# Sarix® IME Indoor and Environmental Mini Domes

# UP TO 3 MPX, WDR AND LOW-LIGHT PERFORMANCE, H.264, IK10, IP66

# **Product Features**

- SureVision 3.0 Technology, Including:
  - 130dB Wide Dynamic Range (WDR)
  - Advanced Low-Light Performance, 0.05 lux
  - Anti-Bloom Technology
  - 3D Noise Filtering
  - Enhanced Tone Mapping
- Up to 3 Megapixel (MPx) Resolution
- Up to 60 Frames per Second (fps)
- Autofocus Varifocal 3 ~ 9 mm or 9 ~ 22 mm Lens
- Power over Ethernet (PoE), 24 VAC, 12 VDC
- Built-in Analytics Suite
- Adaptive IR Illumination up to 30 Meters (Option)
- Up to 128 GB Edge Storage with SD Card

### Sarix Enhanced Range with SureVision 3.0

Sarix® Enhanced (E) range cameras feature SureVision technology, delivering high definition (HD) resolution, 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.

Designed to install quickly, the cameras include autofocus, motorized zoom, built-in analytics, and other advanced features needed for demanding security applications.

#### Camera

The **IME Series** contains an integrated varifocal MPx autofocus lens (3  $\sim$  9 mm or 9  $\sim$  22 mm). Form factors include indoor and outdoor domes. All models feature a sturdy design that is both vandal- and tamper-resistant. The environmental model features worry-free use in a wide range of environmental operating conditions.

**Sarix Enhanced** range cameras include four unique, advanced autofocus options: temperature change (every 5°C / 9°F), day/night transition, a daily autofocus routine, and manual autofocus. These benefits ensure clear, focused images regardless of the scene or environment. All autofocus options are available through the web UI.

Integrated and Adaptive IR Illumination is optionally available on all outdoor models.



- Compatible with Pelco and Third-Party Video Systems
- ONVIF Profile S, Profile G, and Profile Q Conformant
- Full 3-Year Warranty and Support

#### **Video**

The **IME Series** supports two independently-configurable video streams in addition to a service video stream. The streams can be compressed in MJPEG and H.264 formats across several resolution configurations. The **IME Series** offers real-time video (60 fps) with full HD resolution (up to 3 MPx) using H.264 compression for optimized bandwidth and storage efficiency.

The streams can be configured to a variety of frame rates, bit rates, and group of pictures (GOP) structures for additional flexibility in bandwidth administration. In addition, streams can be encoded as constrained variable bit rate (CVBR) or constant bit rate (CBR).

# **Open and Integrated**

**Sarix Enhanced** range cameras seamlessly connect to Pelco video management systems such as VideoXpert $^{\mathbb{N}}$ , Endura $^{\oplus}$  version 2.0 (or later), and Digital Sentry $^{\oplus}$  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 Q standards.

# **Built-In Analytics**

Analytics enhance the flexibility and performance of **Sarix Enhanced** range cameras. Eight behaviors are preloaded and included as standard features. These behaviors can be configured and enabled using a standard Web browser, and they are compatible with VideoXpert, Endura, or a third-party system that supports alarms using Pelco's API.







# **CONVENIENT POWER**

**Sarix Enhanced** range cameras are designed with Power over Ethernet (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).

#### **ANALYTICS**

**Sarix Enhanced** range cameras includes eight user-configurable behaviors. The camera is capable of running up to two behaviors at the same time.

For each behavior, you can create several custom profiles that contain different camera settings. With these profiles, 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 system.

Analytics behaviors can be scheduled to work during a certain time or condition. For example, during the day, a camera can be configured with Object Counting to count the number of people that enter a lobby door. At night, the operator can change the profile to Camera Sabotage to trigger an alarm if a camera is moved or obstructed. Available behaviors include:

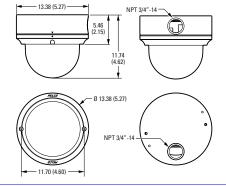
- Abandoned Object: Detects objects placed within a defined zone and triggers an alarm if the object remains in the zone unattended. An airport terminal is a typical installation for this behavior. This behavior can also detect objects left behind at an ATM, signaling possible card skimming.
- Intrusion Detection: 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.
- 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.
- Wrong Direction: 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.

# **COMPONENT FEATURES**



VALUES IN PARENTHESES ARE INCHES; ALL OTHERS ARE CENTIMETERS.

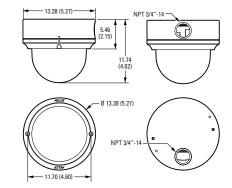




#### Indoor/Vandal-Resistant, Surface Mount

- · Attaches to 4S Electrical Box Adapter
- Meets IP66
- Meets IK10 (20J)
- Aluminum Base and Plastic Trim Ring
- SE White 3, RAL 9003





#### **Environmental/Vandal-Resistant, Surface Mount**

- · Attaches to 4S Electrical Box with Adapter
- Meets IP66
- Meets Type 4X (with IMEEBAP adapter plate
- accessory and IMEPM-E pendant mount accessory)
- Meets IK10 (20J)
- Aluminum Construction
- Telegray 4, RAL 7047
- Heater
- Optional IR Illuminator

# **CAMERA**

Imaging Device 1/2.8-inch Imager Type CMOS

Imager Readout Progressive scan

**Highest Resolution** 

3 MPx 2048 x 1536 2 MPx 1920 x 1080 1.3 MPx 1280 x 960 Signal-to-Noise Ratio >60 dB

Electronic Shutter Range 1/20000 sec (or faster) to 2 sec

Wide Dynamic Range 130 dB

White Balance Range 2,000° to 10,000°K f/1.3; 2,850°K; SNR >20 dB Sensitivity 3 ~ 9 mm

Color (33 ms) 0.050 lux Color (500 ms) 0.005 lux Mono (33 ms) 0.010 lux Mono (500 ms) 0.001 lux Mono (IR on) 0.000 lux

Sensitivity 9 ~ 22mm f/1.6; 2,850°K; SNR >20 dB

Color (33 ms) 0.200 lux Color (500 ms) 0.010 lux 0.100 lux Mono (33 ms) Mono (500 ms) 0.0025 lux Mono (IR on) 0.000 lux Day/Night Capabilities

Mechanical IR Cut Filter Yes, (ON/OFF/AUTO selectable), with

different set points on lux

Adaptive IR Illumination 850nm wavelength, maximum distance of

30 meters (100 feet) IR illumination at 0 lux

SD Card Support Up to 128 GB SDHC/SDXC Cards Supported Yes

# **LENS**

Lens Type Built-in; varifocal

Focal Length f/1.3, 3 ~ 9 mm, f/1.6, 9 ~ 22 mm

Focus Autofocus, motorized

Zoom Remote

Auto Iris Type DC drive P-iris lens

Field of View in Degrees

Lens	Focal Length	3 MPx		1.3 & 2 MPx	
		Horiz	Vert	Horiz	Vert
3 ~ 9 mm	Wide	100°	74°	93°	52°
	Tele	39°	29°	37°	21°
9 ~ 22 mm	Wide	33°	24°	30°	14°
	Tele	14°	10°	13°	7°

# **AUDIO**

Streaming Bidirectional: full or half duplex
Input/Output Line level/external microphone input;

Single-ended, stereo, 1 Vp-p max. signal level

Compression G.711 PCM 8 bit, 8 kHz mono at 64 kbit/s

# **MECHANICAL**

Dome Attenuation

Clear f/0.0 light loss
Pan/Tilt Adjustment Manual
Pan 355°
Tilt 75°
Rotation 340°

# **PHYSICAL**

Weight Shipping
Indoor, Surface Mount 1020 gm (2.25 lb)
Environmental, Surface Mount 1020 gm (2.25 lb)
Product Box Dimensions (approximate) 6.75 x 6.75 x 6.75 in.

#### **ENVIRONMENTAL**

Operating Temperature

Start-up Temperature

Indoor —10°C (14°F)

Environmental With heater, -40°C (-40°F)

Storage Temperature

Indoor and Environmental -40° to 60°C (-40° to 140°F)

Operating Humidity

Indoor/Vandal-Resistant Environmental 10 to 90%, RH noncondensing 5 to 95%, RH noncondensing 20 to 80%, RH noncondensing 10 to 90%, RH noncondensing 10 to 95%, RH noncondensing 10 to 80%, RH noncond

# **ELECTRICAL**

Network Port RJ-45 connector for 100Base-TX

Auto MDI/MDI-X

Cable Type Cat5 or better for 100Base-TX
Input Power PoE, 24 VAC, 12 VDC
Power Consumption Up to 12 W nominal

Current Consumption 330 mA @ POE; 0.5 A @ 24 VAC;

1A @ 12 VDC

Local Storage SD, SDHC, SDXC

Alarm Detects open or closed alarm state Input 5 VDC maximum, 0.5 mA maximum

Relay Output ±350V VDC maximum, ±130 mA maximum

# **NETWORK**

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

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

Users

Unicast Up to 20 simultaneous users depending on

the resolution settings Unlimited users H.264

Multicast Unlimited users H.264
Security Access Password protected
Software Interface Web browser view and setup

# **VIDEO**

Video Streams Independently configurable primary and

secondary streams plus service stream

Available Resolutions Two configurable streams as follows:

Camera Model			Aspect Ratio	MPx	Width	Height
3 MPx				3.0	2048	1536
				2.95	1984	1488
				1.8	1600	1200
	2 MPx and 1 MPx		4.0	1.2	1280	960
		0.5 MPx	4:3	0.5	800	600
				0.3	704	480
				0.3 (480p)	640	480
				0.07	320	240
3 MPx and 2 MPx				2.0 (1080p)	1920	1080
	1 MPx		16:9	0.9 (720p)	1280	720
				0.6	1024	576
				0.5	960	544
		0.5		0.3	800	448
		MPx		0.2	640	360
				0.06	320	192

Maximum Frame Rate Up to 60 frames per second, 30 fps with WDR

Video Encoding H.264 High, Main, or Base profiles; and

MJPEG

Bit Rate Control Constrained variable bit rate (CVBR) and

constant bit rate (CBR)

Corridor Mode Electronic image flip and mirror: 180°, 90°

and 270° (H.264 only)

Service Stream JPEG stream; 640 x 480 or 640 x 360,

up to 15 fps

#### **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 100 megabits (or greater)

Monitor Minimum of 1024 x 768 resolution,

16- or 32-bit pixel color resolution

Web Browser Internet Explorer® 8.0 (or later), Google Chrome™ (51 or later) or Mozilla® Firefox® 3.5

(or later); Internet Explorer 8.0 (or later) is recommended for configuring analytics

Media Player Pelco Media Player for Windows 7, XP, or Vista; or QuickTime 7.6.4 for Mac OS X 10.4

(or later)

#### **ANALYTICS**

Required Systems for Analytics

Pelco Interface WS5200 Advanced System Management

Software on an Endura 2.0 (or later) system

Open API The Pelco API can transmit behavior alarm

data to third-party applications, available at

pdn.pelco.com

#### **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, and

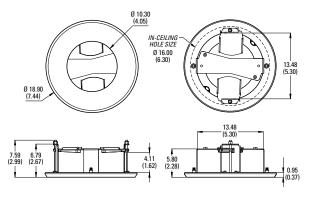
Profile Q

Mobile Application Integrated with Pelco Mobile Application

# **SOFTWARE FEATURES**

- Multilingual menus in user interface: Arabic, English, French, Italian, German, Korean, Spanish, Portuguese, Russian, Simplified Chinese, Turkish
- 16 window blanks, configurable in size
- Password protection
- Snapshot with JPEG capture at the same resolution as the highest stream configured
- · Text overlays for camera name, time, date, or custom text
- · Image overlays

#### IMEICM-I AND IMEICM-E IN-CEILING MOUNT



# **CERTIFICATIONS/RATINGS\***

- CE (Class A)
- FCC (Class A)
- ICES-003 (Class A)
- UL/cUL ListedUL/IEC 60950-22
- KC
- RCM
- Meets IP66 and IK10 rating, and Type 4X (environmental models)
- ONVIF Profile S, Profile G, and Profile Q Conformant
- \*At the time of this publication, certifications are pending. Consult the factory or www.pelco.com for the current status of certifications.

#### RECOMMENDED MOUNTS

WMVE-SR Wall mount, 1.5 in., NPT, outdoor,

**RAL 7047** 

WMVE-SW Wall mount, 1.5 in., NPT, indoor,

RAL 9003

 IMEICM-E
 Environmental in-ceiling mount, RAL 7047

 IMEICM-I
 Indoor in-ceiling mount, RAL 9003

 IMEPMB-I
 Wall mount bracket, light duty, indoor,

RAL 9003

IMEPM-I Indoor pendant mount, RAL 9003
IMEPM-E Environmental pendant mount, RAL 7047

IMEEBAP-I Indoor electrical box adapter

IMEEBAP-E Environmental electrical box and Type 4X

adapter

#### **OPTIONAL ACCESSORIES**

PA101 Pole adapter for use with WMVE-SR pendant

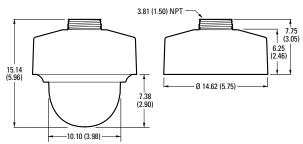
mount

 IMELD2-0I
 Smoke lower dome (indoor)

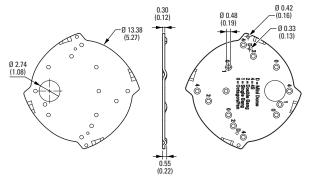
 IMELD2-0E
 Smoke lower dome (environmental)

 IMELD2-1E
 Clear lower dome (environmental)

#### IMEPM-I AND IMEPM-E PENDANT MOUNT



# IMEEBAP-I & IMEEBAP-E 4S ELECTRICAL BOX ADAPTER



# **MODELS\***

Back Box	Resolution	Model Number	Lens	Description
	1.3 MPx	IME129-1ES	3 ~ 9 mm	Sarix Enhanced Environmental Dome
	1.3 MPx	IME129-1IS	3 ~ 9 mm	Sarix Enhanced Indoor Dome
	1.3 MPx	IME129-1RS	3 ~ 9 mm	Sarix Enhanced Environmental IR Dome
	1.3 MPx	IME122-1ES	9 ~ 22 mm	Sarix Enhanced Environmental Dome
Surface	2 MPx	IME229-1ES	3 ~ 9 mm	Sarix Enhanced Environmental Dome
	2 MPx	IME229-1IS	3 ~ 9 mm	Sarix Enhanced Indoor Dome
	2 MPx	IME229-1RS	3 ~ 9 mm	Sarix Enhanced Environmental IR Dome
	2 MPx	IME222-1ES	9 ~ 22 mm	Sarix Enhanced Environmental Dome
	2 MPx	IME222-1IS	9 ~ 22 mm	Sarix Enhanced Indoor Dome
	2 MPx	IME222-1RS	9 ~ 22 mm	Sarix Enhanced Environmental IR Dome
	3 MPx	IME329-1ES	3 ~ 9 mm	Sarix Enhanced Environmental Dome
	3 MPx	IME329-1IS 3 ~ 9 mm Sarix Enhance		Sarix Enhanced Indoor Dome
	3 MPx	IME329-1RS	3 ~ 9 mm	Sarix Enhanced Environmental IR Dome
	3 MPx	IME322-1ES	9 ~ 22 mm	Sarix Enhanced Environmental Dome
	3 MPx	IME322-1IS	9 ~ 22 mm	Sarix Enhanced Indoor Dome
	3 MPx	IME322-1RS	9 ~ 22 mm	Sarix Enhanced Environmental IR Dome

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

#### IMEPMB-I INDOOR WALL MOUNT

