# Sarix® IME Indoor and Environmental IR Domes

# UP TO 4 K, WDR AND LOW-LIGHT PERFORMANCE, H.264, H.265, IK10+

# **Product Features**

- SureVision Technology (Advanced Low-Light & WDR Performance Simultaneously, Anti-Bloom Technology, 3D Noise Filtering, and Enhanced Tone Mapping)
- Up to 8 Megapixel (MP) Resolution
- Up to 120 Frames per Second (fps) at 1080p on select models
- Up to 130 dB Wide Dynamic Range (2 MP and 3 MP Models),
   Up to 120 dB Wide Dynamic Range (5 MP and 4 K Models)
- Adaptive IR Illumination (850 nm) up to 50 Meters
- Robust Electronic Image Stabilization
- Built-in Pelco Enhanced Analytics Suite & Capable of Advanced Deep Learning Analytics Available Separately
- H.265, H.264, and MJPEG Encoding with Pelco Smart Compression
- Power Redundancy From PoE/PoE+ to 12 VDC / 24 VAC
- IP66, IP67, IP68, IP69K, Type 4X (Environmental Models Only)
- IK10+ (50 Joules) Rated Vandal Resistant

## **Sarix Enhanced Range with SureVision**

Sarix® Enhanced (E) range cameras feature SureVision technology, delivering resolutions of up to 4 K high definition (HD) resolution (2 MP, 3 MP, 5 MP, and 4 K options are available), consistent color science, fast processing power, and simultaneous advanced low-light performance with wide dynamic range (WDR) and anti-bloom technologies. New advancements include 3D noise filtering, smooth response to illumination changes, and improved tone mapping to retain color accuracy and overall image contrast.

With Electronic Image Stabilization enabled by built-in Gyro technology, Sarix Enhanced cameras always provide sharp, stable images even in the presence of vibration and wind movement.

Power redundancy between PoE/PoE+ and 12 VDC/24 VAC ensures 24-hour, 365-day continuous operation even under unstable power supply situations.

## **The IME Series Dome Camera**

The IME Series include indoor and environmental domes. All models feature a sturdy design that is IK10+ (50 Joules) rated, vandal resistant. The environmental models feature worry-free use in harsh environments with IP66, IP67, IP68, IP69K and Type 4X ratings, and a wide range of operating temperatures.

Sarix Enhanced range cameras contain an integrated P-Iris, autofocus, and motorized zoom lens for quick installation and easy maintenance. Included are unique, advanced autofocus options: temperature change, day/night transition, and auto/manual focus. These benefits ensure clear, focused images regardless of the scene or environment. All autofocus options are available through the web UI.



- Support for Local Storage with Micro SD Slot for SDHC/SDXC Card
- Compatible with Pelco and Third-Party Video Systems
- ONVIF Profile S, Profile G, and Profile T Conformant
- Full 3-Year Warranty and Support

Integrated and Adaptive IR Illumination 850 nm up to 50 m is available on all models to ensure visibility in totally dark environments.

A System Watchdog feature automatically restarts the camera if a malfunction is detected.

# Video

The IME Series supports three independently-configurable video streams. The three streams can be compressed with efficient H.265, H.264 High or Main profiles, or MJPEG formats. The streams can be configured to a variety of frame rates, variable bit rates, and group of pictures (GOP) structures to optimize image quality with bandwidth and storage efficiency. In addition, streams can be encoded as constrained variable bit rate (CVBR) or constant bit rate (CBR). Pelco Smart Compression is available on both H.264 and H.265, optimizing between bandwidth and image quality and can reduce storage by up to 70% depending on the scene.

# **Open and Integrated**

Sarix Enhanced range cameras seamlessly connect to Pelco video management systems such as VideoXpert™, VXToolbox, Endura® version 2.0 (or later), and Digital Sentry® version 7.3 (or later). Sarix Enhanced range cameras integrate with major third-party video management systems through the Pelco API, and other third-party software and systems through the ONVIF Profile S, G, and T standards.



## **POWER REDUNDANCY**

**Sarix Enhanced** range cameras are designed with Power over Ethernet (PoE or PoE+), 24 VAC and 12 VDC to reduce costs and simplify planning, wiring, and installation. PoE functionality works with PoE-enabled network switches or power injectors, eliminating the need for separate power supplies and cabling, and increasing camera fail safety through an uninterruptable power supply (UPS).

The cameras also support power supply failover between PoE/PoE+ and 12 VDC/24 VAC. If the camera is running with both PoE power and 12 VDC/24 VAC power supplied, and then PoE power is lost, the camera will switch to 12 VDC/24 VAC without any interruption or video loss. Once PoE power is restored, the camera will reboot and then run using PoE power.

## PELCO ENHANCED ANALYTICS SUITE

**Sarix Enhanced** range cameras includes two Basic and seven Enhanced user-configurable behaviors to enhance the flexibility and performance of the camera. The camera is capable of running up to two Enhanced behaviors in addition to the two Basic behaviors at the same time.

For each behavior, you can set up different scenarios for the behavior, which will automatically detect and trigger alarms when specific activity is detected.

Analytics are configured and enabled using a standard Web browser, and behavior alarms are compatible with VideoXpert or a third-party system that supports Pelco's API.

Available Basic analytic behaviors include:

- Camera Sabotage: Detects contrast changes in the field of view. An alarm is triggered if the lens is obstructed by spray paint, a cloth, or a lens cap. Any unauthorized repositioning of the camera also triggers an alarm
- Region-Based Simple Motion Detection: Based on sensitivity, the camera determines if sufficient motion is detected within a configurable region.

Available Enhanced analytic behaviors include:

- Abandoned Object: Detects objects placed within a defined zone and triggers an alarm if the object remains in the zone unattended. An airport terminal is a typical installation for this behavior. This behavior can also detect objects left behind at an ATM, signaling possible card skimming.
- Adaptive Motion: Detects and tracks objects that enter a scene and then triggers an alarm when the objects enter a user-defined zone. This behavior is primarily used in outdoor environments with light traffic to reduce the number of false alarms caused by environmental changes.
- Directional Motion: Generates an alarm in a high traffic area when a
  person or object moves in a specified direction. Typical installations for
  this behavior include an airport gate or tunnel where cameras can detect
  objects moving in the opposite direction of the normal flow of traffic or an
  individual entering through an exit door.
- Loitering Detection: Identifies when people or vehicles remain in a
  defined zone too long. This behavior is effective in real-time notification
  of suspicious behavior around ATMs, stairwells, and school grounds.
- Object Counting: Counts the number of objects that cross a defined line. This behavior can be used to count the number of people at a store entrance/exit or inside a store where the traffic is light. This behavior is based on tracking and does not count people in a crowded setting.
- Object Removal: Triggers an alarm if an object is removed from a user-defined zone. This behavior is ideal for customers who want to detect the removal of high value objects, such as a painting from a wall or a statue from a pedestal.
- Stopped Vehicle: Detects vehicles stopped near a sensitive area longer than the user-defined time allows. This behavior is ideal for airport curbside drop-offs, parking enforcement, suspicious parking, traffic lane breakdowns, and vehicles waiting at gates.

## PELCO'S SMART COMPRESSION TECHNOLOGY

Pelco's Smart Compression Technology lowers bandwidth and storage requirements by up to 70%. Our technology allows the user to make intelligent decisions regarding storage savings and image guality.

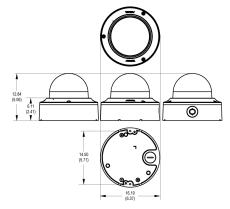
Pelco's Smart Compression Technology dynamically analyzes motion occurring within live video in real-time, to intelligently compress the information you don't need, while retaining details with clear quality in the areas that are important in the scene. By enabling Dynamic GOP, an added feature of Smart Compression, the number of I-frames are automatically reduced in scenes with low motion. Based on the complexity of scenes and motion occurring, such as a store room that has limited entry and exit, up to 70% bandwidth savings can be achieved.

# **COMPONENT FEATURES**



VALUES IN PARENTHESES ARE INCHES; ALL OTHERS ARE CENTIMETERS.

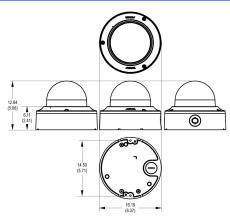




## Indoor/Vandal-Resistant, Surface Mount

- · Attaches to Electrical Box Adapter
- Meets IP54
- Meets IK10+ (50J)
- Aluminum Construction with Polycarbonate Bubble
- **RAL 9003**
- Built-in Microphone
- IEEE802.3af PoE Class 3, 24 VAC or 12 VDC





# Environmental/Vandal-Resistant, Surface Mount

- Attaches to Electrical Box with Adapter
- Meets IP66, IP67, IP68, IP69K
- Meets Type 4X
- Meets IK10+ (50J)
- Aluminum Construction with Polycarbonate Bubble
- **RAL 9003**
- Heater
- IEEE802.3at PoE+ Class 4, 24 VAC or 12 VDC
- NEMA TS2 para 2.2.7 2.2.9

# **CAMERA**

Imaging Device 1/1.8-inch for 5MP and 4K models

Imager Type CMOS

Imager Readout Highest Resolution

4 K 5 MP 3 MP 2 MP

Signal-to-Noise Ratio Electronic Shutter Range Wide Dynamic Range

1/2.8-inch for 2MP and 3MP models or

Progressive scan

3840 x 2160 2592 x 1944 2048 x 1536 1920 x 1080 >60 dB

1/10000 sec (or faster) to 1sec Up to 130 dB (2 MP and 3 MP Models), Up to 120 dB (5 MP and 4 K Models)

White Balance Range: 2,500° to 10,000°K; Selectable Auto/

Manual

Day/Night Capabilities Mechanical IR cut filter (ON/OFF/AUTO), with

different set points on lux

Adaptive IR Illumination 850nm wavelength, maximum distance of

50 meters (164 feet)

Yes (ON / OFF selectable)

Minimum Illumination

Resolution	Lens	Sensitivity	Color		Mono		
			33 ms	500 ms	33 ms	500 ms	Mono (IR on)
2 MP	2.8-8 mm	f/1.3	0.0125 lux	0.0012 lux	0.0025 lux	0.0003 lux	0.0 lux
3 MP	2.8-8 mm	f/1.3	0.05 lux	0.005 lux	0.010 lux	0.001 lux	0.0 lux
	8-20 mm	f/1.5	0.080 lux	0.008 lux	0.015 lux	0.0018 lux	0.0 lux
5 MP	4-9 mm	f/1.5	0.10 lux	0.00625 lux	0.05 lux	0.003125 lux	0.0 lux
8 MP (4 K)	4-9 mm	f/1.5	0.10 lux	0.00625 lux	0.05 lux	0.003125 lux	0.0 lux
	9-20 mm	f/1.6	0.12 lux	0.0075 lux	0.06 lux	0.00375 lux	0.0 lux

3D Noise Reduction

# **LENS**

Focus

Lens Type Built-in; varifocal Focal Length f/1.3, 2.8 ~ 8 mm, f/1.5, 8 ~ 20 mm,

 $f/1.54 \sim 9 \text{ mm},$ f/1.69 ~ 20 mm Autofocus, motorized

Zoom Remote motorized Auto Iris Type P-Iris

Field of View in Degrees

Note: Field of view may vary with changes in resolution settings.

Lens	Angle of View	2 MP	3 MP	5 MP	4 K
2.8 - 8 mm	Diagonal	136.4° ~ 47.4°	137.9° ~ 47.8°		N/A
	Horizontal	115.7° ~ 41.3°	106° ~ 38.2°		
	Vertical	62.4° ~23.2°	77° ~ 28.7°	N/A	
8 - 20 mm	Diagonal		46.5° ~ 18.8°	N/A	
	Horizontal		36.5° ~ 15°		
	Vertical		27° ~ 11.3°		
4 - 9 mm	Diagonal		N/A	141.8° ~ 58.4°	141.8° ~ 58.4°
	Horizontal	N/A		116.9° ~ 50.8°	116.9° ~ 50.8°
	Vertical			60.7° ~ 28.5°	60.7° ~ 28.5°
9 - 20 mm	Diagonal			N/A	58.7° ~ 25.6°
	Horizontal				50.1° ~ 22.3°
	Vertical				27.1° ~ 12.6°

# **AUDIO**

Streaming Bidirectional: full or half duplex

60 SPL @ 25 feet >40dB SNR (indoor models Built-In Microphone

only)

Line level, 3K ohm differential with/1Vp-p Input

maximum signal

Line level, 600 ohm differential with/1Vp-p Output

Encoding G.711-Alaw/G711-Ulaw

# **GENERAL**

Pan/Tilt Adjustment Manual Pan 0° ~ 370° -10° ~ -90° Tilt Rotation

Construction Aluminum with polycarbonate bubble

Finish White, RAL 9003

Weight

Unit 1.41 kg (3.1 lb) 1.81 kg (4 lb) Shipping 36.9 in^2 **EPA** 

# **ENVIRONMENTAL**

Operating Temperature Indoor/Vandal-Resistant -10° to 55°C (14° to 131°F)† Environmental -50° to 60°C (-58° to 140°F)†

4-Hour Duration Maximum Operating Temperature 65°C (149°F) (environmental models)

Start-up Temperature -10°C (14°F) Indoor -40°C (-40°F) Environmental

Storage Temperature Indoor and Environmental

Operating Humidity

Indoor/Vandal-Resistant Environmental

Storage Humidity Impact Resistance

Ingress Protection

-40° to 60°C (-40° to 140°F) 10 to 90%, RH condensing

10 to 100%, RH condensing 20 to 80%, RH noncondensing

IK10+ (50 J) IP54 (indoor models),

IP66, IP67, IP68, IP69K, Type 4X (environmental models)

Shock and Vibration Resistance

Tested in accordance to EN 50155 (EN 61373, Category 1, Class B); IEC/EN 60068:2-6 and 2-

## **ELECTRICAL**

Network Port RJ-45 connector for 100Base-TX\*/

1000Base-T, Automatic MDI/MDI-X

\*Some combinations of high resolution, frame rate, and high numbers of unicast streams, may lead to less desirable results at 100Base-TX.

Input Power PoE (IEEE 802.3af, Class 3), 24 VAC (18  $\sim$  32

VAC), 12 VDC ±10% (Indoor models)
PoE+ (IEEE 802.3at, Class 4), 24 VAC (18 ~ 32 VAC), 12 VDC ±10% (Environmental

models)

Power Consumption

Indoor Dome Environmental Dome 7.6 W typical, 12.95 W maximum

12 VDC 8.1 W typical, 20.5 W maximum 24 VAC 7.4 W typical, 18.1 W maximum PoE+ 7.6 W typical, 16.8 W maximum

Local Storage Micro SD, SDHC, SDXC compatible;
Up to 2 TB addressable (256 GB testable)

Alarm Detects open or closed alarm state

Input Quantity 1, Normally Open, Normally Closed,

Supervised,

3.5 VDC maximum, 35 mA maximum Output Quantity 1, ±32 VDC maximum, 150 mA

maximum

# **NETWORK**

Software Interface

Supported Protocols TCP/IP, UDP/IP (Unicast, Multicast IGMP),

UPnP, DNS, DHCP, RTP, RTSP, NTP, IPv4, IPv6, SNMP v2c/v3, QoS, HTTP, HTTPS, SSL, SMTP, FTP, 802.1x (EAP), and NTCIP 1205, IGMP,

TLS/TTLS

Users

Unicast Two guaranteed (up to 20 depending on the

resolution settings)

Multicast Unlimited

Security Access Password protected, HTTP, IEEE 802.1X,

digest authentication, IP filtering Web browser view and setup

# **MINIMUM SYSTEM REQUIREMENTS**

Processor Intel® Core™ i3 processor, 2.4 GHz

Operating System Microsoft® Windows® 7 (32- and 64-bit), or

DirectX®11, Windows XP Service Pack 3 with DirectX 9.0c; or Mac® OS X 10.4 (or later)

Memory 4 GB RAM

Network Interface 1 gigabit (or greater)

Monitor Minimum of 1024 x 768 resolution,

16- or 32-bit pixel color resolution

Web Browser Internet Explorer® 10 (or later), Google

Chrome™ (51 or later), Microsoft Edge, or

Mozilla® Firefox® 3.5 (or later)

## **INTEGRATION**

Pelco System Integration VideoXpert;

Endura 2.0 (or later); Digital Sentry 7.3 (or later)

Open API Pelco API or ONVIF Profile S, Profile G, Profile

Т

Mobile Application Pelco Mobile Application

Camera Discovery VX Toolbox
Firmware Upgrade Web UI or VxToolbox

Multilingual User Interface English, French, Italian, German, Spanish,

Korean, Portuguese, Russian, Simplified

Chinese, Turkish

## **VIDEO**

stream and third stream are variable based on

the setup of the primary stream

Available Resolutions 4 K 3840 x 2160 to 512 x 384;

5 MP 2592 x 1944 to 512 x 384; 3 MP 2048 x 1536 to 640 x 360; 2 MP 1920 x 1080 to 512 x 384

Maximum Frame Rate Up to 120 frames per second (fps) at 1080p on

the 3MP models,

Up to 60 fps at 1080p on all models,

Up to 30 fps at full resolution with WDR on all

models

Video Encoding H.265, H.264 Main/High, MJPEG

Bit Rate Control Constrained variable bit rate (CVBR) and

constant bit rate (CBR)

Orientation Modes Electronic image rotation 90, 180, and 270

degrees (Corridor Mode)

Video Snapshot JPEG capture at the same resolution as the

highest stream configured 16 configurable Windows

Window Blanking

Electronic Image

Stabilization Yes (ON / OFF selectable)

Video Overlay Camera name, time, date, and customizable

text with multiple supported languages. Embedding of custom images and logos

supported.

Flicker Correction Selectable Auto On/Off, 50 Hz or 60 Hz modes

# **CERTIFICATIONS/RATINGS**

- CE (Class A)
- FCC (Class A)
- ICES-003 (Class A)
- UL/cUL Listed
- UL/IEC/EN 60950-1, 60950-22, 62368-1
- KC\*
- NOM
- RCM
- EAC\*BIS
- · Environmental models:
  - Type 4X
  - EN 50155 (EN 61373 Category 1, Class B)
  - IEC/EN 60068-2-6 Product Vibration
  - IEC/EN 60068-2-27 Product Shock
  - IEC/EN 62262 Impact (IK 10+)
  - IEC/EN 60529 (IP66, IP67, IP68)
  - DIN 40 050 Part 9 (IP69K)
- · Indoor models:
  - IEC/EN 60529 (IP54)
- Meets NEMA TS2 para 2.2.7 2.2.9 (Environmental models)
- FDOT (Environmental models)\*
- ONVIF Profile S, Profile G, and Profile T Conformant

# **RECOMMENDED MOUNTS**

PA101 with WMVE-SW &

IME3PM-E Pole Mount for use with WMVE-SW &

IME3PM-E

IME3ICM-E In-ceiling mount, RAL 9003
IME3PM-E Pendant mount, RAL 9003

IMM-CM with WMVE-SW &

IME3PM-E Corner mount for use with WMVE-SW &

IME3PM-E

IME3EBAP-E Electrical box adapter

WMVE-SW Wall mount, 1.5 in. NPT, RAL 9003

IWM-SW Wall mount with cable feedthrough, RAL9003 IWM24-SW Wall mount with cable feedthrough, includes

integral 24 VAC, 100 VA transformer,

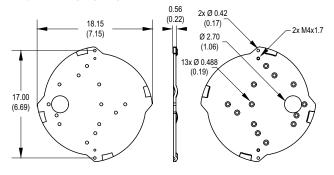
RAL9003

PP350/PP351 Parapet wall/roof mount, RAL9002 PP450/PP451 Parapet wall/roof mount, RAL9002



VALUES IN PARENTHESES ARE INCHES; ALL OTHERS ARE CENTIMETERS.

## IME3EBAP-E ELECTRICAL BOX ADAPTER



# **OPTIONAL ACCESSORIES**

 IME3LD-0E
 Smoked lower dome (environmental)

 IME3LD-1E
 Clear lower dome (environmental)

 IME3LD-0
 Smoked lower dome (indoor)

 IME3LD-1
 Clear lower dome (indoor)

## **POWER SUPPLIES**

WCS Series Outdoor, 24 VAC power supply

POE130-XT Single-port PoE Gigabit extender powered by

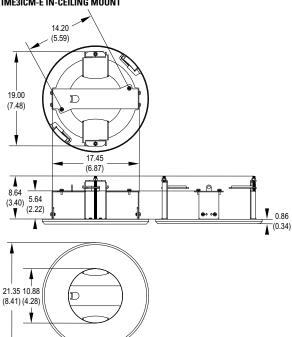
POE190-BT injector

POE130-AT (US or EU) Single-port PoE+ midspan with power cord POE430-AT (US or EU) 4-port, 30W per port PoE midspan with power

cord

POE1236-AT (US or EU) 12-port, 36W PoE midspan POE2436-AT (US or EU) 24-port, 36W PoE midspan

#### **IME3ICM-E IN-CEILING MOUNT**



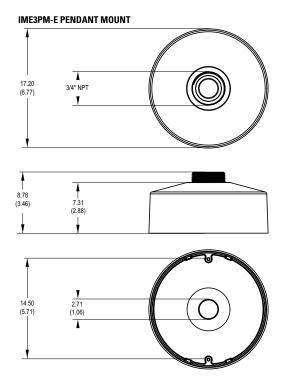
Color: RAL 9003

<sup>\*</sup>At the time of this publication, certifications are pending. Consult the factory or www.pelco.com for the current status of certifications.

# **MODELS\***

Back Box	Resolution	Model Number	Lens	Description
	2 MP	IME238-1ERS	2.8 ~ 8 mm	2 MP Sarix Enhanced IR Environmental Dome
	2 MP	IME238-1IRS	2.8 ~ 8 mm	2 MP Sarix Enhanced Indoor IR Dome
	3 MP	IME332-1ERS	8 ~ 20 mm	3 MP Sarix Enhanced Environmental IR Dome
	3 MP	IME332-1IRS	8 ~ 20 mm	3 MP Sarix Enhanced Indoor IR Dome
	3 MP	IME338-1ERS	2.8 ~ 8 mm	3 MP Sarix Enhanced Environmental IR Dome
Surface	3 MP	IME338-1IRS	2.8 ~ 8 mm	3 MP Sarix Enhanced Indoor IR Dome
Surface	5 MP	IME539-1ERS	4 ~ 9 mm	5 MP Sarix Enhanced Environmental IR Dome
	5 MP	IME539-1IRS	4 ~ 9 mm	5 MP Sarix Enhanced Indoor IR Dome
	4 K	IME832-1ERS	9 ~ 20 mm	4K Sarix Enhanced Environmental IR Dome 4K
	4 K	IME832-1IRS	9 ~ 20 mm	4K Sarix Enhanced Indoor IR Dome 4K
	4 K	IME839-1ERS	4 ~ 9 mm	4K Sarix Enhanced Environmental IR Dome 4K
	4 K	IME839-1IRS	4 ~ 9 mm	4K Sarix Enhanced Indoor IR Dome 4K

<sup>\*</sup>System options contain a back box/mount, camera, and clear dome.



Color: RAL 9003

▲ WARNING: Cancer and Reproductive Harm www.P65Warnings.ca.gov. ▲ ADVERTENCIA: Cancer y Daño Reproductivo www.P65Warnings.ca.gov. ▲ AVERTISSEMENT: Cancer et Troubles de l'appareil reproducteur - www.P65Warnings.ca.gov.