

# Sarix® IBP Series Indoor and Environmental Bullets

## UP TO 5 MEGAPIXEL, H.264, D/N IP BULLETS WITH INTEGRATED LENS AND IR

### Product Features

- Up to 5 megapixel (MPx) resolution
- Up to 30 images per second (ips) at 3 MPx
- Autofocus motorized remote zoom lens
- Operating temperature up to 55°C (131°F)
- Up to 64 GB edge storage with Micro SD card
- Motion detection and camera sabotage detection
- Power over Ethernet (PoE+) Class 4, 24 VAC, 12 VDC
- Vandal resistant to IK10, IP66 ingress protection
- Compatible with Pelco and third-party video systems
- ONVIF Profile S and Profile G conformant
- Full 3-year warranty and support

### 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 mini domes. There are also indoor-only options such as a vandal resistant wedge and micro dome. Mix and match the performance options and form factor you need for almost any lighting condition, environment, and application.

### Camera

Within the **Sarix Professional** range, the **Sarix IBP Series** indoor and outdoor bullet 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 IBP Series** features advanced color science, a mechanical IR cut filter, and advanced integrated adaptive IR illumination for increased sensitivity in low-light installations.

### Video

**Sarix Professional** range cameras support up to two simultaneous video streams and a third service stream. The two streams can be compressed with efficient H.264 High or Main profiles or MJPEG formats. The streams can be configured to a variety of frame rates and bit rates to optimize image quality with bandwidth and storage efficiency.



### Edge Storage

**Sarix Professional** range bullet cameras feature onboard edge storage with a micro SD 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 enabled client.

**Sarix Professional** range cameras feature simple motion detection algorithms allowing 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.

### Open and Integrated

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

# TECHNICAL SPECIFICATIONS

## CAMERA

Imaging Device

| MPx   | Sensor     | Maximum Resolution    |
|-------|------------|-----------------------|
| 5 MPx | 1/1.8-inch | 2592 x 1944 (5.0 MPx) |
| 3 MPx | 1/2.8-inch | 2048 x 1536 (3.0 MPx) |
| 2 MPx | 1/2.8-inch | 1920 x 1080 (2.0 MPx) |
| 1 MPx | 1/3-inch   | 1280 x 960 (1.2 MPx)  |

Imager Type

CMOS

Imager Readout

Progressive scan

Electronic Shutter Range

1/5 ~ 1/30,000 sec (1 MPx and 5 MPx)

1/5 ~ 1/25,000 sec (2 MPx)

1/5 ~ 1/45,000 sec (3 MPx)

Wide Dynamic Range

75 db

White Balance Range

2,000° to 10,000°K

3D Digital Noise Reduction

Yes (ON/OFF selectable)

Signal to Noise Ratio

≥50 dB

Minimum Illumination

| MPx   | Sensitivity | Color    |          | Mono - with IR Illumination |          |
|-------|-------------|----------|----------|-----------------------------|----------|
|       |             | 33 ms    | 200 ms   | 33 ms                       | 200 ms   |
| 5 MPx | f/1.2       | 0.30 lux | 0.02 lux | 0.00 lux                    | 0.00 lux |
| 3 MPx | f/1.2       | 0.25 lux | 0.02 lux | 0.00 lux                    | 0.00 lux |
| 2 MPx | f/1.2       | 0.25 lux | 0.02 lux | 0.00 lux                    | 0.00 lux |
| 1 MPx | f/1.4       | 0.05 lux | 0.02 lux | 0.00 lux                    | 0.00 lux |

Mechanical IR Cut Filter

Yes (AUTO/MANUAL selectable), with different set points on lux

IR Illumination

Adaptive IR up to 35 m; auto ON in night mode, or OFF

## LENS

Lens type

Built-in; varifocal

Focal Length

f/1.4, 3 ~ 10.5 mm, 9 ~ 22 mm, or 12 ~ 40 mm

Focus

Autofocus, motorized

Zoom

Remote

Auto Iris Type

DC drive lens

Field of View\*

| Lens         | Angle of View | 1 MPx        | 2 MPx        | 3 MPx        | 5 MPx     |
|--------------|---------------|--------------|--------------|--------------|-----------|
| 3 to 10.5 mm | Diagonal      | 112°~ 33°    | 120°~ 35°    | 115°~ 34°    | 116°~ 46° |
|              | Horizontal    | 86°~ 27°     | 102°~ 31°    | 98°~ 30°     | 90°~ 37°  |
|              | Vertical      | 63°~ 19°     | 54°~ 17°     | 52°~ 16°     | 67°~ 27°  |
| 9 to 22 mm   | Diagonal      | 38.7°~ 16°   | 41.4°~ 17.1° | 41.5°~ 17.1° | N/A       |
|              | Horizontal    | 30.6°~ 12.8° | 35.8°~ 14.9° | 32.7°~ 13.7° | N/A       |
|              | Vertical      | 22.7°~ 9.6°  | 19.7°~ 8.4°  | 24.3°~ 10.3° | N/A       |
| 12 to 40 mm  | Diagonal      | 28.4°~ 10°   | 30.4°~ 10.3° | 30°~ 10°     | N/A       |
|              | Horizontal    | 22.6°~ 8°    | 26°~ 9°      | 23.8°~ 8.3°  | N/A       |
|              | Vertical      | 16.7°~ 5.9°  | 14.8°~ 5.2°  | 17.8°~ 6.2°  | N/A       |

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

# TECHNICAL SPECIFICATIONS

## VIDEO

Video Streams

Up to 2 simultaneous streams, plus service stream; the secondary stream is variable based on the setup of the primary stream

Text Overlay

Camera name, time, date, and customizable text with multiple languages supported

Available Resolutions

| MPx | Width | Height | Aspect Ratio |
|-----|-------|--------|--------------|
| 5.0 | 2592  | 1944   | 4:3          |
| 3.1 | 2048  | 1536   | 4:3          |
| 2.1 | 1920  | 1080   | 16:9         |
| 1.2 | 1280  | 960    | 4:3          |
| 0.9 | 1280  | 720    | 16:9         |
| 0.5 | 800   | 600    | 4:3          |
| 0.3 | 640   | 480    | 4:3          |
| 0.1 | 320   | 240    | 4:3          |
| 0.1 | 320   | 180    | 16:9         |

Frame Rates

| MPx   | Images per Second (ips)                          |
|-------|--|
| 5 MPx | 15, 12.5, 10, 7.5, 5, 3, 2, 1                    |
| 3 MPx | 30, 25, 20, 16.67, 15, 12.5, 10, 7.5, 5, 3, 2, 1 |
| 2 MPx | 30, 25, 20, 16.67, 15, 12.5, 10, 7.5, 5, 3, 2, 1 |
| 1 MPx | 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.264 High, Main, and Baseline profiles; and MJPEG

Bit Rate Control

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

Corridor Mode

Electronic image flip and mirror: 180°, 90° and 270° (H.264 only)

Service Stream

640 x 480 or 640 x 352; 2 ips, JPEG

Window Blanking

4 configurable windows

## AUDIO

Streaming

Dual-channel

Input

Line in/terminal block

Encoding

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

# TECHNICAL SPECIFICATIONS

## GENERAL

|                    |  |
|--------------------|--|
| Construction       | Die cast aluminum, cylindrical                       |
| Ingress Protection | IP66<br>Type 4X                                      |
| Vandal Resistance  | IK10 (20J impact) per IEC 62262                      |
| Finish             | RAL 7047 (environmental)<br>White, RAL 9003 (indoor) |
| Unit Weight        | 1.76 kg (3.89 lb)                                    |
| Shipping Weight    | 2.35 kg (5.18 lb)                                    |

## ELECTRICAL

|                   |  |
|-------------------|--|
| Network Port      | RJ-45 connector for 100Base-TX   |
| Power Input       | PoE (IEEE 802.3af, Class 3); 24 VAC nominal,<br>18 to 32 VAC range, 12 VDC |
| Power Consumption |  |
| Indoor            | < 6 W  |
| Outdoor           | < 11.50 W  |
| Local Storage     | Up to 64 GB on Micro SDHC or SDXC card                                     |
| Alarm             |  |
| Input             | 1  |
| Output            | 1; PhotoMOS™ relay (30 V, 1 A)   |
| Triggers          | Unsupervised mode that detects switch<br>closures (N.O. and N.C.)          |

## ENVIRONMENTAL

|                       |                               |
|-----------------------|-------------------------------|
| Operating Temperature |                               |
| Outdoor               | −40° to 55°C (−40° to 131°F)* |
| Indoor                | −10° to 55°C (14° to 131°F)   |
| Storage Temperature   | −40° to 60°C (−40° to 140°F)  |
| Operating Humidity    | 15% to 85%, RH condensing     |
| Storage Humidity      | 5% to 90%, RH noncondensing   |

\*Thermostatically controlled heating provides ramped heating control between the initial heater on at 15°C (59°F) and full heating mode at −40°C (−40°F).

## NETWORK

|                     |  |
|---------------------|--|
| Supported Protocols | TCP/IP, UDP/IP (Unicast, Multicast IGMP),<br>ICMP, IPv4, IPv6, SNMP v2c/v3, HTTP, HTTPS,<br>SSL, SSH, SMTP, FTP, RTSP, UPnP, DNS, NTP,<br>RTP, RTCP, LDAP (client), QoS, GB28181 |
| Users               |  |
| Unicast             | 1 administrator, up to 4 viewers   |
| Multicast           | Unlimited users H.264  |
| Security Access     | Multiple user access levels with password<br>protection  |

## INTEGRATION

|                                  |   |
|----------------------------------|---|
| Video Management                 | VideoXpert;<br>Endura version 2.0 (or later);<br>Digital Sentry 7.3 (or later);<br>Third-party VMS through Pelco API 1.0 and<br>ONVIF Profile S and Profile G   |
| Mobile Application               | Pelco Mobile  |
| Analytics                        | Simple motion detection and camera<br>sabotage detection  |
| Local Storage                    | Capture 1-, 5-, or 10-second video clips on<br>camera sabotage, motion detection, or alarm<br>input; record video continuously in the case of<br>network outage with option to overwrite;<br>access video through FTP protocol and ONVIF<br>Profile G |
| Camera Discovery<br>and Firmware | Discover cameras and upgrade firmware<br>using the Pelco Device Utility 2 version 2.2 or<br>later; cameras discovered and firmware<br>upgrade through Endura Utilities  |
| Web Browser Support              | Microsoft® Internet Explorer® 9.0, Apple®<br>Safari® 7.0.6, Mozilla® Firefox® 31.0,<br>Google® Chrome™ 37.0.2062.124 m and later  |
| Multilingual User Interface      | English, French, German, Italian, Portuguese,<br>Arabic, Russian, Spanish, Turkish, Korean,<br>Simplified Chinese   |

## CERTIFICATIONS\*


- CE - EN 55022 (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 60950-22
- ICES-003 (Class A)
- RCM
- KC
- Type 4X and IP66 rated enclosure (outdoor models) when installed properly
- ONVIF Profile S and Profile G conformant

\*At the time of this publication, certifications are pending. Consult the factory or [www.pelco.com](http://www.pelco.com) for the current status of certifications.

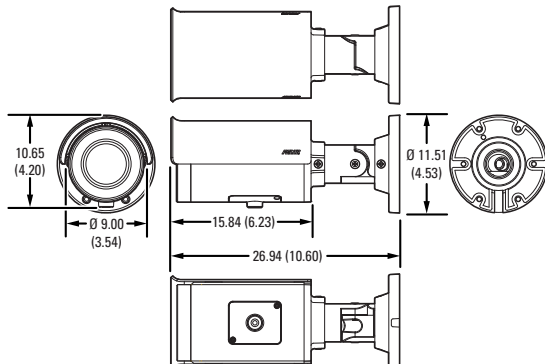
# TECHNICAL SPECIFICATIONS

## MODELS

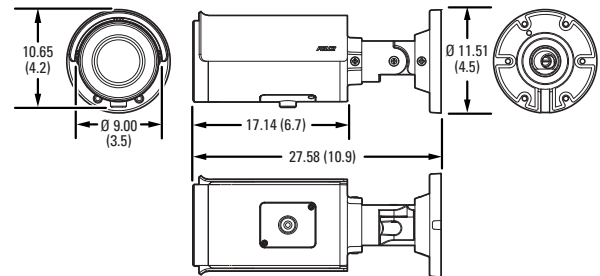
| Resolution | Lens         | Model Number | Description                    |
|------------|--------------|--------------|--------------------------------|
| 1 MPx      | 3 to 10.5 mm | IBP121-1I    | Sarix Pro Indoor Bullet        |
| 1 MPx      | 3 to 10.5 mm | IBP121-1R    | Sarix Pro Environmental Bullet |
| 1 MPx      | 9 to 22 mm   | IBP122-1I    | Sarix Pro Indoor Bullet        |
| 1 MPx      | 9 to 22 mm   | IBP122-1R    | Sarix Pro Environmental Bullet |
| 1 MPx      | 12 to 40 mm  | IBP124-1I    | Sarix Pro Indoor Bullet        |
| 1 MPx      | 12 to 40 mm  | IBP124-1R    | Sarix Pro Environmental Bullet |
| 2 MPx      | 3 to 10.5 mm | IBP221-1I    | Sarix Pro Indoor Bullet        |
| 2 MPx      | 3 to 10.5 mm | IBP221-1R    | Sarix Pro Environment Bullet   |
| 2 MPx      | 9 to 22 mm   | IBP222-1I    | Sarix Pro Indoor Bullet        |
| 2 MPx      | 9 to 22 mm   | IBP222-1R    | Sarix Pro Environmental Bullet |
| 2 MPx      | 12 to 40 mm  | IBP224-1I    | Sarix Pro Indoor Bullet        |
| 2 MPx      | 12 to 40 mm  | IBP224-1R    | Sarix Pro Environmental Bullet |
| 3 MPx      | 3 to 10.5 mm | IBP321-1I    | Sarix Pro Indoor Bullet        |
| 3 MPx      | 3 to 10.5 mm | IBP321-1R    | Sarix Pro Environmental Bullet |
| 3 MPx      | 9 to 22 mm   | IBP322-1I    | Sarix Pro Indoor Bullet        |
| 3 MPx      | 9 to 22 mm   | IBP322-1R    | Sarix Pro Environment Bullet   |
| 3 MPx      | 12 to 40 mm  | IBP324-1I    | Sarix Pro Indoor Bullet        |
| 3 MPx      | 12 to 40 mm  | IBP324-1R    | Sarix Pro Environmental Bullet |
| 5 MPx      | 3 to 10.5 mm | IBP521-1I    | Sarix Pro Indoor Bullet        |
| 5 MPx      | 3 to 10.5 mm | IBP521-1R    | Sarix Pro Environmental Bullet |

 VALUES IN PARENTHESES ARE INCHES; ALL OTHERS ARE CENTIMETERS

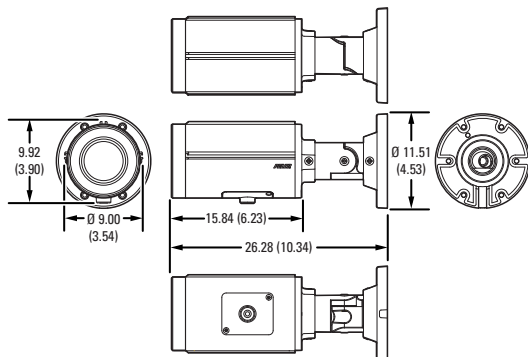
### SARIX PRO ENVIRONMENTAL BULLET 3 TO 10.5 MM AND 9 TO 22 MM LENS



### SARIX PRO ENVIRONMENTAL BULLET 12 TO 40 MM LENS



### SARIX PRO INDOOR BULLET 3 TO 10.5 MM AND 9 TO 22 MM LENS



### SARIX PRO INDOOR BULLET 12 TO 40 MM LENS

