

# Sarix® IME Series Mini Domes with SureVision 2.0

## UP TO 3 MPX, H.264, IP CAMERAS WITH WDR AND LOW-LIGHT PERFORMANCE

### Product Features

- SureVision 2.0 Technology, Including:
  - True Wide Dynamic Range (WDR)
  - Advanced Low-Light Performance
  - Anti-Bloom Technology
  - 3D Noise Filtering
  - Enhanced Tone Mapping
- Up to 3 Megapixel (MPx) Resolution
- Up to 30 Images per Second (ips) at 3 MPx
- Autofocus Varifocal 3 ~ 9 mm and 9 ~ 22 mm MPx Lenses
- Power over Ethernet (PoE), IEEE 802.3af
- Built-in Pelco Analytics Suite
- Local Storage (Micro SD)

### Sarix Enhanced Range with SureVision 2.0

**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 3 ~ 9 mm or 9 ~ 22 mm MPx autofocus lens. All models include a camera in a compact in-ceiling, surface mount, or pendant enclosure that is ready to install. The vandal-resistant and environmental models feature a sturdy metal design that is both vandal- and tamper-resistant. The environmental model features worry-free use in a wide range of environmental operating conditions. All in-ceiling models have a back box that is plenum rated per 2008 NEC article 300.22(C)(2).

**Sarix Enhanced** range cameras include four unique, advanced autofocus options: temperature change (every 10°C / 18°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.

SureVision™ 2.0  
A Pelco® by Schneider Electric™ technology



- Compatible with Pelco and Third-Party Video Systems
- ONVIF Profile S and Profile G Conformant
- 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 (30 ips) 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), constrained bit rate (CBR), or variable bit rate (VBR).

### Open and Integrated

**Sarix Enhanced** range cameras seamlessly connect to Pelco video management systems such as 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 and Profile G standards.

### Built-In Analytics

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



by Schneider Electric



International Standards  
Organization Registered Firm;  
ISO 9001 Quality System



C3942 / REVISED 1-19-16

# TECHNICAL SPECIFICATIONS

## Convenient Power

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

## PELCO ANALYTICS

**Sarix Enhanced** range cameras includes eight user-configurable behaviors. The camera is capable of running up to two behaviors at the same time; although, the number of behaviors is limited to the available processing power of the camera and the type of analytic being used.

**Note:** Available processing power is determined by the settings for compression standards, resolution, image rate, bit rate, and analytic configuration.

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.

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

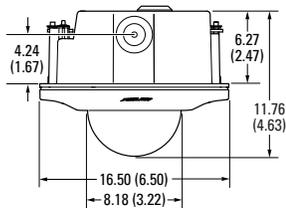
Pelco analytics behaviors can be scheduled to work during a certain time or condition. For example, during the day, a camera can be configured with Object Counting to count the number of people that enter a lobby door. At night, the operator can change the profile to Camera Sabotage to trigger an alarm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

- **Abandoned Object:** Detects objects placed within a defined zone and triggers an alarm if the object remains in the zone longer than the user-defined time allows. 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 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.
- **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 longer than the user-defined time allows. 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 enter a defined zone. 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.

# TECHNICAL SPECIFICATIONS

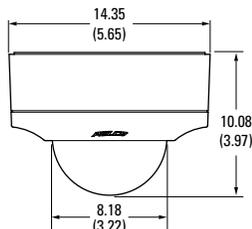
## COMPONENT FEATURES

 VALUES IN PARENTHESES ARE INCHES; ALL OTHERS ARE CENTIMETERS.



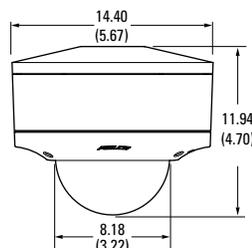
### Indoor, In-Ceiling

- Single Back Box for Suspended or Hard Ceiling Applications
- Requires 8.26 cm (3.25 in.) Space Above Ceiling
- Minimum Ceiling Thickness 0.64 cm (0.25 in.); Maximum Ceiling Thickness 4.45 cm (1.75 in.)
- 3/4 in. NPT or 25 mm Conduit Attachments on Side and Top of Back Box
- Microphone
- Plenum Rated Back Box
- Alodine Aluminum Construction
- White Back Box is Standard; Black is Available



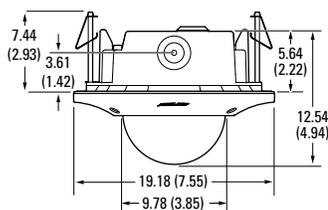
### Indoor, Surface Mount

- Attaches to Single-Gang Electrical Box
- Microphone
- Polycarbonate/ABS Construction
- White Back Box is Standard; Black is Available



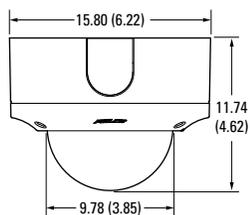
### Indoor, Pendant

- Microphone
- 3/4 in. NPT or 25 mm Conduit/Pipe Attachment
- Polycarbonate/ABS Construction
- White Back Box is Standard; Black is Available



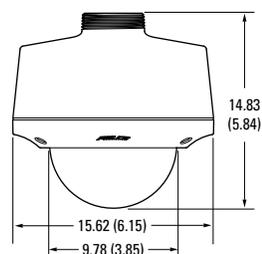
### Environmental/Vandal-Resistant, In-Ceiling

- Single Back Box for Suspended or Hard Ceiling Applications
- Requires 8.26 cm (3.25 in.) Space Above Ceiling
- Minimum Ceiling Thickness 0.97 cm (0.38 in.); Maximum Ceiling Thickness 3.81 cm (1.50 in.)
- 3/4 in. NPT or 25 mm Conduit Attachments on Side and Top of Back Box
- Microphone on Vandal-Resistant Models
- Vandal-Resistant Model Meets IP56
- Environmental Model Meets IP66 and NEMA Type 4X
- NEMA TS-2 (Temp.) para 2.2.7.3 - 2.2.7.7
- Meets IK10++ (50J)
- Plenum Rated Back Box
- Alodine Aluminum Construction
- Light Gray Finish



### Environmental/Vandal-Resistant, Surface Mount

- Attaches to Standard 4 in. Square Outlet Box and Standard 2-Gang Electrical Box
- 3/4 in. NPT or 25 mm Conduit Attachments on Side and Top of Back Box
- Microphone on Vandal-Resistant Models
- Vandal-Resistant Model Meets IP56
- Environmental Model Meets IP66 and NEMA Type 4X
- NEMA TS-2 (Temp.) para 2.2.7.3 - 2.2.7.7
- Meets IK10++ (50J)
- Alodine Aluminum Construction
- Light Gray Finish



### Environmental/Vandal-Resistant, Pendant

- 1-1/2 in. NPT Thread for Use with Pelco Wall Mounts
- Microphone on Vandal-Resistant Models
- Vandal-Resistant Model Meets IP56
- Environmental Model Meets IP66 and NEMA Type 4X
- NEMA TS-2 (Temp.) para 2.2.7.3 - 2.2.7.7
- Meets IK10++ (50J)
- Alodine Aluminum Construction
- Light Gray Finish

# TECHNICAL SPECIFICATIONS

## CAMERA

Imaging Device	1/3-inch
Imager Type	CMOS
Imager Readout	Progressive scan
Highest Resolution	
3 MPx	2048 x 1536
2 MPx	1920 x 1080
1 MPx	1280 x 960
0.5 MPx	800 x 608
Signal-to-Noise Ratio	>60 dB
Electronic Shutter Range	0.5 ~ 1/48,000 sec
True Wide Dynamic Range	Up to 100 dB*
White Balance Range	2,000° to 10,000°K
Sensitivity 3 ~ 9 mm	f/1.2; 2,850°K; SNR >20 dB
Color (33 ms)	0.1 lux
Color (500 ms)	0.005 lux
Mono (33 ms)	0.05 lux
Mono (500 ms)	0.0013 lux
Sensitivity 9 ~ 22 mm	f/1.6; 2,850°K; SNR >20 dB
Color (33 ms)	0.4 lux
Color (500 ms)	0.009 lux
Mono (33 ms)	0.09 lux
Mono (500 ms)	0.002 lux
Day/Night Capabilities	Yes
Mechanical IR Cut Filter	Yes, (ON/OFF/AUTO selectable), with different set points on lux

\*Sensor level is not inclusive of SureVision image processing.

## LENS

Lens Type	Built-in; varifocal
Focal Length	f/1.2, 3 ~ 9 mm, or 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	Mode	Diagonal	Horizontal	Vertical
3 ~ 9 mm	Wide	4:3	105	84	63
	Tele	4:3	38	30	23
	Wide	16:9	97	84	47
	Tele	16:9	35	30	17
9 ~ 22 mm	Wide	4:3	38	30	23
	Tele	4:3	15	12	8.9
	Wide	16:9	35	30	17
	Tele	16:9	14	12	6.6

## AUDIO

Streaming	Bidirectional: full or half duplex
Input/Output	Line level/external microphone input; 600-ohm differential, 1 Vp-p max. signal level; built-in microphone (indoor and vandal-resistant models)
Compression	G.711 PCM 8 bit, 8 kHz mono at 64 kbit/s

## MECHANICAL

Dome Attenuation	
Clear	f/0.0 light loss
Smoked	f/1.0 light loss
Pan/Tilt Adjustment	Manual
Pan	355°
Tilt	180°
Rotation	360°

## PHYSICAL

Weight	Unit	Shipping
Indoor, In-Ceiling	1.2 kg (2.6 lb)	1.6 kg (3.6 lb)
Indoor, Surface Mount	1.0 kg (2.0 lb)	1.4 kg (3.0 lb)
Indoor, Pendant	1.0 kg (2.1 lb)	1.4 kg (3.1 lb)
Environmental, In-Ceiling	1.4 kg (3.1 lb)	1.9 kg (4.1 lb)
Environmental, Surface Mount	1.5 kg (3.3 lb)	2.0 kg (4.3 lb)
Environmental, Pendant	1.3 kg (2.9 lb)	1.8 kg (3.9 lb)
Vandal-Resistant, In-Ceiling	1.4 kg (3.1 lb)	1.9 kg (4.1 lb)
Vandal-Resistant, Surface Mount	1.5 kg (3.3 lb)	2.0 kg (4.3 lb)
Vandal-Resistant, Pendant	1.3 kg (2.9 lb)	1.8 kg (3.9 lb)
Product Box Dimensions (approximate)	22.2 x 32.9 x 17.6 cm (8.75" D x 12.94" W x 6.94" H)	

## ENVIRONMENTAL

Operating Temperature	
Indoor/Vandal-Resistant	-10° to 50°C (14° to 122°F) <sup>†</sup>
Environmental	-40° to 50°C (-40° to 122°F) <sup>†</sup> 74°C (165.2°F) absolute maximum ambient temperature per NEMA TS-2

<sup>†</sup>Thermostatically controlled active heating and cooling elements are used to achieve operating temperature range. A blower (fan) is used to achieve operating temperatures to 50°C (122°F). Active heating elements are used to achieve operating temperatures below -10°C (14°F).

Cold Start	
Indoor/Vandal-Resistant	-10°C (14°F)
Environmental	-20°C (-4°F)
Storage Temperature	-10° to 60°C (14° to 140°F)
Operating Humidity	
Indoor/Vandal-Resistant	20 to 80%, RH noncondensing
Environmental	10 to 95%, RH condensing
Storage Humidity	20 to 80%, RH noncondensing
Impact Resistance	IK10++ (50J) per IEC 62262 (environmental/vandal-resistant models)
Shock and Vibration	EN50155 Category 1, Class B; IEC 60068-2-6 and 2-27 (environmental/vandal-resistant models)

## ELECTRICAL

Network Port	RJ-45 connector for 100Base-TX Auto MDI/MDI-X
Accessory Port	Micro B USB connector for Pelco accessories
Cable Type	Cat5 or better for 100Base-TX
Input Power	PoE (IEEE 802.3af, Class 3)
Power Consumption <sup>†</sup>	8.5 W nominal
Current Consumption	350 mA maximum
Local Storage	Micro SD, SDHC (see manual for details)
Alarm	
Unsupervised	Detects open or closed alarm state
Supervised	Detects open and short alarm state with external 1-kohm resistor
Input	3.5 VDC maximum, 3.5 mA maximum
Relay Output	±32 VDC maximum, 150 mA maximum

<sup>†</sup>Does not include optional accessories connected to accessory port.

## NETWORK

Supported Protocols	TCP/IP, UDP/IP (Unicast, Multicast IGMP), UPnP, DNS, DHCP, RTP, RTSP, NTP, IPv4, IPv6, SNMP v2c/v3, QoS, HTTP, HTTPS, LDAP (client), SSH, SSL, SMTP, FTP, ARP, ICMP, and 802.1x (EAP)
Users	
Unicast	Up to 20 simultaneous users depending on the resolution settings
Multicast	Unlimited users H.264
Security Access	Password protected
Software Interface	Web browser view and setup

# TECHNICAL SPECIFICATIONS

## VIDEO

Video Streams	Multiple simultaneous streams with up to 2 different configurations plus service stream; the secondary stream is variable based on the setup of the primary stream
Available Resolutions	Two configurable streams as follows:

Camera Model	MPx	Max Mbps CVBR	Width	Height	Aspect Ratio	
3 MPx	3.0	9.2	2048	1536	4:3	
	2 MPx	1.9	5.7	1600	1200	4:3
		1.2	3.8	1280	960	4:3
	1 MPx	0.5	2	800	608	4:3
		0.3	1.5	640	480	4:3
	0.08	0.5	320	240	4:3	
3 MPx and 2 MPx	1080p	6	1920	1080	16:9	
	1 MPx	720p	2.9	1280	720	16:9
		0.5 MPx	0.5	1.7	800	448
	0.2		1.2	640	352	16:9
	0.06		0.4	320	176	16:9

**Note:** Default mbps values are based on High profile (30 ips; default IP GOP length).

Frame Rate	Up to 30, 25, 15, 12.5, 10, 5, 1 (depending on the coding, resolution, and stream configuration)
Video Encoding	H.264 High, Main, or Base profiles; and MJPEG
Bit Rate Control	Constrained variable bit rate (CVBR), constant bit rate (CBR), and variable bit rate (VBR) with target range
Service Stream	JPEG stream; the aspect ratio will be consistent with the independent streams

## MINIMUM SYSTEM REQUIREMENTS

Processor	Intel® Core™ i3 processor, 2.4 GHz
Operating System	Microsoft® Windows® 7 (32- and 64-bit), or Window Vista®; 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® 7.0 (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 or QuickTime® 7.6.5 for Windows 7, XP, or Vista; or QuickTime 7.6.4 for Mac OS X 10.4 (or later)

\*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.

## ANALYTICS

Required Systems for Pelco 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 <a href="http://pdn.pelco.com">pdn.pelco.com</a>

## INTEGRATION

Pelco System Integration	Endura 2.0 (or later) Digital Sentry 7.3 (or later) DX4700/DX4800
Open API	Pelco API or ONVIF Profile S and Profile G
Mobile Application	Integrated with Pelco Mobile Application

## SOFTWARE FEATURES

- Multilingual menus in user interface: English, French, Italian, German, Spanish, Portuguese, Russian, Chinese, Turkish
- 16 window blanks, configurable in size
- Password protection
- Snapshot with JPEG capture at 2016 x 1523 resolution
- Text overlays for camera name, time, date

## CERTIFICATIONS/RATINGS

- CE, Class A
- FCC, Class A
- ICES-003, Class A
- UL/cUL Listed
- KCC
- C-Tick
- CB
- Meets NEMA Type 4X, IP66 rating (Environmental), and IP56 (Vandal-Resistant)
- NEMA TS-2 (Temp.) para 2.2.7.3 - 2.2.7.7
- Compliant with applicable immunity sections of EN 50155, EN 50121-3-2, and EN 50121-4
- ONVIF Profile S and Profile G Conformant

## RECOMMENDED MOUNTS

WMVE-SR	Wall mount, light gray; for use with environmental and vandal-resistant pendant mount options
WMVE-SW	Wall mount, white; for use with indoor pendant mount options
PA101	Pole adapter for use with WMVE-SR wall mount
IMEP-VCM	Indoor corner mount

## OPTIONAL ACCESSORIES

IPCT01	Pelco IP camera tester†
ALM-1	External alarm accessory
POE20U560G	Single port PoE injector
IMELLD1-0I	Lower dome assembly, smoked, in-ceiling, white
IMELLD1-0BI	Lower dome assembly, smoked, in-ceiling, black
IMELD1-0S	Lower dome assembly, smoked, surface mount/pendant, white
IMELD1-0BS	Lower dome assembly, smoked, surface mount/pendant, black
IMELD1-0V	Lower dome (bubble only), smoked, environmental/vandal-resistant
IMELD1-1V	Lower dome (bubble only), clear, environmental/vandal-resistant

† Contact Pelco Product Support for more information about the use of the Pelco IP camera tester with cameras.

# TECHNICAL SPECIFICATIONS

## MODELS\*

Type	Lens	Mount	Color	Resolution	Model
Indoor	3 ~ 9 mm Focal Range	In-Ceiling	White	0.5 MPx	IMES19-1I
				1 MPx (720p)	IME119-1I
				2 MPx (1080p)	IME219-1I
			Black	3 MPx (1080p)	IME319-1I
				3 MPx (1080p)	IME319-B1I
				Surface Mount	White
		1 MPx (720p)	IME119-1S		
		2 MPx (1080p)	IME219-1S		
		Black	3 MPx (1080p)		IME319-1S
			3 MPx (1080p)		IME319-B1S
			Pendant		White
		1 MPx (720p)		IME119-1P	
2 MPx (1080p)	IME219-1P				
Black	3 MPx (1080p)	IME319-1P			
	3 MPx (1080p)	IME319-B1P			
	Environmental	3 ~ 9 mm Focal Range		In-Ceiling	Light Gray
1 MPx (720p)			IME119-1EI		
2 MPx (1080p)			IME219-1EI		
3 MPx (1080p)			IME319-1EI		
Surface Mount			0.5 MPx	IMES19-1ES	
			1 MPx (720p)	IME119-1ES	
			2 MPx (1080p)	IME219-1ES	
			3 MPx (1080p)	IME319-1ES	
Pendant			0.5 MPx	IMES19-1EP	
			1 MPx (720p)	IME119-1EP	
			2 MPx (1080p)	IME219-1EP	
			3 MPx (1080p)	IME319-1EP	
Vandal-Resistant	3 ~ 9 mm Focal Range	In-Ceiling	Light Gray	0.5 MPx	IMES19-1VI†
				1 MPx (720p)	IME119-1VI†
				2 MPx (1080p)	IME219-1VI†
				3 MPx (1080p)	IME319-1VI†
		Surface Mount		0.5 MPx	IMES19-1VS†
				1 MPx (720p)	IME119-1VS†
				2 MPx (1080p)	IME219-1VS†
				3 MPx (1080p)	IME319-1VS†
		Pendant		0.5 MPx	IMES19-1VP†
				1 MPx (720p)	IME119-1VP†
				2 MPx (1080p)	IME219-1VP†
				3 MPx (1080p)	IME319-1VP†
Indoor	9 ~ 22 mm Focal Range	In-Ceiling	White	3 MPx (1080p)	IME3122-1I
			Black		IME3122-B1I
		Surface Mount	White		IME3122-1S
			Black		IME3122-B1S
		Pendant	White		IME3122-1P
			Black		IME3122-B1P
Environmental	9 ~ 22 mm Focal Range	In-Ceiling	Light Gray		IME3122-1EI
		Surface Mount			IME3122-1ES
		Pendant			IME3122-1EP
Vandal-Resistant	9 ~ 22 mm Focal Range	In-Ceiling			IME3122-1VI†
		Surface Mount			IME3122-1VS†
		Pendant			IME3122-1VP†

\*All environmental models are vandal resistant.

†This vandal-resistant model is for indoor use only.

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