EX286W HD IP PTZ JB

Complete camera station

Overview

Eaton's EX series are highly advanced process and surveillance camera stations that are certified to meet worldwide explosion proof environments.

Features

- Full HD resolution
- DNV type approval
- EX certified for Zone 1 (gas group IIC) and Zone 2 (dust)
- Digital WDR (wide dynamic range)
- IR sensitive
- Integrated Ex e junction box
- Flexible powering (30 VAC, 24 VDC)
- Automatic day/night function

- Audio (optional)
- Sunshield
- Washer pump & tank (optional)
- Auto focus with manual override
- Auto iris with manual override
- Built-in heating
- Thermoelectric heating
- Scratch proof, tempered glass
- 20 x zoom
- Designed to accept future software upgrades remotely

The EX286 HD IP PTZ JB series is designed for direct termination of fiber optic, IP and power supply. Pan/tilt, camera and junction box combined in one compact design makes it an extremely versatile camera station choice.

Designed specifically for operation in the most demanding conditions, the EX286 HD IP PTZ JB is built from high quality electro polished 316L stainless steel and has scratch resistant tempered window glass and a built-in heater as standard.

This camera station will quickly focus on a predefined object or area by utilizing the preset position feature. 100 positions are at your fingertips and will allow the operator to alternate between areas, processes or objects rapidly.

Additionally the EX286 HD IP PTZ JB carries global Ex and Marine certifications & approvals and when combined with its IP66 ingress protection it makes it exceptionally resilient to extreme environmental conditions where vibration, humidity, extreme temperature variations and corrosion are a normal occurrence. Low power consumption combined with a reflective surface has resulted in the lowest surface temperature classification possible, i.e. T6.

Installation is simple and a single cable is sufficient for the transmission of data and power, routed directly to the control cabinet (standard Ethernet cable).

The EX286W HD IP PTZ JB can work with illumination as low as 0.01 lux, has 1080p resolution and uses the HERNIS™ Flex IP control protocol. Additionally the future proof design can facilitate future software upgrades and diagnostics remotely.

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Powering Business Worldwide

Certifications

Camera

Ex code	EX II2 GD - Ex d IIC T6 Gb (Gas) & Ex tb IIIC T85°C Db (Dust)
ATEX	Presafe 15 ATEX 7413
IECEx	IECEx PRE 15.0069
TR CU	TR CU C-NO.GB05.B00872
INMETRO	DNV 13.0001

Junction box

Ex code	EX II 2 (1) GD Ex d [op is Ga] IIC T6 Gb (Gas) or Ex tb IIIC T85°C Db (Dust)	EX II 2 GD Ex d IIC T6 Gb (Gas) Ex tb IIIC T85°C Db (Dust)
ATEX	Presafe 15 ATEX 6485X	
IECEx	IECEx PRE 15.0025X	
TR CU	TR CU C-NO.GB05.B00872	
INMETRO	DNV 13.0004X	

Specifications

Physical dimensions camera

Weight	25.3 kg
Dimensions (W x H x D)	331 x 370 x 219 mm
Mounting	Upright or hanging – Bolts: M12, 4 pcs.(not included) Field cable installation through ATEX/IECEx approved glands (Compound gland) M20 Not included
Material & finish	Stainless steel AISI 316L, electro polished

Operating conditions camera

IP protection rate	IP66 (NEMA 4x)
Humidity	Up to 100%
Operating temperature range	-20°C to +60°C (heating element inside housing)
Enclosure	Salt mist tested
EMC	All locations including open deck

Operating conditions junction box

IP protection rate	IP66 / IP67 (NEMA 4x/6 and 6P)
Humidity	Up to 100%
Operating temperature range	-50°C to +60°C (heating element inside housing)

Camera

Image sensor	1/2.8" progressive scan CMOS
Sync system	Internal
Frame rate	50 HZ: 25 fps (1920 × 1080), 25 fps (1280 × 720) 60 HZ: 30 fps (1920 × 1080), 30 fps (1280 × 720)
Min. illumination	Color: 0.05Lux @(F1.6, AGC ON) B/W: 0.01Lux @(F1.6, AGC ON)
S/N ratio / WDR	> 50 dB / WDR

Lens	20x optical	30x optical
Focal length	4.7 - 94mm	4.5 - 135mm
Aperture range	F1.6 - F3.5	F1.6 - F4.4
Angle of view	61.4 - 2.9° (wide-tele)	65.1 - 2.35° (wide-tele)
Min. working distance	10mm - 1500mm (wide-tele)	10mm - 1500mm (wide-tele)
Zoom speed	Approx. 2.7s (optical, wide-tele)	Approx. 3s (optical, wide-tele)
Day & night	IR cut filter auto switch	IR cut filter auto switch

Specifications IP

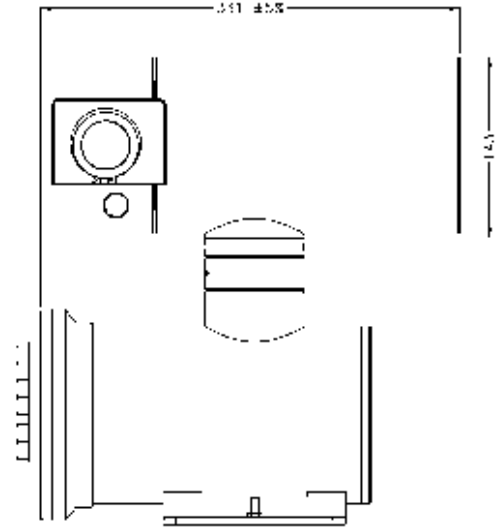|	
Protocol	IPv4/IPv6, TCP/IP, HTTP, DHCP, DNS, DDNS, RTP, RTSP, PPPoE, SMTP, NTP, UPnP, SNMP, FTP, 802.1x, QoS, HTTPS, IPv6 (SIP, SRTP optional)
Compression	Main stream: H.264 Sub stream: H.264, MJPEG
H.264 compression profile	Main profile, high profile
Dual-streaming	Supported
Video bit rate	256 Kbps - 13 Mbps

Specification fiber optics (FO)

Mode	Single mode (SM), bi-directional transmission
Wave length	1310 / 1550 nm
Optical budget	19 dB
Operating distance	Up to 20 km
Connector	1 x LC connector on SFP module FO pigtail with LC fibre connector (not included) in fibre splice box (included)

General arrangement drawing (all dimensions in mm)

Specifications

Attributes			
Power supply for config. 311/466	30 VAC, +10% -30%, 50/60 Hz		
Power supply for config. 314/466	115/230 VAC, +/-10%, 50/60 Hz		
Power supply for config. 315/466	24 VDC +/-10%		
Power consumption/heat dissipation	30VAC:	Min	19W 45W (heating on) 44W (washer pump EXMD110 is running, and heating in base is off)
		Max	62W Max (Washer pump EXMD110 is running, and heating in base is on)
	24VDC:	Min	19W 34W (heating on) 34W (washer pump EXMD110 is running, and heating in base is off)
		Max	46W Max (washer pump EXMD110 is running, and heating in base is on)
	115/230VAC:	Min	21W 51W (heating on) 48W (washer pump EXMD110 is running, and heating in base is off)
		Max	68W (washer pump EXMD110 is running, and heating in base is on)
Rotating angle/variable speed	Pan: 0-360°/Speed 1.5°/sec. - 45°/sec Tilt: ±90° / Speed 1.5°/sec. - 26°/sec		
Preset/home positions	100 preset + 4 home positions, accuracy ≤ 0.2°		
Accessories			
Included	Sunshield		
Optional	Tropical sunshield, tank & pump, wall or weld bracket, safety wire, HERNIS™ Muliticables, cable compound glands		

Ordering requirements

The following code is designed to help in selection of the correct unit.

Order info		
HERNIS™ part no:	097184-31**x**/4**x**6	
31<u>1</u>/4<u>66</u>	IP-FO 30VAC	20xZ 1080p
31<u>1</u>/4<u>86</u>	IP-FO 30VAC	30xZ 1080p
31<u>4</u>/4<u>66</u>	IP-FO 115/230VAC	20xZ 1080p
31<u>4</u>/4<u>86</u>	IP-FO 115/230VAC	30xZ 1080p
31<u>5</u>/4<u>66</u>	IP-FO 24VDC	20xZ 1080p
31<u>5</u>/4<u>86</u>	IP-FO 24VDC	30xZ 1080p