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 ~ 9 mm or 9 ~ 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.

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®, 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 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.
TECHNICAL SPECIFICATIONS

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 include 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.
TECHNICAL SPECIFICATIONS

COMPONENT FEATURES

VALUES IN PARENTHESES ARE INCHES; ALL OTHERS ARE CENTIMETERS.

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
- Sensitivity 3 – 9 mm:
  - Color (33 ms): 0.050 lux; 2,850°K; SNR >20 dB
  - 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 – 22 mm:
  - Color (33 ms): 0.200 lux
  - Color (500 ms): 0.010 lux
  - Mono (33 ms): 0.100 lux
  - Mono (500 ms): 0.0025 lux
  - Mono (IR on): 0.000 lux
- Day/Night Capabilities: Yes
- 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 3 MPx 1.3 & 2 MPx
  - 3 – 9 mm:
    - Horiz: 100°, 93°
    - Vert: 74°, 52°
  - 9 – 22 mm:
    - Horiz: 39°, 37°
    - Vert: 29°, 21°

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
TECHNICAL SPECIFICATIONS

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

PHYSICAL
Weight: 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:
  Indoor/Vandal-Resistant: −10° to 55°C (14° to 131°F)
  Environmental: −40° to 55°C (−40° to 131°F)
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: 10 to 90%, RH noncondensing
  Environmental: 5 to 95%, RH noncondensing
Storage Humidity: 20 to 80%, RH noncondensing
Impact Resistance: IK10 (20J) all surfaces per IEC 62262

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
  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:

<table>
<thead>
<tr>
<th>Camera Model</th>
<th>Aspect Ratio</th>
<th>MPx</th>
<th>Width</th>
<th>Height</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 MPx</td>
<td>4:3</td>
<td>3.0</td>
<td>2048</td>
<td>1536</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2.95</td>
<td>1984</td>
<td>1488</td>
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<tr>
<td></td>
<td></td>
<td>1.8</td>
<td>1600</td>
<td>1200</td>
</tr>
<tr>
<td>2 MPx and 1 MPx</td>
<td>16:9</td>
<td>1.2</td>
<td>1280</td>
<td>960</td>
</tr>
<tr>
<td>0.5 MPx</td>
<td></td>
<td>0.5</td>
<td>800</td>
<td>600</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.3</td>
<td>704</td>
<td>480</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.3</td>
<td>640</td>
<td>480</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.07</td>
<td>320</td>
<td>240</td>
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</table>

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<th>Aspect Ratio</th>
<th>MPx</th>
<th>Width</th>
<th>Height</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 MPx and 2 MPx</td>
<td>2.0 (1080p)</td>
<td>0.9</td>
<td>1280</td>
<td>720</td>
</tr>
<tr>
<td>1 MPx</td>
<td>16:9</td>
<td>0.6</td>
<td>1024</td>
<td>576</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.5</td>
<td>960</td>
<td>544</td>
</tr>
<tr>
<td>0.5 MPx</td>
<td></td>
<td>0.3</td>
<td>800</td>
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<td>0.2</td>
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<td></td>
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<td>0.06</td>
<td>320</td>
<td>192</td>
</tr>
</tbody>
</table>

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)

**CERTIFICATIONS/RATINGS**

- CE (Class A)
- FCC (Class A)
- ICES-003 (Class A)
- UL/cUL Listed
- UL/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

**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

**IMPEM-I AND IMEEPM-E PENDANT MOUNT**

**IMEEBAP-I & IMEEBAP-E 4S ELECTRICAL BOX ADAPTER**
### TECHNICAL SPECIFICATIONS

#### MODELS*

<table>
<thead>
<tr>
<th>Back Box</th>
<th>Resolution</th>
<th>Model Number</th>
<th>Lens</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surface</td>
<td>1.3 MPx</td>
<td>IME129-1ES</td>
<td>3 ~ 9 mm</td>
<td>Sarix Enhanced Environmental Dome</td>
</tr>
<tr>
<td></td>
<td>1.3 MPx</td>
<td>IME129-1IS</td>
<td>3 ~ 9 mm</td>
<td>Sarix Enhanced Indoor Dome</td>
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<td>3 ~ 9 mm</td>
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<tr>
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<td>1.3 MPx</td>
<td>IME122-1ES</td>
<td>9 ~ 22 mm</td>
<td>Sarix Enhanced Environmental Dome</td>
</tr>
<tr>
<td></td>
<td>2 MPx</td>
<td>IME229-1ES</td>
<td>3 ~ 9 mm</td>
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*System options contain a back box/mount, camera, and clear dome.