ExSite® Series Explosionproof Camera System

**FIXED AND PAN/TILT SYSTEMS WITH IOP CAMERA AND OPTIONAL WIPER**

**Product Features**

- For Use in a Variety of Harsh and/or Hazardous Environments, including Marine Environments
- Electropolished 316L Stainless Steel Construction
- Upright or Inverted Operation
- Both Fixed and Pan/Tilt Options
- Autofocus, High Resolution Integrated Optics Package (IOP) with 36X Day/Night, Motion Detection, and 540 TVL Horizontal Resolution
- Multilingual On-Screen Menus
- Password Protection
- Configurable Camera Settings
- On-Screen Compass, Tilt, and Zoom Display
- Quick and Easy Installation
- Reliable, Maintenance-Free Brushless DC Stepper Motor and Timing Belt Transmissions for Smooth and Accurate Positioning
- 2-Year Continuous-Duty Warranty
- Sun Shroud, Heater/Window Defroster, and Blower All Standard
- Configurable Locations of Labels and On-Screen Displays
- 7 Alarm Inputs, 3 Relay Outputs

The ExSite® Series are innovative integrated camera systems that meet stringent explosionproof and dust-ignitionproof requirements. 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 ExSite Fixed Series also includes an IOP and can be installed in a standard or inverted position and features manually adjustable 200 degrees of pan and 180 degrees of tilt positioning. The Integrated Optics Package contains an autofocus camera and lens module with configurable features.

The ExSite Series features a day/night camera with a removable infrared cut filter and a 36X zoom lens (36X optical, 12X digital).

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

The ExSite Series include an optional window wiper. The wiper is completely integrated into the enclosure. The wiper can be 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 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 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**

**All Models**
- Built-in Menu System for Setup of Configurable Functions
- Autofocus with Manual Override
- Auto Iris with Manual Override
- NTSC/PAL
- Integral Multiprotocol Receiver/Driver
- Autosensing Protocol (Coaxitron®, RS-422 Pelco P and Pelco D); Accepts Competitive Control Protocol with Optional Translator Card
- On-Board Connector for
  - Pelco VC-UTP Video Converter
  - Pelco TXB Series Translator Boards for Use with Hernis and Other Protocols
  - Pelco FS85011A Series
- Software Update and Setup Through Remote Data Port (IPS-RDPE-2)
- AC Line Lock

**Fixed Models**
- Manual 200° Pan and 180° Tilt Adjustments

**Pan/Tilt Models**
- Variable Speed Pan: 0.1° to 40°/Second with Proportional Pan
- 360° Continuous Pan Rotation
- Tilt Range of +90° to –90° from Horizontal
- ±0.1° Preset Accuracy
- Preset Positioning, Patterns, Multiple Scan Modes
- Configurable Power-up Mode
- Configurable Park
- 80 Presets with Custom Camera Settings and Labels
- 8 Zones (configurable in size) Can Be Labeled with Up to 20 Characters
- Each or Set to Output Blank Video
- 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 acknowledgment 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

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

**VALUES IN PARENTHESES ARE INCHES; ALL OTHERS ARE CENTIMETERS.**

**FIXED**

**Pan/Tilt**

- 13.03 (5.13)
- 12.47 (4.91)
- 1.91 (0.75 NPT)
- 29.21 (11.5)
- 14.07 (5.54)
- 18.08 (7.12)
- 33.27 (13.1)
- 12.03 (4.71)
- 42.01 (16.54)
- 10.5 (4.13)
- 5.54 (2.18)
- 33.77 (13.24)
- 0.75 NPT (2.41)
- 8.52 (3.35)

**4 PLCS. TYP.**

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

**VALUES IN PARENTHESES ARE INCHES; ALL OTHERS ARE CENTIMETERS.**
TECHNICAL SPECIFICATIONS

GENERAL

Construction  316L stainless steel
Finish  Electropolish
Viewing Window  12.7 mm (0.50-inch) thick, soda-lime tempered glass
Operating Temperature  –60° to 60°C (–76° to 140°F)
Storage Temperature  –20° to 60°C (–4° to 140°F)
Storage Humidity  0% ~ 95% RH (noncondensing)
Pan/Tilt
Unit Weight  25 kg (55.1 lb)
Shipping Weight  33 kg (73 lb)
Effective Projected Area  (EPA) 40.8 square inches
Fixed
Unit Weight  11.33 kg (24.9 lb)
Shipping Weight  18.14 kg (40 lb)
Effective Projected Area  (EPA) 31.1 square inches

CAMERA/OPTICS

<table>
<thead>
<tr>
<th>Day/Night (36X)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Signal Format</td>
</tr>
<tr>
<td>Scanning System</td>
</tr>
<tr>
<td>Image Sensor</td>
</tr>
</tbody>
</table>
| 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  | NTSC*: 0.55 lux at 1/80 sec shutter (color)  
0.018 lux at 1/2 sec shutter (color);  
0.055 lux at 1/60 sec shutter (B-W);  
0.0018 lux at 1/2 sec shutter (B-W)  
PAL*: 0.45 lux at 1/50 sec shutter (color);  
0.015 lux at 1/1.5 sec shutter (color);  
0.045 lux at 1/50 sec shutter (B-W);  
0.0015 lux at 1/1.5 sec shutter (B-W) |
| Sync System  | Internal/AC line lock, phase adjustable using remote control, V-Sync* |
| White Balance  | Automatic with manual override* |
| Shutter Speed  | NTSC: Automatic (electronic iris)/Manual  
1/2 ~ 1/30,000*  
1/1.5 ~ 1/30,000*  
PAL: Automatic (electronic iris)/Manual  
1/2 ~ 1/30,000*  
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  | >50 dB |

*All values measured at 27 dB gain.
† 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.

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, 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 1.91 cm (0.75-inch 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

*Only applicable for pan/tilt models.

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, T6  
Class I, Zone 1, AEx d IIC  
Class II, Groups E, F, G, T6
- AEx tb IIIC T85°C IP66
- BR-Ex d IIC, T6, IP66
- IECEx UL 11.0007X
- Ex d IIC T5, Cert No. GYJ05584
- 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
RECOMMENDED MOUNTS

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 10.16 to 22.86 cm (4 to 9 inches)

GENERAL

Construction
Mounts Electropolished 304 stainless steel
PAXM100 Mounting Straps 316 stainless steel

Maximum Load
WXM100 33.00 kg (73 lb)
CMXM100 38.50 kg (85 lb)
PAXM100 40.00 kg (88 lb)
PXM100 35.83 kg (79 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 lb)
CMXM100 5.89 kg (13 lb)
PAXM100 6.35 kg (14 lb)
PXM100 1.81 kg (4 lb)

MECHANICAL

<table>
<thead>
<tr>
<th>Mounting Method</th>
<th>Recommended Mounting Surface</th>
<th>Recommended Hardware</th>
</tr>
</thead>
<tbody>
<tr>
<td>WXM100, CMXM100*, and PXM100</td>
<td>Solid concrete with the recommended strength of 3,600 psi or 25 Mpa</td>
<td>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)</td>
</tr>
<tr>
<td>WXM100, CMXM100*, and PXM100</td>
<td>Steel I beam with a minimum of 1/8-inch wall</td>
<td>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)</td>
</tr>
<tr>
<td>PAXM100*</td>
<td>Steel pole with a diameter of 4 to 9 inches (10.16 to 22.86 cm)</td>
<td>Four 5/8-inch wide x 40-inch (101.6 cm) long stainless steel straps to attach the adapter to a pole (supplied)</td>
</tr>
</tbody>
</table>

* 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.
CMXM100 CORNER ADAPTER

*Note:* Designed for use with a WX100 wall mount.

PAXM100 POLE ADAPTER

*Note:* Designed for use with a WX100 to mount the system to a vertical pole or a PXM100 to mount the system to a horizontal pole. Recommended pole diameter is 10.18 to 22.86 cm (4 to 9 inches).
SYSTEM MODEL NUMBERS

<table>
<thead>
<tr>
<th>Model</th>
<th>Format</th>
<th>24 VAC</th>
<th>100-240 VAC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pan/Tilt</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Standard</td>
<td>NTSC</td>
<td>IPSXM3036-2</td>
<td>IPSXM3036-7</td>
</tr>
<tr>
<td></td>
<td>PAL</td>
<td>IPSXM3036-2X</td>
<td>IPSXM3036-7X</td>
</tr>
<tr>
<td>With Wiper*</td>
<td>NTSC</td>
<td>IPSXM3136-2</td>
<td>IPSXM3136-7</td>
</tr>
<tr>
<td></td>
<td>PAL</td>
<td>IPSXM3136-2X</td>
<td>IPSXM3136-7X</td>
</tr>
<tr>
<td>Fixed</td>
<td>NTSC</td>
<td>EHXM3036-2</td>
<td>EHXM3036-7</td>
</tr>
<tr>
<td></td>
<td>PAL</td>
<td>EHXM3036-2X</td>
<td>EHXM3036-7X</td>
</tr>
<tr>
<td>With Wiper*</td>
<td>NTSC</td>
<td>EHXM3136-2</td>
<td>EHXM3136-7</td>
</tr>
<tr>
<td></td>
<td>PAL</td>
<td>EHXM3136-2X</td>
<td>EHXM3136-7X</td>
</tr>
</tbody>
</table>

COMPONENT MODEL NUMBERS

<table>
<thead>
<tr>
<th>Power Module</th>
<th>PTZ or Enclosure</th>
<th>Day/Night 420X Camera Module</th>
</tr>
</thead>
<tbody>
<tr>
<td>IPSXM-2</td>
<td>IPSXMP30</td>
<td>IPSXM3036 NTSC, no wiper</td>
</tr>
<tr>
<td>IPSXM-7</td>
<td>PTZ No Wiper</td>
<td>IPSXM3036X PAL, no wiper</td>
</tr>
<tr>
<td></td>
<td>IPSXMP31</td>
<td>IPSXM3136 NTSC, with wiper*</td>
</tr>
<tr>
<td></td>
<td>PTZ With Wiper*</td>
<td>IPSXM3136X PAL, with wiper*</td>
</tr>
<tr>
<td>EHXM30</td>
<td>Fixed No Wiper</td>
<td>IPSXM3036 NTSC, no wiper</td>
</tr>
<tr>
<td>EHXM31</td>
<td>Fixed With Wiper*</td>
<td>IPSXM3036X PAL, no wiper</td>
</tr>
</tbody>
</table>

*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

- **TXB Series**: Translator boards for AD Manchester, Hernis, Bosch® (Philips®, Burle), Sensormatic®, TASS, Vicon®, and NTCP® 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 one bidirectional data channel over on multimode or single-mode fiber optic cable. Supported models include FS85011AMSTEX, FS85011ASSTEX, and FS85011ASFCEX.
- **EXAC**: Factory-installed 1.5-m (5 ft) increased safety (Ex e) potted cable interface and junction box with flexible armored conduit and 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.

©Copyright 2015, Pelco, Inc. All rights reserved.

Pelco, the Pelco logo, and other trademarks associated with Pelco products referred to in this publication are trademarks of Pelco, Inc. or its affiliates. ONVIF and the ONVIF logos are trademarks of ONVIF Inc. All other product names and services are the property of their respective companies. Product specifications and availability are subject to change without notice.