ExSite® Series Explosionproof Positioning System

PAN/TILT SYSTEM WITH IOP CAMERA AND OPTIONAL WIPER

Product Features

- Electropolished 316L Stainless Steel Construction
- Upright or Inverted Operation
- Receiver, Pan/Tilt, and Enclosure with an Integrated Optics Package (IOP)
- 2 Autofocus, High Resolution Integrated Optic Packages
 - 23X Day/Night, 80X Wide Dynamic Range, Motion Detection, and 540 TVL Horizontal Resolution
 - Color 22X EXview HAD™
- · Multilingual On-Screen Menus
- Password Protection
- · Configurable Camera Settings
- On-Screen Compass, Tilt, and Zoom Display
- Variable Speed Pan: 0.1° to 40°/second with Proportional Pan
- 360° Continuous Pan Rotation
- Tilt Range of +90° to -90° from Horizontal
- · Preset Positioning, Patterns, Multiple Scan Modes
- Designed for Minimal Maintenance
- · Built-in System Memory
- Software Update and Setup Through Remote Data Port (IPS-RDPE-2)
- Password Protection to Prevent Unauthorized Changes to the System

The ExSite® Pan/Tilt Series are innovative integrated positioning systems that meet stringent explosionproof requirements. The ExSite Pan/Tilt Series not only combine a receiver, pan/tilt, and enclosure in a single, easy-to-install system, but also includes an Integrated Optics Package (IOP). The Integrated Optics Package contains an autofocus camera and lens module with configurable features.

For a wide range of applications, the **ExSite Pan/Tilt Series** feature a choice of two different IOP cameras: a high resolution camera with LowLight[™] color technology and 22X zoom lens (22X optical, 12X digital), and a high resolution day/night camera with a removable infrared cut filter and 23X zoom lens (23X optical, 12X digital).

The electropolished 316L stainless steel construction makes the ExSite Pan/Tilt Series ideal for all kinds of environmental conditions including marine applications. The system has an absolute operating temperature range of -76° to 140° F (-60° to 60° C). Within two hours after power-up, the entire unit can de-ice and be operational from a temperature of -13°F (-25°C).

The **ExSite Pan/Tilt Series** include an optional window wiper. The wiper is completely integrated into the enclosure and does not interfere with the viewing range of the system. The wiper can be



(NOT SUPPLIED)

- On-Board Connector for
 - Pelco VC-UTP Video Converter
 - Pelco TXB Series Translator Boards for Use with Hernis and Other
 - Pelco FS85011A and Third-Party Fiber Optic Transmitters

configured to delay between wipes and to automatically shut off after a specified period. A built-in heater, window defroster/defogger, sun shroud, and blower are standard features on the ExSite Pan/Tilt Series. All units also include three auxiliary output relays that can be configured for a variety of uses.

The ExSite Pan/Tilt Series variable pan and tilt speeds range from 0.1 to 40 degrees per second in manual pan, tilt, and preset mode. The **ExSite Pan/Tilt Series** is capable of 360 degrees of continuous pan rotation. The tilt range allows for horizontal viewing of -90 to +90 degrees. There are 80 preset positions with a preset accuracy of ±0.1 degree.

The systems are available with an input voltage of 24 VAC or with a power source of 100 to 240 VAC. The ExSite Pan/Tilt Series also have a power-up recovery mode that allows the user to specify what operation the system will resume whenever the power is cycled.

ExSite Pan/Tilt Series feature built-in system memory in the power module to store camera and location-specific pan/tilt settings, including labels, presets, patterns, and zones. These settings are automatically down-loaded if a new pan and tilt body is installed.

TECHNICAL SPECIFICATIONS

PRODUCT FEATURES

- Integral Multiprotocol Receiver/Driver
- 360° Continuous Pan Rotation, Tilt Range ±90°
- · Quick and Easy Installation
- · Designed for Minimal Maintenance, No Gears to Adjust
- 2-Year Continuous-Duty Warranty
- · Upright or Inverted Installation

SOFTWARE/HARDWARE

- Configurable Power-up Mode
- · Configurable Park
- Sun Shroud, Heater/Window Defroster, and Blower All Standard
- 80 Presets with Custom Camera Settings and Labels
- ±0.1° Preset Accuracy
- Multilingual Menus (English, Spanish, Portuguese, Italian, French, German, Russian, Polish, Turkish, and Czech)
- · On-Screen Compass, Tilt, and Zoom Display
- · Password Protection
- 8 Zones (configurable in size) Can Be Labeled with Up to 20 Characters Each or Set to Output Blank Video
- Configurable Locations of Labels and On-Screen Displays
- 7 Alarm Inputs
- · 3 Relay Outputs
- Action on Alarm: Alarms can be individually configured for 3 priority levels, to initiate a stored pattern, or to go to an associated preset when received
- Resume After Alarm: Allows the pan/tilt to return to a previously configured state after alarm acknowledgement or to its previous position before alarm
- Patterns: Up to 4, on-screen, user-defined configurable patterns; includes pan, tilt, zoom, and preset functions
- Proportional Pan/Tilt: Continually decreases pan and tilt speeds in proportion to depth of zoom
- Variable Scan Speed: Scan speed can be configurable between 1° and 40°/sec
- Configurable Limit Stops for Auto/Random/Frame Scan Modes
- Autosensing Protocol (Coaxitron®, RS-422 Pelco P and Pelco D); Accepts Competitive Control Protocol with Optional Translator Card
- Built-in Menu System for Setup of Configurable Functions

ALL CAMERAS

- Autofocus with Manual Override
- Auto Iris with Manual Override
- Configurable Settings
- AC Line Lock
- NTSC/PAL

ELECTRICAL

Input Voltage 24 VAC or 100 to 240 VAC, 50/60 Hz

Input Voltage Range ±1

Power Consumption Maximum 60 W (120 VA) per system

Heater and Defroster Microprocessor controlled

Electrical Connections
6-foot pigtail wire harness with connections for power, video, data control, alarm inputs,

and auxiliary outputs

Auxiliary Outputs 3 N/O or N/C relays, 32 VDC, 0.5 A. Relay 3 is

allocated specifically for an external washer

(not supplied by Pelco).

Alarm Inputs 7

MECHANICAL

Cable Entry One 0.75-inch (1.91 cm) NPT threaded

opening; one explosionproof sealable fitting

supplied

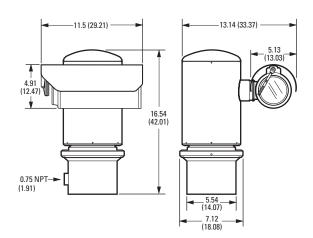
Pan Movement 360° Continuous pan rotation
Vertical Tilt Unobstructed +90° to -90°

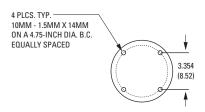
Variable Pan/Tilt Speed

Pan 0.1° to 40°/sec variable-speed operation Tilt 0.1° to 40°/sec variable-speed operation

Preset Speeds

Pan 40°/sec Tilt 40°/sec





NOTE: VALUES IN PARENTHESES ARE CENTIMETERS; ALL OTHERS ARE INCHES.

TECHNICAL SPECIFICATIONS

GENERAL

Construction 316L stainless steel Finish Electropolish

Viewing Window 0.50-inch (12.7 mm) thick, soda-lime

tempered glass

Operating Temperature -76° to 140°F (-60° to 60°C)

Unit Weight 55 lb (25 kg)
Shipping Weight 73 lb (33 kg)
Effective Projected Area (EPA) 40.8 square inches

CERTIFICATIONS/RATINGS

- FCC
- UL/cUL Listed
- UL/cUL Hazardous Locations Listed per NEC Division and Zone

requirement

Class I, Divisions I and II, Groups A, B, C, and D Class II, Divisions I and II, Groups E, F, G, T5 Class I, Zone 1, AEx d IIC, Ex d IIC, T5

- AEx tD 21 T105°C
- 04/UL-BRAE-0027 BR-Ex d IIC, T5, IP66
- IECEx UL 11.0007X
- Tamb –60°C to 60°C
- NEPSI-China, Ex d IIC, T5, Cert No. GYJ05584
- C-Tick
- S Mark for Argentina
- Meets NEMA Type 4X standards
- Lloyd's Register Type Approval: Marine, offshore, and industrial installations for use in environmental categories ENV1, ENV2, and ENV5; Certificate No. 06/60001

CAMERA/OPTICS

	Day/Night (23X)	Color, LowLight™ (22X)
Signal Format	NTSC, PAL	NTSC, PAL
Scanning System	2:1 Interlace	2:1 Interlace
Image Sensor Effective pixels	1/4-inch Progressive Scan CCD	1/4-inch EXview HAD™ CCD
NTSC	768 (H) x 494 (V)	768 (H) x 494 (V)
PAL	752 (H) x 582 (V)	752 (H) x 582 (V)
Horizontal Resolution		
NTSC	540 TV lines	>470 TV lines
PAL	540 TV lines	>460 TV lines
Lens	f/1.6 (focal length, 3.6 ~ 82.8 mm optical)	f/1.6 (focal length, 4 ~ 88 mm optical)
Zoom	23X optical, 12X digital	22X optical, 12X digital
Configurable Zoom Speed (Optical Range)	2.9/4.2/5.8 seconds	2.4/3.9/6.3 seconds
Horizontal		
Angle of View	54° at 3.6 mm wide zoom;	47° at 4.0 mm wide zoom;
	2.5° at 82.8 mm telephoto zoom	2.2° at 88 mm telephoto zoom
Focus	Automatic with manual override	Automatic with manual override
Maximum Sensitivity at 35 IRE		
NTSC	0.025 lux at 1/2 sec shutter (color)	0.02 lux at 1/2 sec shutter
	0.1 lux at 1/60 sec shutter (B-W)	
	0.004 lux at 1/2 sec shutter (B-W)	
PAL	0.025 lux at 1/1.5 sec shutter (color)	0.02 lux at 1/1.5 sec shutter
	0.1 lux at 1/50 sec shutter (B-W)	
	0.004 lux at 1/1.5 sec shutter (B-W)	
Sync System	Internal/AC line lock, phase adjustable using remote control, V-Sync*	Internal/AC line lock, phase adjustable using remote control, V-Sync*
White Balance	Automatic with manual override*	Automatic with manual override*
Shutter Speed	Automatic (electronic iris)/Manual	Automatic (electronic iris)/Manual
NTSC	1/2 ~ 1/30,000*	1/2 ~ 1/30,000*
PAL	1/1.5 ~ 1/30,000*	1/1.5 ~ 1/30,000*
Iris Control	Automatic Iris Control with manual override*	Automatic Iris Control with manual override*
Gain Control	Automatic/OFF*	Automatic/OFF*
Video Output	1 Vp-p, 75 ohms	1 Vp-p, 75 ohms
Video Signal to Noise	>50 dB	>50 dB

^{*}Manual control of camera setup functions can be done with CM6700, CM6800, CM9760, CM9770, CM9780, KBD200A, KBD300A, and MPT9500 controllers. Manual control of cameras cannot be done with CM7500, MPT9000, or KBD9000 controllers.

MOUNTING ACCESSORIES

MODET2	
M/XM1100	Wall mou

Wall mount designed to mount the ExSite Series system directly to a load-bearing vertical surface
Pedestal mount designed to mount an ExSite Series system directly to a horizontal surface in either an upright or inverted position
Corner adapter for use with the WXM100 to mount an ExSite Series system to the corner of a structure
Pole adapter for use with the WXM100 to mount a system to a vertical pole or with a PXM100 to mount a system to a horizontal

pole; recommended pole diameter is 4 to 9 inches (10.16 to 22.86 cm)

GENERAL

PXM100

Construction	
Mounts	Electropolished 304 stainless steel
PAXM100 Mounting Strap	s 316 stainless steel
Maximum Load	
WXM100	73 lb (33.00 kg)
CMXM100	85 lb (38.50 kg)
PAXM100	88 lb (40.00 kg)
PXM100	79 lb (35.83 kg)
Unit Weight	
WXM100	12.4 lb (5.62 kg)
CMXM100	7.6 lb (3.45 kg)
PAXM100	9.2 lb (4.17 kg)
PXM100	1.3 lb (0.60 kg)
Shipping Weight (approxima	ate)
WXM100	17 lb (7.71 kg)
CMXM100	13 lb (5.89 kg)
PAXM100	14 lb (6.35 kg)

4 lb (1.81 kg)

MECHANICAL

PXM100

CMXM100

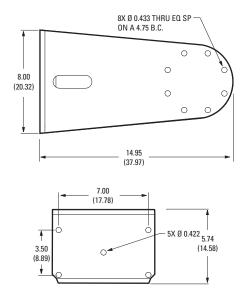
PAXM100

Mounting Method	Recommended Mounting Surface	Recommended Hardware
WXM100, CMXM100*, and PXM100	Solid concrete with the recommended strength of 3,600 psi or 25 Mpa	Five 3/8-16 x 1-9/16-inch long stainless steel drop-in anchors and five 3/8-16 x 1.0-inch thread length, stainless steel hex head bolts with stainless steel lock washers (not supplied)
	Steel I beam with a minimum of 1/8-inch wall	Five 3/8-16 x 1.0-inch thread length, stainless steel hex head bolts with stainless steel lock washers and 3/8-16 stainless steel nuts (not supplied)
PAXM100*	Steel pole with a diameter of 4 to 9 inches (10.16 to 22.86 cm)	Four 5/8-inch wide x 40-inch (101.6 cm) long stainless steel straps to attach the adapter to a pole (supplied)

^{*} Five 3/8-16 x 1.0-inch thread length, stainless steel hex head bolts with lock washers are supplied with the CMXM100 and PAXM100 to be used with the WXM100 wall mount or PXM100 pedestal mount.

WXM100 WALL MOUNT



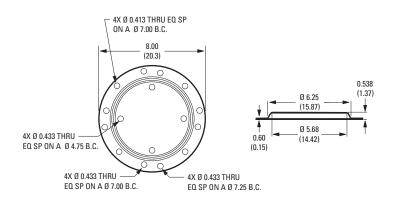


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MOUNTING ACCESSORIES

PXM100 PEDESTAL MOUNT

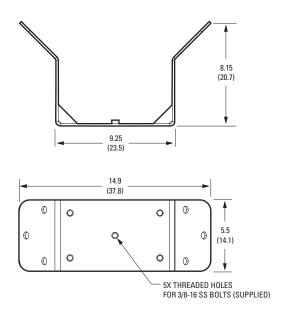




CMXM100 CORNER ADAPTER



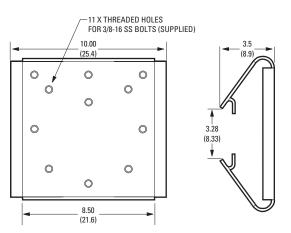
Note: Designed for use with a WXM100 wall mount.



PAXM100 POLE ADAPTER



Note: Designed for use with a WXM100 to mount a system to a vertical pole or a PXM100 to mount the system to a horizontal pole. Recommended pole diameter is 4 to 9 inches (10.16 to 22.86 cm).



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SYSTEM MODEL NUMBERS

	Model	Format	24 VAC	100-240 VAC
22X	Standard	NTSC PAL	IPSXM30C22-2 IPSXM30C22-2X	IPSXM30C22-7 IPSXM30C22-7X
Color	With Wiper	NTSC PAL	IPSXM31C22-2 IPSXM31C22-2X	IPSXM31C22-7 IPSXM31C22-7X
23X	Standard	NTSC PAL	IPSXM30CBW23-2 IPSXM30CBW23-2X	IPSXM30CBW23-7 IPSXM30CBW23-7X
Day/ Night	With Wiper	NTSC PAL	IPSXM31CBW23-2 IPSXM31CBW23-2X	IPSXM31CBW23-7 IPSXM31CBW23-7X

COMPONENT MODEL NUMBERS

Power Module	PTZ	Camera Module	
IPSXM-2 24 VAC IPSXM-7 100 to 240 VAC	IPSXMPT30 No Wiper	IPSXM30C22 IPSXM30C22X IPSXM30CBW23 IPSXM30CBW23X	Color (NTSC) camera (264X) no wiper Color (PAL) camera (264X) no wiper Day/Night (NTSC) camera (276X) no wiper Day/Night (PAL) camera (276X) no wiper
	IPSXMPT31 With Wiper	IPSXM31C22 IPSXM31C22X IPSXM31CBW23 IPSXM31CBW23X	Color (NTSC) camera (264X) with wiper Color (PAL) camera (264X) with wiper Day/Night (NTSC) camera (276X) with wiper Day/Night (PAL) camera (276X) with wiper

OPTIONAL ACCESSORIES

TXB Series* Translator boards for AD Manchester, Hernis,

Bosch® (Philips®, Burle), Sensormatic®, TASS, Vicon™, and NTCIP™ protocols.

IPS-CABLE Remote monitor cable and software kit.

IPS-RDPE-2* Remote data port. 24 VAC, wall/pole mount video/data breakout box. Allows ground-level control/configuration when used with the

IPS-CABLE.

VC-UTP Converts video for use with unshielded

twisted pair (UTP); cannot be used simultaneously with TXB translator boards.

FS85011A Series* Factory-installed fiber transmitter sends one unidirectional composite video channel and

unidirectional composite video channel and one bidirectional data channel over on multimode or single-mode fiber optic cable.

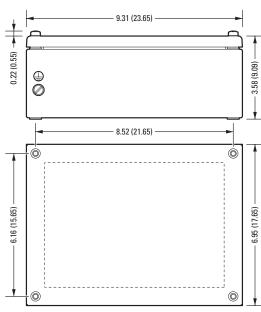
EXAC Factory-installed increased safety (Ex e)

potted cable interface and junction box with screw-down terminal for quick connection

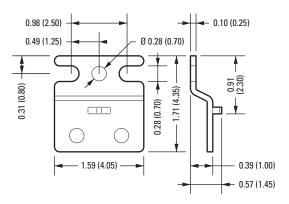
and easy installation.

*If TXB or FS85011A boards are installed, remote upload of system software will not be possible.

EXAC JUNCTION BOX



EXAC MOUNTING BRACKET



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