

# ExSite® IP Fixed Series Explosionproof Camera System

## NETWORK CAMERA SYSTEM WITH IOP CAMERA AND OPTIONAL WIPER

### Product Features

- Ability to Control and Monitor Video Over IP 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
- Manual 200° Pan and 180° Tilt Adjustments
- 2 Autofocus, High Resolution Integrated Optic Options
- Multilingual On-Screen Menus
- Password Protection
- Configurable Camera Settings
- On-Screen Zoom Display
- For Use in a Variety of Harsh and Hazardous Environments, Including Marine Environments

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

**ExSite IP Fixed 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 Fixed Series** includes a choice of two different integrated optics package (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).



- Up to 2 Simultaneous Video Streams
- Web Viewing, up to 16 Cameras Simultaneously
- Open IP Standards

### Web Interface

**ExSite IP Fixed 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 guarantee data flow can be managed using a Web browser.

### Systemization

**ExSite IP Fixed 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 4.2 (or later); DX8100 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) for interfacing to Pelco's network cameras.



by Schneider Electric

International Standards  
Organization Registered Firm;  
ISO 9001 Quality System



C1312 / NEW 3-16-11

# TECHNICAL SPECIFICATIONS

## 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 NTSC PAL	1/4-inch progressive scan CCD 768 (H) x 494 (V) 752 (H) x 582 (V)	1/4-inch EXview HAD™ CCD 768 (H) x 494 (V) 752 (H) x 582 (V)
Horizontal Resolution NTSC PAL	540 TV lines 540 TV lines	>470 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  Focus	54° at 3.6 mm wide zoom; 2.5° at 82.8 mm telephoto zoom Automatic with manual override	47° at 4.0 mm wide zoom; 2.2° at 88 mm telephoto zoom Automatic with manual override
Maximum Sensitivity at 35 IRE NTSC  PAL	0.025 lux at 1/2 sec shutter ( <b>color</b> ); 0.1 lux at 1/60 sec shutter ( <b>B-W</b> ); 0.004 lux at 1/2 sec shutter ( <b>B-W</b> )  0.025 lux at 1/1.5 sec shutter ( <b>color</b> ); 0.1 lux at 1/50 sec shutter ( <b>B-W</b> ); 0.004 lux at 1/1.5 sec shutter ( <b>B-W</b> )	0.02 lux at 1/2 sec shutter   0.02 lux at 1/1.5 sec shutter
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 NTSC PAL	Automatic (electronic iris)/Manual 1/2 ~ 1/30,000 1/1.5 ~ 1/30,000	Automatic (electronic iris)/Manual 1/2 ~ 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 Ratio	>50 dB	>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, 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 4.2 IP bundle 3 or later; DX8100 Series 2.0 or later; and DVR5100 version 1.5.4 or later

Open IP Integration	Pelco IP camera API
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

\*Internet Explorer is not supported by Mac OS X 10.4.

†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
- Quick and Easy Installation
- Designed for Minimal Maintenance
- 2-Year Continuous-Duty Warranty
- Upright or Inverted Installation

## SOFTWARE/HARDWARE

- Sun Shroud, Heater/Window Defroster, and Blower All Standard
- Multilingual Menus (English, Spanish, Portuguese, Italian, French, German, Russian, Polish, and Turkish)
- On-Screen Zoom Display
- Password Protection
- Configurable Locations of Labels and On-Screen Displays
- 7 Alarm Inputs
- 3 Relay Outputs
- 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

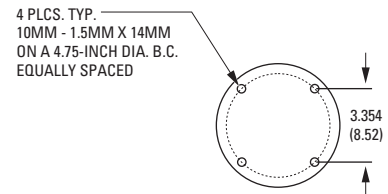
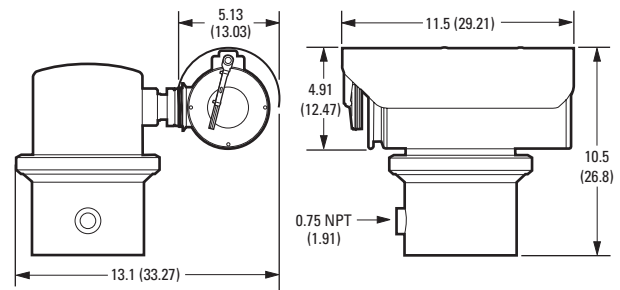
Construction	316L stainless steel
Finish	Electropolish
Viewing Window	0.50-inch (12.7 mm) thick, soda-lime tempered glass
Operating Temperature	-76° to 140°F (-60° to 60°C)
Unit Weight	34.7 lb (11.33 kg)
Shipping Weight	40.0 lb (18.14 kg) approximate
Effective Projected Area (EPA)	31.1 square inches

## 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
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NOTE: VALUES IN PARENTHESES ARE CENTIMETERS; ALL OTHERS ARE 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
- DEMKO 04 ATEX 0413858X
- CE 0539 Ex II 2 G Ex d IIC, T5
- Ex II 2 D Ex tD A21 IP66 T105°C
- 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

# 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

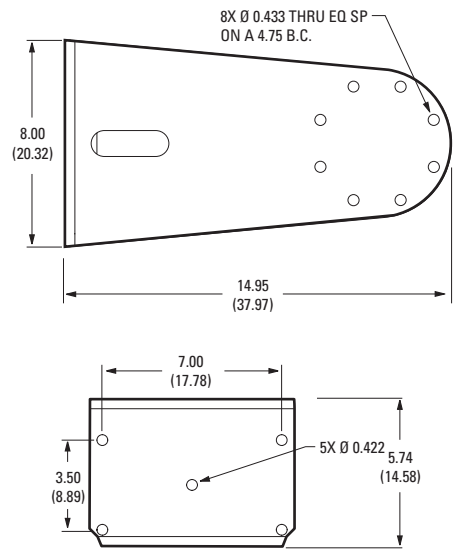
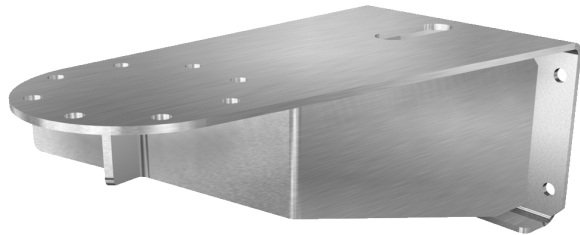
Construction	
Mounts	Electropolished 304 stainless steel
PAXM100 Mounting Straps	316 stainless steel
Maximum Load	
WXM100	73 lb (33 kg)
CMXM100	85 lb (38.50 kg)
PAXM100	88 lb (40 kg)
PXM100	79 lb (35.83 kg)
Unit Weight	
WXM100	12.4 lb (5.62 kg)
CMXM100	7.6 lb (3.45 kg)
PAXM100	9.2 lb (4.17 kg)
PXM100	1.3 lb (0.60 kg)
Shipping Weight (approximate)	
WXM100	17 lb (7.71 kg)
CMXM100	13 lb (5.89 kg)
PAXM100	14 lb (6.35 kg)
PXM100	4 lb (1.81 kg)

## 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.

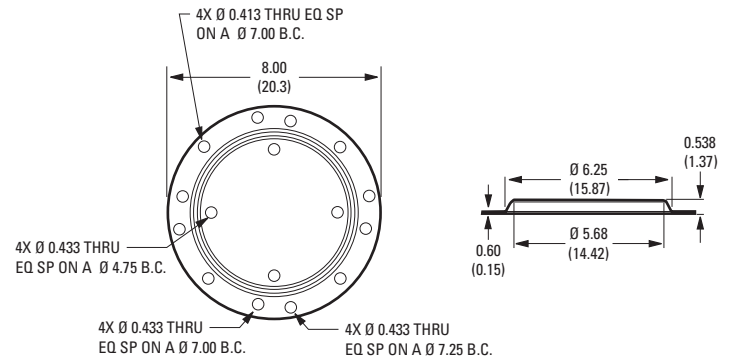
### WXM100 WALL MOUNT



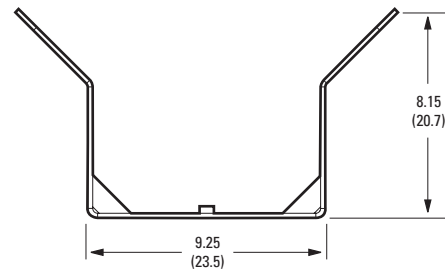
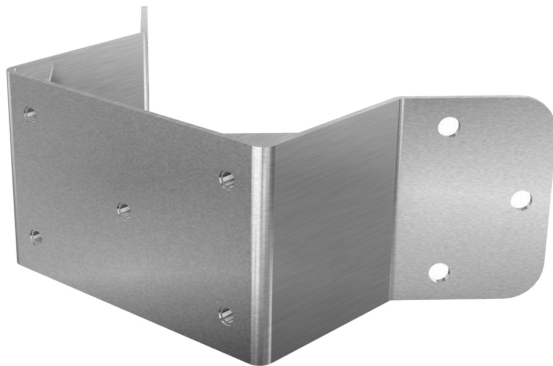
NOTE: VALUES IN PARENTHESES ARE CENTIMETERS; ALL OTHERS ARE INCHES.

# MOUNTING ACCESSORIES

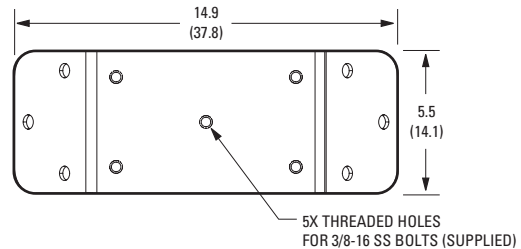
## PXM100 PEDESTAL MOUNT



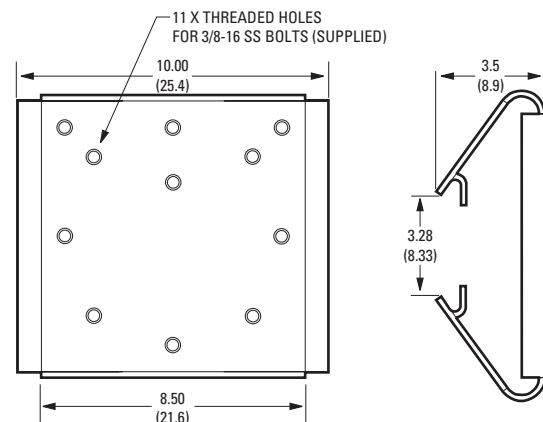
## CMXM100 CORNER ADAPTER



**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
22X Color	Standard	NTSC PAL	EHXME0C22-2 EHXME0C22-2X	EHXME0C22-7 EHXME0C22-7X
	With Wiper	NTSC PAL	EHXME1C22-2 EHXME1C22-2X	EHXME1C22-7 EHXME1C22-7X
23X Day/Night	Standard	NTSC PAL	EHXME0CBW23-2 EHXME0CBW23-2X	EHXME0CBW23-7 EHXME0CBW23-7X
	With Wiper	NTSC PAL	EHXME1CBW23-2 EHXME1CBW23-2X	EHXME1CBW23-7 EHXME1CBW23-7X

## COMPONENT MODEL NUMBERS

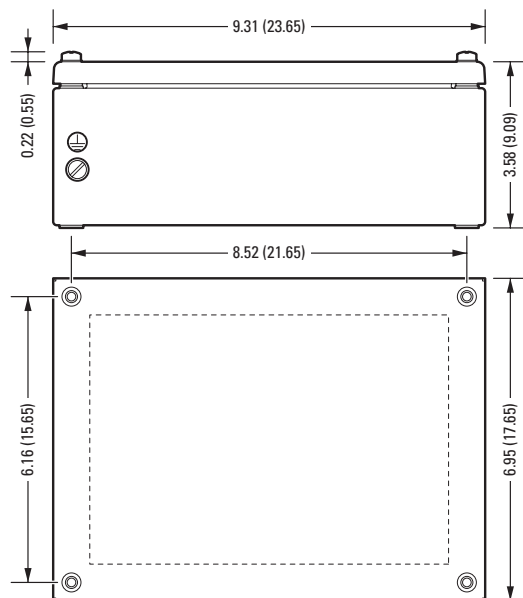
Power Module		Enclosure	Camera Module	
IPXME-2 IPXME-7	24 VAC 100 to 240 VAC	EHXM30 No Wiper	IPXSM30C22 IPXSM30C22X IPXSM30CBW23 IPXSM30CBW23X	Color (NTSC) camera (264X) no wiper Color (PAL) camera (264X) no wiper Day/Night (NTSC) camera (276X) no wiper Day/Night (PAL) camera (276X) no wiper
		EHXM31 No Wiper	IPXSM31C22 IPXSM31C22X IPXSM31CBW23 IPXSM31CBW23X	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 ACCESSORY

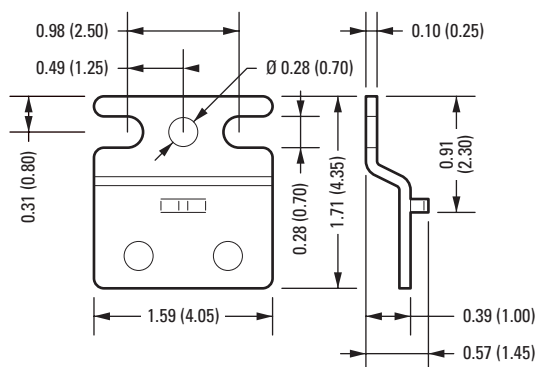
### EXAC

Factory-installed increased safety (Ex e)  
potted cable interface and junction box with  
screw-down terminal for quick connection  
and easy installation.

### EXAC JUNCTION BOX



### EXAC MOUNTING BRACKET



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