Regulatory compliance
- Trending analysis allows input into condition-based maintenance programs

OVERVIEW

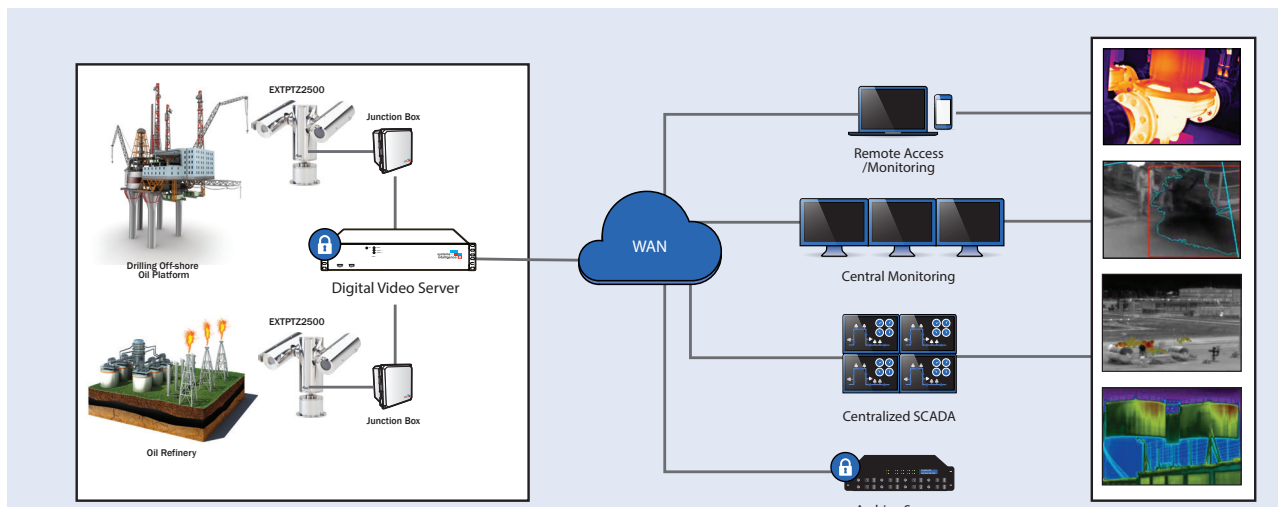
Continuous thermal monitoring systems are able to anticipate, detect, and respond rapidly to problems, thereby reducing the chance of failures and lost productivity. Detection of temperature increases in equipment with thermal monitoring sensors allows corrective maintenance operations before an unplanned outage occurs due to asset failure.

Our OGI system offers a comprehensive solution that combines advanced IR optics, radiometry, image processing algorithms, machine learning, industrial standards compliance, and Industry 4.0 integration. It addresses the HSE needs of the industry by providing accurate and reliable gas detection capabilities.

The Systems With Intelligence thermal monitoring solution includes a hardened digital video server (DVS) that digitally records video from multiple cameras and incorporates a suite of sophisticated video and thermal analytic algorithms for the detection of anomalies. The DVS includes software tools for video monitoring and analysis, features flexible networking capabilities, and provides automated alarm and event notification.



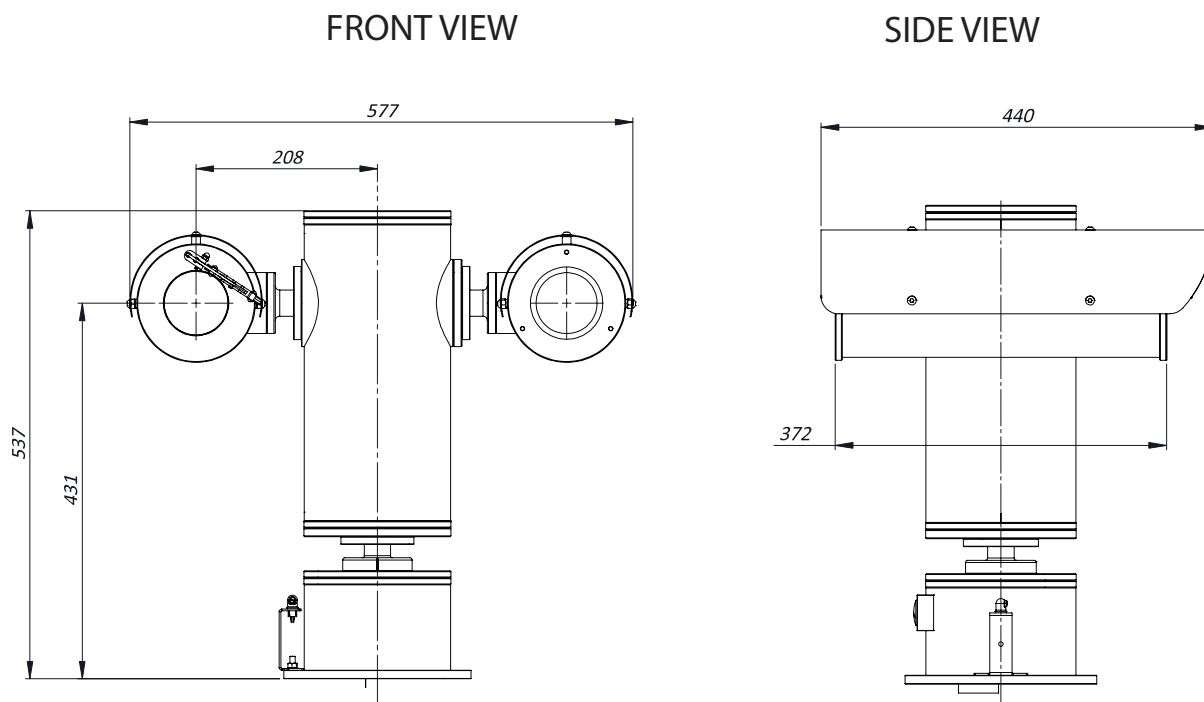
MONITORING ARCHITECTURE



APPLICATIONS

- Power transformers (oil levels, radiators and pump operation)
- Flame detection
- Tank level monitoring
- Methane, SF₆, Methanol, Sulphur Dioxide, VOC's and refrigerant gas detection
- Batteries
- Generators
- Compressors

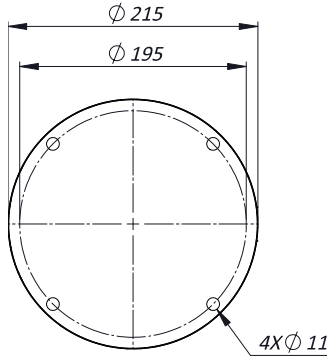
DIMENSIONS





DIMENSIONS (CONT'D)

MOUNTING PATTERN



MAX EXTERNAL LENGTH

Model	L1 [mm] Height	L2 [mm] Width
EXPTZ2500/24	537	440
EXPTZ2500/120	537	440

The unit cannot be installed upside-down nor horizontally

TECHNICAL SPECIFICATIONS

EXTPTZ2500 SPECIFICATIONS	
GENERAL & MECHANICAL	
Dimensions	See drawings previous page
Operating Temperature	-40° +60°C, +75°C peak
Construction	AISI3 16L Stainless Steel
Finish	Electro-polished
Mounting	4x Ø11 on 195 PCD
Cable entries	1x M25x1,5 or 3/4in (adapter)
Wiper	Yes
Pan Angle	360° (continuous rotation)
Pan Speed	0 – 40°/second
Pan Torque	20Nm (limited with safety device)
Tilt Angle	180° (+/-90°)
Tilt Speed	0 – 20°/second
Tilt Torque	20Nm (limited with safety device)
Rotation angle	Electronically adjustable limit switches
Backlash	<0,1°
Max preset accuracy	0.04°
Control protocol	Pelco D (RS485)
Weight	Unit: 48,5kg (106lb) / Package: 54kg (119lb)

ELECTRICAL	
Thermostatically controlled heater T[°C] ON	12 ± 4°C
Thermostatically controlled heater T[°C] OFF	20 ± 3°C
Supply voltage	24VAC, 120VAC (+/-10%)
Power consumption	120W

CAMERA	
Sensor:	1/2.8" CMOS Progressive Scan (2MP)
Lens:	Compatible with CS Mount or C Mount with adaptor DC Auto Iris Support
Day/Night:	IR cut filter removal (ICR) Off/Dusk/Dark/Custom
Iris:	DC-Auto/Manual
Min. illumination:	0.2 lux @ F1.2 (Colour) 0.01 lux @ F1.2 (BW)
VIDEO	
Video Compression:	H.264 (MPEG-4 Part 10) MJPEG
Resolution:	1920 x 1080 (1080p) 1280 x 720 (720p) 720 x 480 (D1) 704 x 480 (4CIF) 704 x 240 (2CIF) 352 x 240 (CIF) 176 x 120 (QCIF)
Frame Rate:	30 fps for all resolutions (except 1080p & 720p-15fps)
Video Streaming:	Triple Stream: 2ch H.264, 1ch MJPEG Stream-profile: resolution /compression / framerate / video quality
Analog Video Out:	BNC port, NTSC
Image Setting:	Brightness, Contrast, AWB, Sharpness, Saturation, Gain, White Balance, Auto Exposure
Image Mirroring:	Horizontal/Vertical/Both
* The specification for this product may change without prior notice for product improvement.	



TECHNICAL SPECIFICATIONS (CONT'D)

EXTPTZ2500 SPECIFICATIONS	
CERTIFICATIONS	
Ingress Protection	EN 60529 (IP66/IP67); NEMA 4X
* Suitable for Class I Div 2 using Zone 1 wiring methods as permitted per NEC Art. 501"	"Class I, Zone 1, AEx db op pr IIC T6 Gb -40°C ≤ Tamb ≤ +60°C Zone 21, AEx tb IIIC T85°C Db -40°C ≤ Tamb ≤ +55°C Zone 21, AEx tb IIIC T90°C Db -40°C ≤ Tamb ≤ +60°C Class I, Zone 1, AEx db op pr IIB T5 Gb -40°C ≤ Tamb ≤ +75°C Zone 21, AEx tb IIIC T100°C Db -40°C ≤ Tamb ≤ +70°C Zone 21, AEx tb IIIC T105°C Db -40°C ≤ Tamb ≤ +75°C Class I, Div 2, Group A, B, C, D T6 -40°C ≤ Tamb ≤ +60°C * Class I, Div 2, Group C, D T5 -40°C ≤ Tamb ≤ +75°C *

* Suitable for Class I Div 2 using Zone 1 wiring methods as permitted per NEC Art. 501"

Vibration	EN/IEC 60068-2-6; EN/IEC 60068-2-27
IECEX Standards	IEC 60079-0; IEC 60079-1; IEC 60079-28; IEC 60079-31
EMC	EN 50130-4; EN 55035 ; EN/IEC 61000-6-2 ; EN/IEC 61000-6-4
LVD	EN 60950-1; EN 60950-22
FCC	FCC part 15B
RoHS	2011/65/EU + 2015/863/EU (RoHS 3)
WEEE	2012/19/EU
North American Standards	"FM Class 3600; FM Class 3810; ANSI/UL 61010-1; ANSI/UL 60079-0; ANSI/UL 60079-1; ANSI/UL 60079-28; ANSI/ISA 60079-31; ANSI/UL 50E; ANSI/IEC 60529 CSA C22.2 No. 0.4; CSA C22.2 No. 0.5; CAN/CSA C22.2 No. 61010-1; CAN/CSA-C22.2 No. 60079-0; CAN/CSA-C22.2 No. 60079-1; CAN/CSA-C22.2 No. 60079-28; CAN/CSA-C22.2 No. 60079-31; CSA C22.2 No. 94.2; CAN/CSA C22.2 No. 60529"
Analytics	Motion Detection/ Tampering/ Audio detection
Local storage	microSD (card not provided)
Network Storage	support for recording to NAS

NETWORK	
Interface	10/100 Mbps Ethernet
Security	User Authentication/ HTTPS/ IP Filter/ IEEE 802.1x
Protocols	IPv4/v6, TCP, UDP, RTP, RTSP, HTTP, HTTPS, ICMP, FTP, SMTP, DHCP, PPPoE, UPnP, IGMP, SNMP, QoS, ARP, NTP

ACCESSORIES	
A26	Wall mounting bracket

THERMAL – TEMPERATURE MONITORING	
Spectral Band	7.5 to 13.5 um
Sensitivity	0.1° C
Frame rate	30Hz, 7.5Hz

THERMAL – OIL TEMPERATURE MONITORING	
Spectral Band	8 to 14 um
Accuracy	+2°C (0°C to 120°C)
Frame rate	30Hz, 7.5Hz

THERMAL – GAS LEAKAGE MONITORING	
Spectral Band	7-9.5 (CH4, SO2, VOC's, Natural Gas and/or hydrocarbons leaks), 8-14 (SF6 and/or refrigerant gas leaks). MWIR available on demand
Accuracy	+1°C (0°C to 60°C)
Frame rate	30Hz, 7.5Hz



CONFIGURATION



BASE UNIT		Description
EXTPTZ2500		Stainless Steel PTZ Thermal and Visual Camera for Hazardous locations
POWER		
PT05		24VAC Pan Tilt Base
PT06		120VAC Pan Tilt Base
THERMAL SENSOR		
THERMAL TEMPERATURE MONITORING		
VL01/VS01		25° x 20°, 25mm, 640x512 pixels (30Hz/7.5Hz)
VL02/VS02		45° x 37°, 13mm, 640x512 pixels (30Hz/7.5Hz)
VL03/VS03		32° x 26°, 19mm, 640x512 pixels (30Hz/7.5Hz)
VL04/VS04		18° x 14°, 35mm, 640x512 pixels (30Hz/7.5Hz)
VL05/VS05		12.4° x 9.9°, 50mm, 640x512 pixels (30Hz/7.5Hz)
OIL THERMAL TEMPERATURE MONITORING		
WL01/WS01		50mm, 640x480 (25Hz/9Hz)
WL02/WS02		35mm, 640x480 (25Hz/9Hz)
WL03/WS03		20mm, 640x480 (25Hz/9Hz)
GAS THERMAL LEAKAGE MONITORING		
XL01/XS01		50mm, 640x480 (25Hz/9Hz)
XL02/XS02		35mm, 640x480 (25Hz/9Hz)
XL03/XS03		20mm, 640x480 (25Hz/9Hz)
		Other gases on demand SF6, Methanol or Refrigerants) or MWIR camera
VISUAL CAMERA		
FZ02		High Definition 10x Zoom, 5.1 to 51mm lens
BRACKETS		
A27		AISI316L wall mounting bracket
CABLE		
FO		On-board FO media converter



Follow Us:



Systems With Intelligence Inc.
 6889 Rexwood Road, Unit #9
 Mississauga, Ontario, CANADA
 L4V 1R2

Tel: +1-289-562-0126
Fax: +1-289-562-0152

General Inquiries:
info@SystemsWithIntelligence.com

Sales Inquiries:
sales@SystemsWithIntelligence.com

Product Support:
support@SystemsWithIntelligence.com

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