

# ExSite® IP Series Explosionproof Positioning System

## NETWORK PAN/TILT SYSTEM WITH IOP CAMERA AND OPTIONAL WIPER

### Product Features

- Ability to Control and Monitor Video Over IPv4 and IPv6 Networks
- H.264, MPEG-4, and MJPEG Compression
- Supported Protocols: TCP/IP, UDP/IP (Unicast, Multicast IGMP), UPnP, DNS, DHCP, RTP, RTSP, NTP, IPv4, SNMP, QoS, HTTP, HTTPS, LDAP (client), SSH, SSL, SMTP, FTP, mDNS (Bonjour®), and 802.1x (EAP)
- Electropolished 316L Stainless Steel Construction
- Upright or Inverted Operation
- 2 Autofocus, High Resolution Integrated Optic Options
- 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
- Up to 2 Simultaneous Video Streams

**ExSite® IP Pan/Tilt Series** has all of the features and functions of the original ExSite Series, while allowing you to control and monitor video over an IP network from virtually anywhere in the world. **ExSite IP Pan/Tilt Series** is an explosionproof integrated positioning system with a built-in 100Base-TX network interface for live streaming to any network application.

**ExSite IP Pan/Tilt Series** supports two simultaneous video streams. The two streams can be compressed in MJPEG, MPEG-4, and H.264 formats across several resolution configurations. The streams can be configured in a variety of frame rates, bit rates, and group of pictures (GOP) structures for additional bandwidth administration. The H.264 compression video files are up to 20 times smaller than MJPEG, making network video storage more affordable.

**ExSite IP Pan/Tilt Series** includes a high resolution day/night camera with a removable infrared cut filter and 36X zoom lens (36X optical, 12X digital).



- Web Viewing, up to 16 Cameras Simultaneously
- Open IP Standards
- ONVIF v1.02 Conformant

### Web Interface

**ExSite IP Pan/Tilt Series** uses a standard Web browser for powerful remote setup and administration. Up to 16 cameras can be viewed on the same network.

Network protocols such as Secure Sockets Layer (SSL) configuration for security certificates, Secure Shell (SSH) for remote logon, and Quality of Service (QoS) for priority or guaranteed data flow can be managed using a Web browser.

### Systemization

**ExSite IP Pan/Tilt Series** easily connects to Pelco IP systems such as Endura® version 1.5 (or later), MPEG-4; Endura version 2.0 (or later), H.264; Digital Sentry® version 7.3 (or later); DX8100 version 2.0 (or later); DX4700/DX4800 version 1.1 (or later); DX4700HD/DX4800HD version 2.0 (or later); and DVR5100 version 1.5.4 (or later). The camera also features open architecture connectivity to third-party software. Pelco offers an application programming interface (API) and software developer's kit (SDK) for interfacing with Pelco's IP cameras.



by Schneider Electric

International Standards  
Organization Registered Firm;  
ISO 9001 Quality System



C1311 / REVISED 4-30-13

# TECHNICAL SPECIFICATIONS

## CAMERA/OPTICS

	<b>Day/Night (36X)</b>
Signal Format	NTSC, PAL
Scanning System	2:1 interlace
Image Sensor	1/4-inch progressive scan CCD
Effective Pixels	
NTSC	768 (H) x 494 (V)
PAL	752 (H) x 582 (V)
Horizontal Resolution	
NTSC	540 TV lines
PAL	540 TV lines
Lens	f/1.4 (focal length, 3.3 ~ 119 mm optical)
Zoom	36X optical, 12X digital
Configurable Zoom Speed (Optical Range)	2.9/4.2/5.8 seconds
Horizontal Angle of View	57.2° at 3.3 mm wide zoom; 2.5° at 82.8 mm telephoto zoom
Focus	Automatic with manual override
Maximum Sensitivity at 35 IRE	
NTSC	0.018 lux at 1/2 sec shutter ( <b>color</b> ); 0.55 lux at 1/60 sec shutter ( <b>B-W</b> ); 0.00018 lux at 1/2 sec shutter ( <b>B-W</b> )
PAL	0.015 lux at 1/1.5 sec shutter ( <b>color</b> ); 0.45 lux at 1/50 sec shutter ( <b>B-W</b> ); 0.00015 lux at 1/1.5 sec shutter ( <b>B-W</b> )
Sync System	Internal/AC line lock, phase adjustable using remote control, V-Sync
White Balance	Automatic with manual override
Shutter Speed	Automatic (electronic iris)/manual
NTSC	1/2 ~ 1/30,000
PAL	1/1.5 ~ 1/30,000
Iris Control	Automatic Iris Control with manual override
Gain Control	Automatic/OFF
Video Output	1 Vp-p, 75 ohms
Video Signal-to-Noise Ratio	>50 dB

# TECHNICAL SPECIFICATIONS

## VIDEO

Video Encoding	H.264 base profile, MPEG-4, and MJPEG
Video Streams	Up to 2 simultaneous streams; the second stream is variable based on the setup of the primary stream
Frame Rate	Up to 30, 25, 24, 15, 12.5, 12, 10, 8, 7.5, 6, 5, 4, 3, 2, 1 (dependent upon coding, resolution, and stream configuration)

Available Resolutions	Resolution			MJPEG		H.264 Base Profile		MPEG-4	
	Width	Height	Format	Maximum IPS	Recommended Bit Rate	Maximum IPS	Recommended Bit Rate	Maximum IPS	Recommended Bit Rate
	704	480	NTSC	30 ips	5.4 Mbps	30 ips	1.9 Mbps	30 ips	2.0 Mbps
	352	240	NTSC	30 ips	1.3 Mbps	30 ips	0.5 Mbps	30 ips	0.6 Mbps
	704	576	PAL	25 ips	5.4 Mbps	25 ips	1.9 Mbps	25 ips	2.0 Mbps

Supported Protocols	TCP/IP, UDP/IP (Unicast, Multicast IGMP), UPnP, DNS, DHCP, RTP, RTSP, NTP, IPv4, IPv6*, SNMP, QoS, HTTP, HTTPS, LDAP (client), SSH, SSL, SMTP, FTP, mDNS (Bonjour®), and 802.1x (EAP)
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Users	
Unicast	Up to 20 simultaneous users depending on resolution settings (2 guaranteed streams)
Multicast	Unlimited users H.264 or MPEG-4
Security Access	Password protected
Software Interface	Web browser view and setup, up to 16 cameras

Pelco System Integration	Endura 1.5 or later (MPEG-4) or Endura 2.0 or later (H.264); Digital Sentry 7.3 IP bundle 3 or later; DX8100 Series 2.0 or later; DX4700/DX4800 1.1 or later; DX4700HD/DX4800HD 2.0 or later; and DVR5100 version 1.5.4 or later
Open API	Pelco API or ONVIF v1.02

Minimum System Requirements	
Processor	Intel® Pentium® 4 microprocessor, 1.6 GHz
Operating System	Microsoft® Windows® XP, Windows Vista®, Windows 7, or Mac® OS X 10.4 (or later)
Memory	512 MB RAM
Network Interface Card	100 megabits (or greater)
Monitor	Minimum of 1024 x 768 resolution, 16- or 32-bit pixel color resolution
Web Browser	Internet Explorer® 7.0 (or later) or Mozilla® Firefox® 3.0 (or later)
Media Player†	Pelco Media Player or QuickTime® 7.6.5 for Windows XP, Windows Vista, or QuickTime 7.6.4 for Mac OS X 10.4

\*Supports mixed IPv4 and IPv6 installations, but not IPv6-only deployments.

†This product is not compatible with QuickTime version 7.6.4 for Windows XP or Windows Vista. If you have this version installed on your PC, you will need to upgrade to QuickTime version 7.6.5.

# TECHNICAL SPECIFICATIONS

## PRODUCT FEATURES

- Integral Multiprotocol Receiver/Driver
- 360° Continuous Pan Rotation, Tilt Range  $\pm 90^\circ$
- 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
- $\pm 0.1^\circ$  Preset Accuracy
- Multilingual Menus (English, Spanish, Portuguese, Italian, French, German, Russian, Polish, and Turkish)
- 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  $1^\circ$  and  $40^\circ/\text{sec}$
- Configurable Limit Stops for Auto/Random/Frame Scan Modes
- Built-in Menu System for Setup of Configurable Functions

## ALL CAMERAS

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

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

## ELECTRICAL

Input Voltage	24 VAC or 100 to 240 VAC, 50/60 Hz
Input Voltage Range	±10%
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, network, alarm inputs, and auxiliary outputs
Auxiliary Outputs	3 normally open (N.O.) or normally closed (N.C.) relays, 32 VDC, 0.5 A; relay 3 is allocated specifically for an external washer (not supplied by Pelco)
Alarm Inputs	7

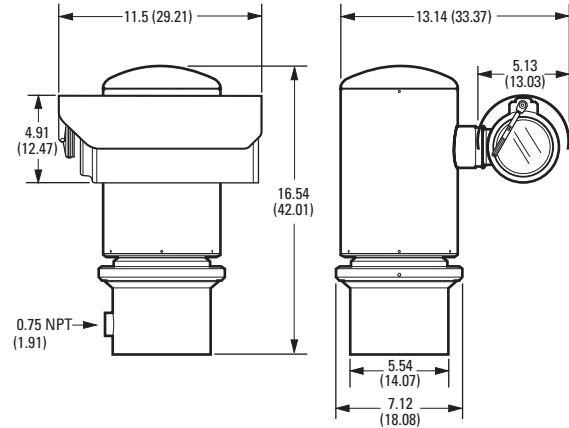
## MECHANICAL

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

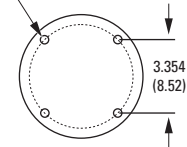
## CERTIFICATIONS/RATINGS

- FCC
- UL/cUL Listed
- UL/cUL Hazardous Locations Listed per NEC Division and Zone requirement
  - Class I, Groups A, B, C, and D
  - Class II, Groups E, F, G, T5
  - Class I, Zone 1, AEx d IIC
- AEx tD 21 T105°C
- BR-Ex d IIC, T5, IP66
  - 04/UL-BRAE-0027
- IECEx UL 11.0007X
- Ex d IIC T5 Gb
- Ex tb IIIC T105°C Db IP66
- DEMKO 04 ATEX 0413858X
  - CE 0539 Ex II 2 G Ex d IIC, T5 Gb
  - Ex II 2 D Ex tb IIIC T105°C Db IP66
- Tamb -60°C to 60°C
- NEPSI-China, Ex d IIC, T5, Cert No. GYJ05584
- C-Tick
- S Mark for Argentina
- Cisco® Medianet (MSP) compatible
- ONVIF 1.02
- Meets NEMA Type 4X standards

**Note:** Please contact Pelco for information on the dimensions of the flameproof joints.



4 PLCS. TYP.  
10MM - 1.5MM X 14MM  
ON A 4.75-INCH DIA. B.C.  
EQUALLY SPACED



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

# MOUNTING ACCESSORIES

## MODELS

WXM100	Wall mount designed to mount the ExSite Series system directly to a load-bearing vertical surface
PXM100	Pedestal mount designed to mount an ExSite Series system directly to a horizontal surface in either an upright or inverted position
CMXM100	Corner adapter for use with the WXM100 to mount an ExSite Series system to the corner of a structure
PAXM100	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

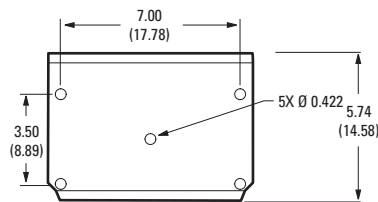
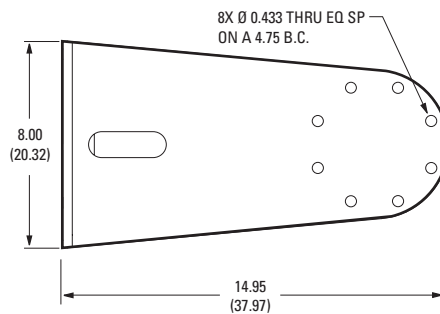
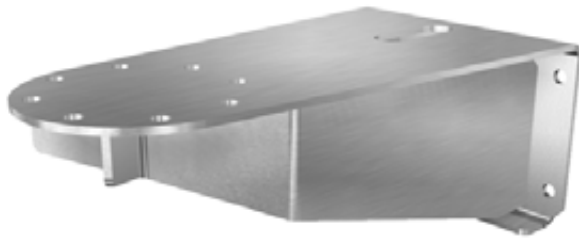
Construction	
Mounts	Electropolished 304 stainless steel
PAXM100 Mounting Straps	316 stainless steel
Maximum Load	
WXM100	33.00 kg (72.8 lb)
CMXM100	38.50 kg (84.9 lb)
PAXM100	40.00 kg (88.2 lb)
PXM100	35.83 kg (79.0 lb)
Unit Weight	
WXM100	5.62 kg (12.4 lb)
CMXM100	3.45 kg (7.6 lb)
PAXM100	4.17 kg (9.2 lb)
PXM100	0.60 kg (1.3 lb)
Shipping Weight (approximate)	
WXM100	7.71 kg (17.0 lb)
CMXM100	5.89 kg (13.0 lb)
PAXM100	6.35 kg (14.0 lb)
PXM100	1.81 kg (4.0 lb)

## MECHANICAL

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.

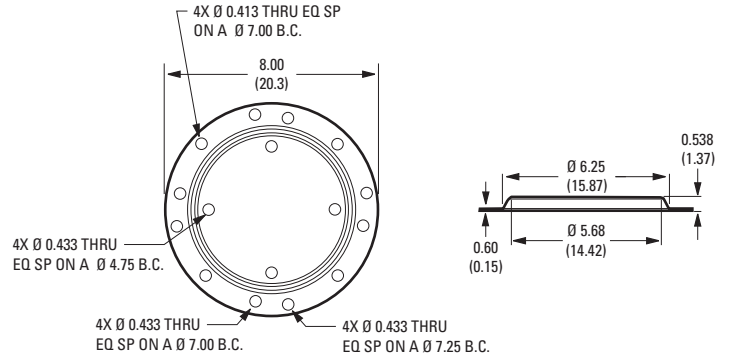
### WXM100 WALL MOUNT



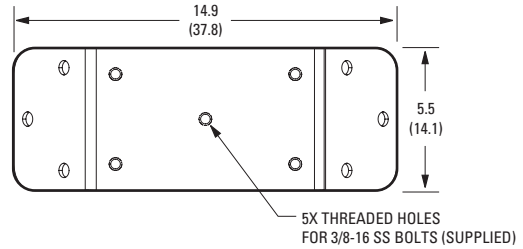
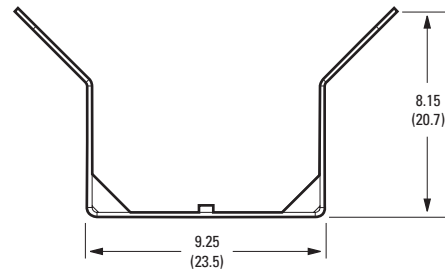
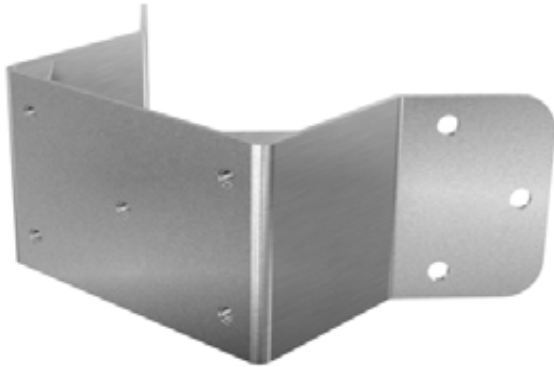
NOTE: VALUES IN PARENTHESES ARE CENTIMETERS; ALL OTHERS ARE INCHES.

# MOUNTING ACCESSORIES

## PXM100 PEDESTAL MOUNT

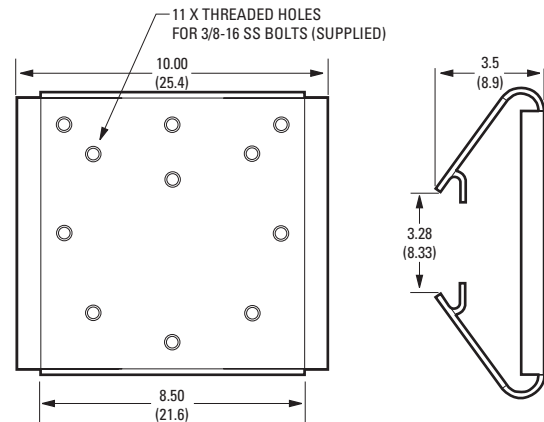


## CMXM100 CORNER ADAPTER



**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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# MODEL NUMBERS

## SYSTEM MODEL NUMBERS

Model		Format	24 VAC	100–240 VAC
36X Day/Night	Standard	NTSC	IPXME036-2	IPXME036-7
		PAL	IPXME036-2X	IPXME036-7X
	With Wiper*	NTSC	IPXME136-2	IPXME136-7
		PAL	IPXME136-2X	IPXME136-7X

## COMPONENT MODEL NUMBERS

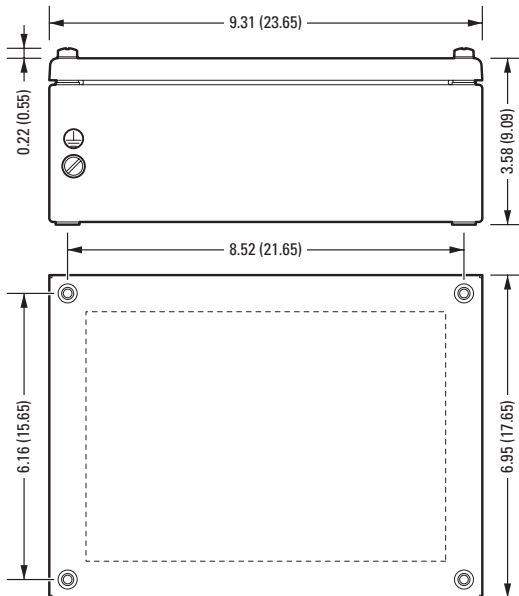
Power Module		PTZ	Camera Module	
IPXME-2 IPXME-7	24 VAC	IPXMP30 No Wiper	IPX3036 IPX3036X	Day/Night (NTSC) camera (432X) no wiper Day/Night (PAL) camera (432X) no wiper
	100 to 240 VAC	IPXMP31 No Wiper	IPX31CBW36 IPX31CBW36X	Day/Night (NTSC) camera (432X) with wiper* Day/Night (PAL) camera (432X) with wiper*

\*When cameras with wipers are in full wide zoom or 1X zoom, the wiper is visible in the upper-right corner of the video.

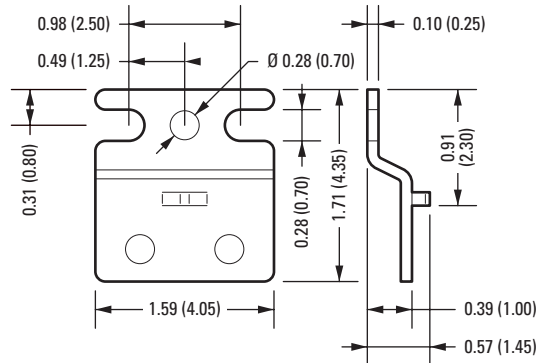
## OPTIONAL ACCESSORIES

EXAC	Factory-installed increased safety (Ex e) potted cable interface and junction box with screw-down terminal for quick connection and easy installation.
SECURE-SLA License	Enables Information Assurance compliant mode of operation

### EXAC JUNCTION BOX



### EXAC MOUNTING BRACKET



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