

Sarix® IMP Indoor and Environmental Domes

UP TO 5 MP, H.265, H.264, WDR, DAY/NIGHT IP DOMES

Product Features

- H.265, H.264 Main, High, MJPEG video encoding
- Up to 5 MP resolution at 30 frames per second
- Up to 60 frames per second (ips) at 4 MP for 5 MP cameras
- Autofocus motorized remote zoom lens
- Integrated adaptive IR illumination up to 50 m (some models)
- Operating temperature up to 60°C (140°F) (environmental models)
- Micro SDHC and SDXC card up to 2 TB addressable, 128 GB testable
- Pelco Pro Analytics Suite including Adaptive Motion, Object Counting, Motion Detection, Camera Sabotage
- Power over Ethernet (PoE or PoE+), 24 VAC, 12 VDC
- Pelco Smart Compression Technology
- All models vandal resistant to IK10
- Compatible with Pelco and third-party video management systems
- ONVIF Profile S, Profile G, Profile Q, and Profile T conformant

Sarix Professional Range

Powerful, versatile, and affordable, the **Sarix® Professional (P)** range cameras pack the most popular features and functionality of Sarix technology into a wide range of indoor and outdoor options, including bullet cameras and domes. There is also a vandal resistant wedge camera and a box camera. Mix and match the performance options and form factor you need for almost any lighting condition, environment, and application.

IMP Dome Series Camera

Within the **Sarix Professional** range, the **Sarix IMP Series** dome cameras feature a remote zoom lens for wide angle or long range surveillance needs. Autofocus capability ensures the camera can be automatically refocused when needed. Additionally, the **Sarix IMP Series** features advanced color science and true WDR, optional adaptive IR illumination for increased visibility in difficult lighting conditions. IK10 vandal resistant on both indoor and outdoor domes and IP66/IP67 on the outdoor dome ensures enough robustness for installation in challenging environments.

Video

Sarix Professional provides options for three simultaneous 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 and variable bit rates to



- Full 3-year warranty

optimize image quality with bandwidth and storage efficiency. Pelco Smart Compression is available on both H.264 and H.265, minimizing storage and bandwidth utilization.

Edge Storage

Sarix Professional range cameras feature onboard edge storage with a micro SDHC and SDXC card. Video clips of varying lengths can be stored to the card upon alarm, or video can be written continuously to the SD card in the case of network outage. Video can be retrieved from the card through the FTP protocol or by using an ONVIF Profile G compliant client.

Open and Integrated

Sarix Professional 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 Professional** range cameras integrate with major third-party systems through the open Pelco API or the ONVIF Profile S, Profile G, Profile Q, and Profile T standards.

Standard Web Interface

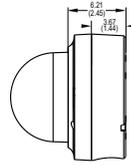
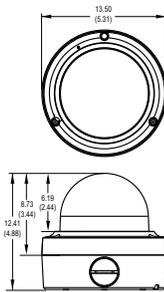
Pelco cameras use a standard Web browser interface for easy remote setup and administration. Controls are optimized for convenient one-step camera configuration for features including color, exposure, flicker control, backlight compensation, and streaming.

TECHNICAL SPECIFICATIONS

BACK BOX FEATURES

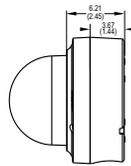
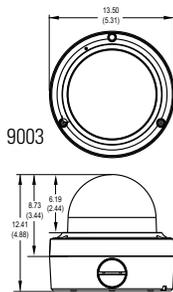


VALUES IN PARENTHESES ARE INCHES; ALL OTHERS ARE CENTIMETERS.



Indoor Surface Mount

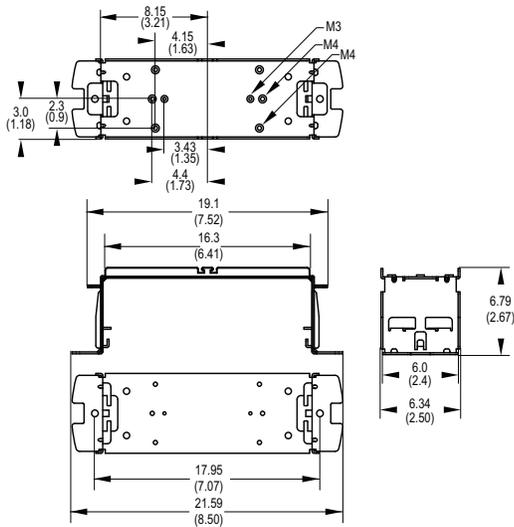
- Aluminum Body and Trim Ring; Polycarbonate Bubble
- RAL 9003
- IK10 (20J) Impact Resistance
- IEEE802.3af PoE, 18 ~ 32 VAC, 12 +/-10% VDC
- IR Illumination 50 m
- IP 64 Ingress Protection



Environmental Surface Mount

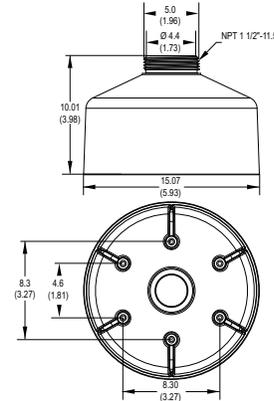
- Aluminum Body and Trim Ring; Polycarbonate Bubble
- RAL 9003
- Type 4X, When Used with IMP3EBAP
- IK10 (20J) Impact Resistance
- IEEE802.3at PoE, 18 ~ 32 VAC, 12 +/-10% VDC
- IR Illumination 50 Meters
- IP66, IP67 Ingress Protection

IMP3ICM-1E IN-CEILING BRACKET



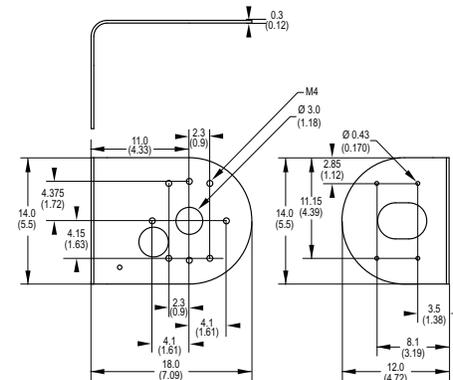
Color: RAL 9003

IMP3PM-1E PENDANT MOUNT



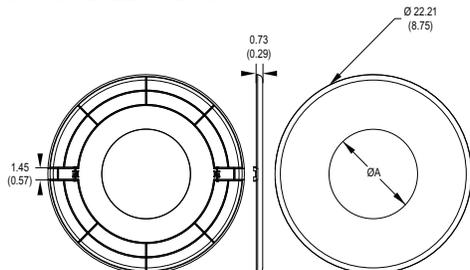
Color: RAL 9003

IMP3PMB-1I WALL MOUNT BRACKET



Color: RAL 9003

IMP3ICM-1E CEILING PLATE



Color: RAL 9003

TECHNICAL SPECIFICATIONS

CAMERA

| | |
|--------------------------|--|
| Imaging Device | 1/2.8-inch |
| Imager Type | CMOS |
| Imager Readout | Progressive scan |
| Highest Resolution | |
| 5MP | 2592 x 1944 (5.0 MP) |
| 3MP | 2048 x 1536 (3 MP) |
| 2 MP | 1920 x 1080 (2 MP) |
| 1 MP | 1280 x 960 (1 MP) |
| Electronic Shutter Range | 1/10,000 to 1 sec |
| True Wide Dynamic Range | 120 dB, per IEC62676 |
| White Balance | Range: 2,000° to 10,000°K; Selectable ATW (Auto Tracing White Balance), Auto, and Manual |
| 3D Noise Reduction | Yes (ON/OFF selectable) |

Minimum Illumination

| MP | Lens | Sensitivity | Color | | Mono | | Mono (IR on) |
|------|-----------|-------------|------------|-------------|----------|------------|--------------|
| | | | 33 ms | 200 ms | 33 ms | 200 ms | |
| 5 MP | 2.8-12 mm | f/1.4 | 0.26 lux | 0.065 lux | 0.15 lux | 0.0375 lux | 0.0 lux |
| 3 MP | 2.8-12 mm | f/1.4 | 0.065 lux | 0.01625 lux | 0.03 lux | 0.0075 lux | 0.0 lux |
| 2 MP | 2.8-12 mm | f/1.4 | 0.0169 lux | 0.00416 lux | 0.01 lux | 0.0025 lux | 0.0 lux |
| 1 MP | 2.8-12 mm | f/1.4 | 0.0169 lux | 0.00416 lux | 0.01 lux | 0.0025 lux | 0.0 lux |

| | |
|------------------------|--|
| Day/Night Capabilities | Mechanical IR cut filter (ON/OFF/AUTO), with different set points on lux |
| IR Illumination | 850 nm adaptive IR, up to 50 meters; auto ON in night mode, or OFF |
| Signal to Noise Ratio | ≥50 dB |

LENS

| | |
|----------------|----------------------|
| Lens Type | Built-in; varifocal |
| Focal Length | f/1.4, 2.8 ~ 12 mm |
| Focus | Autofocus, motorized |
| Zoom | Remote |
| Auto Iris Type | DC-Iris |

Field of View*

| Focal Length | Angle of View | 1 MP | 2 MP | 3 MP | 5 MP |
|--------------|---------------|----------|-----------|-----------|-----------|
| 2.8 to 12 mm | Diagonal | 96°~ 32° | 123°~ 40° | 120°~ 39° | 124°~ 40° |
| | Horizontal | 74°~ 26° | 103°~ 35° | 90°~ 31° | 94°~ 32° |
| | Vertical | 55°~ 20° | 54°~ 20° | 66°~ 23° | 68°~ 24° |

*Field of view may vary with changes in resolution settings.

TECHNICAL SPECIFICATIONS

VIDEO

Video Streams

Up to three simultaneous streams, the second stream and third stream are variable based on the setup of the primary stream

Video Overlay

Camera name, time, date, and customizable text with multiple supported languages. Embedding of custom images and logos supported.

Available Resolutions

| MP | Width | Height | Aspect Ratio |
|-----|-------|--------|--------------|
| 5.0 | 2592 | 1944 | 4:3 |
| 3.7 | 2560 | 1440 | 16:9 |
| 3.2 | 2048 | 1536 | 4:3 |
| 3 | 2304 | 1296 | 16:9 |
| 2.1 | 1920 | 1080 | 16:9 |
| 1.9 | 1600 | 1200 | 4:3 |
| 1.2 | 1280 | 960 | 4:3 |
| 0.9 | 1280 | 720 | 16:9 |
| 0.5 | 800 | 600 | 4:3 |
| 0.3 | 640 | 480 | 4:3 |
| 0.2 | 640 | 360 | 16:9 |
| 0.1 | 320 | 240 | 4:3 |
| 0.1 | 320 | 180 | 16:9 |

Frame Rates

| MP | Images per Second (ips) |
|------|--|
| 5 MP | 60, 50, 30, 25, 20, 16.67, 15, 12.5, 10, 7.5, 5, 3, 2, 1 |
| 3 MP | 30, 25, 20, 16.67, 15, 12.5, 10, 7.5, 5, 3, 2, 1 |
| 2 MP | 30, 25, 20, 16.67, 15, 12.5, 10, 7.5, 5, 3, 2, 1 |
| 1 MP | 30, 25, 20, 16.67, 15, 12.5, 10, 7.5, 5, 3, 2, 1 |

Note: Available frame rates are selectable for each independent stream depending on the coding, resolution, and stream configuration.

Video Encoding

H.265, H.264 High or Main profiles; and MJPEG

Bit Rate Control

Constant bit rate (CBR), constrained variable bit rate (CVBR) with configurable maximum value

Orientation Modes

Corridor Mode, Mirror Mode, Flip Mode, Electronic Image Rotation 90°, 180°, and 270°

Window Blanking

8 configurable windows

Flicker Control

Selectable 50 Hz or 60 Hz modes

PELCO PRO ANALYTICS SUITE

Sarix Professional range cameras feature the Pro suite of video analytics including Motion Detection, Camera Sabotage, Audio Detection, Object Counting, Adaptive Motion, Object Removal, and Directional Motion.

Simple Motion Detection algorithms allow the camera to record or send an alarm when there is motion detected in a selected zone or with the entire scene.

A Camera Sabotage alarm is triggered if the lens is obstructed or when the camera is repositioned.

Audio Detection allows user to define an audio intensity threshold to trigger surrounding audio.

Object Counting counts the number of moving objects passing through the defined virtual lines.

Adaptive Motion detects moving objects crossing defined lines and entering a defined target area.

Object Removal: This behavior detects moving objects that leave the target area.

Directional Motion detects objects moving in disallowed directions.

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 informed optimization between storage savings and image quality.

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 extent of motion, up to 70% bandwidth savings can be achieved.

AUDIO

Streaming

Bi-directional full duplex

Built-In Microphone

60 SPL @ 25 ft > 40 dB SNR (Indoor models only)

Input

Line level, 3K ohm differential w/ 1Vp-p maximum signal

Output

Line level, 600 ohm differential w/1Vp-p

Encoding

G.711 A-law/G.711 U-law

TECHNICAL SPECIFICATIONS

ELECTRICAL

| | |
|--------------|---|
| Network Port | RJ-45 connector for 10/100Base-TX |
| Power Input | IEEE802.3af PoE (Indoor), IEEE802.3at (Environmental) 18 ~ 32 VAC, 12 ± 10% VDC |

Indoor Dome

| Model | Power Input | Power Consumption (Watts or VA) | | |
|------------------|-------------|---------------------------------|-----------------------------|--------------------------|
| | | Typical | Maximum (Models without IR) | Maximum (Models with IR) |
| IMP131 IMP231 | 12 VDC | 4.3 W | 5.4 W | 8.4 W |
| | 24 VAC | 4.4 W | 5.3 W | 7.9 W |
| | PoE | 5.2 W | 9.6 W | 12 W |
| IMP331 | 12 VDC | 5 VA | 5.4 VA | 8.4 VA |
| | 24 VAC | 5 VA | 5.8 VA | 7.9 VA |
| | PoE | 5.8 VA | 9.6 VA | 12 VA |
| IMP531 | 12 VDC | 7.5 W | 8.4 W | 10.2 W |
| | 24 VAC | 7 W | 7.2 W | 9.4 W |
| | PoE | 8.1 W | 12 W | 12 W |

Environmental Dome

| Model | Power Input | Power Consumption (Watts or VA) | | |
|------------------|-------------|---------------------------------|-----------------------------|--------------------------|
| | | Typical | Maximum (Models without IR) | Maximum (Models with IR) |
| IMP131 IMP231 | 12 VDC | 4.3 W | 14.4 W | 16.8 W |
| | 24 VAC | 4.4 W | 13.0 W | 14.4 W |
| | PoE | 5.2 W | 14.4 W | 16.8 W |
| IMP331 | 12 VDC | 5 VA | 14.4 W | 16.8 W |
| | 24 VAC | 5 VA | 13.0 VA | 14.4 W |
| | PoE | 5.8 VA | 14.4 VA | 16.8 W |
| IMP531 | 12 VDC | 7.5 W | 16.8 W | 19.2 W |
| | 24 VAC | 7 W | 14.4 W | 15.8 W |
| | PoE | 8.1 W | 16.8 W | 16.8 W |

Local Storage Micro SDHC and SDXC card, 2 TB addressable, 128 GB or more testable

Alarm
Input 1, PhotoMOS™ relay (30 V, 1 A)
Output 1, PhotoMOS™ relay (30 V, 1 A)
Triggers Unsupervised mode that detects switch closures (Normally Open and Normally Closed)

Analog Output IMP531-1ERS only

ENVIRONMENTAL

| | |
|-----------------------|--|
| Operating Temperature | |
| Environmental | -40° to 60°C (-40° to 140°F) |
| Indoor | -10° to 55°C (14° to 131°F) |
| Storage Temperature | -40° to 70°C (-40° to 158°F) |
| Operating Humidity | 5% to 95%, RH condensing (environmental models) 5% to 90%, RH noncondensing (indoor models) |
| Storage Humidity | 20% to 80%, RH noncondensing |
| Shock and Vibration | |
| Resistance | IEC 60068:2-6 and 2-27 |
| Impact Resistance | IK10 (20 Joules) |

Ingress Protection IP64 (Indoor models) & IP66/67, Type 4X (Environmental models)

GENERAL

| | |
|---------------------|--------------------------------|
| Construction | Aluminum; polycarbonate bubble |
| Finish | RAL 9003 |
| Weight | |
| Unit | 0.86 kg (1.90 lb) |
| Shipping | 1.20 kg (2.65 lb) |
| Pan/Tilt Adjustment | Manual |
| Pan | 0° ~ 370° |
| Tilt | -15° ~ -90° |
| Rotate | 0° ~ 355° |

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, 802.1x (EAP), and NTCIP 1205, ARP, DDNS, ICMP, IGMP, RTCP, SFTP, SIP, TLS/ TTLS, WS-discovery

Users
Unicast Up to 5 simultaneous users depending on resolution settings (3 guaranteed streams)
Multicast Unlimited users H.264/H.265
Security Access Password protected, HTTPS, IEEE 802.X, Digest Authentication, IP Filtering
Software Interface Web browser view and setup

INTEGRATION

Video Management VideoXpert;
VX Toolbox;
Endura 2.0 (or later);
Digital Sentry 7.3 (or later);
Open API Third-party VMS through Pelco API, ONVIF Profile S, Profile G, Profile Q, and Profile T
Mobile Application Pelco Mobile
Local Storage Capture 1-, 5- or 10-second video clips on camera sabotage, motion detection, or alarm input; record video continuously in the case of network outage with option to overwrite; access video through FTP protocol and ONVIF Profile G
Camera Discovery VX Toolbox
Firmware Upgrade Web UI or VX Toolbox
Web Browser Support Microsoft® Internet Explorer® 8.0, Mozilla® Firefox® 3.5, Google® Chrome™ 61.0 and later
Multilingual User Interface English, French, German, Italian, Portuguese, Arabic, Russian, Spanish, Turkish, Korean, Simplified Chinese

TECHNICAL SPECIFICATIONS

SYSTEM MODEL NUMBERS*

| Back Box | Resolution | Lens | Model Number | Description |
|----------|------------|--------------|--------------|--|
| Surface | 1 MP | 2.8 to 12 mm | IMP131-1ERS | Sarix Pro Environmental IR Dome |
| | 1 MP | 2.8 to 12 mm | IMP131-1IRS | Sarix Pro Indoor IR Dome with Microphone |
| | 2 MP | 2.8 to 12 mm | IMP231-1ES | Sarix Pro Environmental Dome |
| | 2 MP | 2.8 to 12 mm | IMP231-1ERS | Sarix Pro Environmental IR Dome |
| | 2 MP | 2.8 to 12 mm | IMP231-1IS | Sarix Pro Indoor Dome with Microphone |
| | 2 MP | 2.8 to 12 mm | IMP231-1IRS | Sarix Pro Indoor IR Dome with Microphone |
| | 3 MP | 2.8 to 12 mm | IMP331-1ES | Sarix Pro Environmental Dome |
| | 3 MP | 2.8 to 12 mm | IMP331-1ERS | Sarix Pro Environment IR Dome |
| | 3 MP | 2.8 to 12 mm | IMP331-1IS | Sarix Pro Indoor Dome with Microphone |
| | 3 MP | 2.8 to 12 mm | IMP331-1IRS | Sarix Pro Indoor IR Dome with Microphone |
| | 5 MP | 2.8 to 12 mm | IMP531-1ES | Sarix Pro Environmental Dome |
| | 5 MP | 2.8 to 12 mm | IMP531-1ERS | Sarix Pro Environmental IR Dome |
| | 5 MP | 2.8 to 12 mm | IMP531-1IS | Sarix Pro Indoor Dome with Microphone |
| | 5 MP | 2.8 to 12 mm | IMP531-1IRS | Sarix Pro Indoor IR Dome with Microphone |

*System options contain a back box/mount, camera, and clear dome.

CERTIFICATIONS*

- CE - EN 55032 (Class A), EN 50130-4, EN 60950-1
- FCC (Class A) - 47 CFR Part 15
- UL and cUL Listed - UL 60950-1, CAN/CSA-C22.2 No. 60950-1-07
- UL/IEC/EN 60950-22 (environmental models only)
- ICES-003 (Class A)
- RCM
- KCC
- NOM
- EAC
- BIS
- Type 4X (environmental models only) when installed properly with IMP3EBAP
- IP66/67 (environmental models only) when installed properly
- IEC 60068:2-6 and 2-27
- ONVIF Profile S, Profile G, Profile Q, and Profile T conformant

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

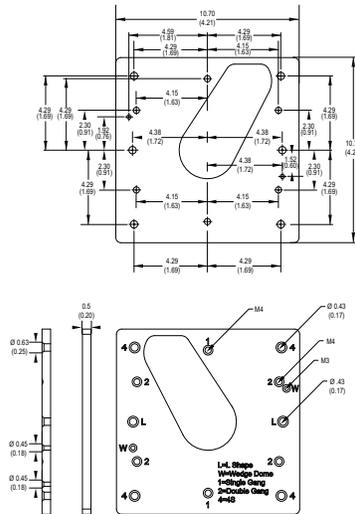
RECOMMENDED MOUNTS

| | |
|--------------------------------------|-----------------------------|
| WMVE-SW | Wall mount arm, 1.5 in. NPT |
| PA101 with WMVE-SW | Pole Mount |
| IMP3PMB-11 | Wall mount |
| IMP3ICM-1E | In-ceiling mount |
| IMP3PM-1E | Pendant mount |
| IMM-CM with WMVE-SW and IMP3PM-1E | Corner mount |

OPTIONAL ACCESSORIES

| | |
|-----------|---------------------------------|
| IMP3EBAP | 4S electrical box adapter |
| IMP3LD-0E | Smoked environmental lower dome |
| IMP3LD-0I | Smoked indoor lower dome |
| IMP3LD-1E | Clear environmental lower dome |
| IMP3LD-1I | Clear indoor lower dome |

IMP3EBAP 4S ELECTRICAL BOX ADAPTER



Color: RAL 9003

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

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