Sarix® IXP Series Box Cameras
UP TO 5MP, H.264, H.265, IP BOX CAMERAS WITH TRUE WDR

Product Features

- H.265, H.264 Main, High, MJPEG video encoding
- Up to 5 megapixel (MP) resolution at 30 frames per second
- Up to 60 images per second (ips) at 4 MP for 5MP cameras
- Micro SDHC & SDXC 2TB addressable, 128 GB testable
- Pelco Pro Analytics Suite including Adaptive Motion, Object Counting, Motion Detection, Camera Sabotage
- Operating temperature from −10° to 55°C (14° to 131°F)
- 24 VAC, 12 VDC, IEEE802.3af Power over Ethernet (PoE)
- Pelco Smart Compression Technology
- Choice of standard CS megapixel lenses
- Compatible with Pelco and third-party video management systems
- ONVIF Profile S, Profile G, Profile Q, and Profile T 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 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.

Camera

Within the Sarix Professional Range, the IXP Series Box Cameras are compatible with a choice of standard CS mount megapixel lenses for wide angle or long range surveillance needs. The box cameras feature an auto back focus mechanism to accommodate this range of lenses and to ensure that the camera automatically stays in perfect focus. The Sarix IXP Series features advanced color science and true WDR for increased visibility in difficult lighting situations.

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 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/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.
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:
  - 5 MP: 2592 x 1944
  - 3 MP: 2048 x 1536
  - 2 MP: 1920 x 1080
  - 1 MP: 1280 x 960
- 3D Noise Reduction: Yes (ON/OFF selectable)
- Signal-to-Noise Ratio: >50 dB
- Auto Back Focus: Yes
- Electronic Shutter Range: 1/10,000 sec ~ 1 sec
- True Wide Dynamic Range: Up to 120 dB, per IEC62676
- White Balance Range: 2,000° to 10,000°K; Selectable ATW (Auto Tracing White Balance), Auto, & Manual
- Day/Night Capabilities: Mechanical IR Cut Filter (ON/OFF/AUTO), with different set points on lux

Minimum Illumination

<table>
<thead>
<tr>
<th>MP</th>
<th>Sensitivity</th>
<th>Color</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Color Mono</td>
</tr>
<tr>
<td></td>
<td>33 ms</td>
<td>200 ms</td>
</tr>
<tr>
<td>5 MP</td>
<td>f/1.3</td>
<td>0.26 lux</td>
</tr>
<tr>
<td>3 MP</td>
<td>f/1.3</td>
<td>0.065 lux</td>
</tr>
<tr>
<td>2 MP</td>
<td>f/1.3</td>
<td>0.0169 lux</td>
</tr>
<tr>
<td>1 MP</td>
<td>f/1.3</td>
<td>0.0169 lux</td>
</tr>
</tbody>
</table>

*Note: The minimum illumination values will change depending on the lens used.
TECHNICAL SPECIFICATIONS

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 NTCP 1205, ARP, DDNS, ICMP, IGMP, RTCP, SFTP, SIP, TLS/SSL, WS-discovery

Users
- Unicast: Up to 5 simultaneous users depending on resolution settings (3 guaranteed streams)
- Multicast: Unlimited, H.264/H.265

Security Access: Password Protected, HTTPS, IEEE 802.1X, Digest Authentication, IP Filtering

Software Interface: Web browser view and setup

LENSING
- Lens Mount: CS thread
- Auto Iris Type: DC-iris, P-Iris
- Field of View: Refer to recommended Lenses

AUDIO
- Streaming: Bidirectional full duplex
- Input: Line Level, 3K ohm differential w/ 1Vp-p max signal
- Output: Line Level, 600 ohm differential w/ 1Vp-p
- Encoding: G711-Alaw / G711-Ulaw

GENERAL
- Construction Material: Aluminum
- Finish: RAL 9001, black
- Weight
  - Unit: 0.42 kg (0.926 lb)
  - Shipping: 0.58 kg (1.28 lb)

ENVIRONMENTAL
- Operating Temperature: –10°C to 55°C (14°F to 131°F)
- Storage Temperature: –40°C to 70°C (–40°F to 158°F)
- Operating Humidity: 5 to 90%, RH noncondensing
- Storage Humidity: 20 to 80%, RH noncondensing

ELECTRICAL
- Network Port: RJ-45 Connector, 10/100Base-Tx
- RS-485: Yes
- Input Power: IEEE802.3af PoE, 18 – 32 VAC, 12 +/-10% VDC
- Local Storage: Micro SDHC & SDXC 2TB addressable, 128G or more testable

<table>
<thead>
<tr>
<th>Model</th>
<th>Power Input</th>
<th>Power Consumption (Watts or VA)</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Typical</td>
<td>Maximum</td>
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<tr>
<td>IXP13</td>
<td>12 VDC</td>
<td>3.5 W</td>
</tr>
<tr>
<td></td>
<td>24 VAC</td>
<td>3.7 VA</td>
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<td></td>
<td>PoE</td>
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<td></td>
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<td>PoE</td>
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<td>4 W</td>
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<td></td>
<td>24 VAC</td>
<td>9.4 VA</td>
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<tr>
<td></td>
<td>PoE</td>
<td>12.1 W</td>
</tr>
<tr>
<td>IXP53</td>
<td>12 VDC</td>
<td>8 W</td>
</tr>
<tr>
<td></td>
<td>24 VAC</td>
<td>10.8 VA</td>
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<tr>
<td></td>
<td>PoE</td>
<td>12.5 W</td>
</tr>
</tbody>
</table>

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)
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 H.264 SMART COMPRESSION TECHNOLOGY

Pelco’s H.264 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 occurring, up to 70% bandwidth savings can be achieved.

INTEGRATION

Video Management
- Pelco’s H.264 Smart Compression Technology

Open API
- 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
- Microsoft® Internet Explorer® 8.0, Mozilla® Firefox® 3.5, Google® Chrome™ 61.0 and later

Web Browser Support
- English, French, German, Italian, Portuguese, Arabic, Russian, Spanish, Turkish, Korean, Simplified Chinese
TECHNICAL SPECIFICATIONS

VIDEO

Video Streams
Up to 3 simultaneous streams, the second 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

<table>
<thead>
<tr>
<th>MP</th>
<th>Width</th>
<th>Height</th>
<th>Aspect Ratio</th>
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<tbody>
<tr>
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<td>1944</td>
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<td>16:9</td>
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<tr>
<td>3.2</td>
<td>2048</td>
<td>1536</td>
<td>4:3</td>
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<tr>
<td>3.0</td>
<td>2304</td>
<td>1296</td>
<td>16:9</td>
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<tr>
<td>2.1</td>
<td>1920</td>
<td>1080</td>
<td>16:9</td>
</tr>
<tr>
<td>1.9</td>
<td>1600</td>
<td>1200</td>
<td>4:3</td>
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<tr>
<td>1.2</td>
<td>1280</td>
<td>960</td>
<td>4:3</td>
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<tr>
<td>0.9</td>
<td>1280</td>
<td>720</td>
<td>16:9</td>
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<tr>
<td>0.5</td>
<td>800</td>
<td>600</td>
<td>4:3</td>
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<td>480</td>
<td>4:3</td>
</tr>
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<td>640</td>
<td>360</td>
<td>16:9</td>
</tr>
<tr>
<td>0.1</td>
<td>320</td>
<td>240</td>
<td>4:3</td>
</tr>
<tr>
<td>0.1</td>
<td>320</td>
<td>180</td>
<td>16:9</td>
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</table>

Frame Rates

<table>
<thead>
<tr>
<th>MP</th>
<th>Images per Second (ips)</th>
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<tr>
<td>5 MP</td>
<td>60, 50, 30, 25, 20, 16.67, 15, 12.5, 10, 7.5, 5, 3, 2, 1</td>
</tr>
<tr>
<td>3 MP</td>
<td>30, 25, 20, 16.67, 15, 12.5, 10, 7.5, 5, 3, 2, 1</td>
</tr>
<tr>
<td>2 MP</td>
<td>30, 25, 20, 16.67, 15, 12.5, 10, 7.5, 5, 3, 2, 1</td>
</tr>
<tr>
<td>1 MP</td>
<td>30, 25, 20, 16.67, 15, 12.5, 10, 7.5, 5, 3, 2, 1</td>
</tr>
</tbody>
</table>

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

Minimum Frame Rate
Up to 60 frames per second at 4 MP on 5 MP model

Video Encoding
H.265, H.264 Main/High, MJPEG

Bit Rate Control
Constrained variable bit rate (CVBR) with configurable maximum value and constant bit rate (CBR)

Orientation Modes
Corridor Mode, Mirror Mode, Flip Mode.
Electronic image rotation 90, 180, 270 degrees

Window Blanking
8 configurable windows

Flicker Control
Selectable 50 Hz or 60 Hz Modes

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™ (61.0 or later) or Mozilla® Firefox® 3.5 (or later); Internet Explorer 8.0 (or later) is recommended for configuring analytics.
TECHNICAL SPECIFICATIONS

MODELS

<table>
<thead>
<tr>
<th>Resolution</th>
<th>Model Number</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>1 MP</td>
<td>IXP13</td>
<td>Sarix Professional Series Box Camera</td>
</tr>
<tr>
<td>2 MP</td>
<td>IXP23</td>
<td>Sarix Professional Series Box Camera</td>
</tr>
<tr>
<td>3 MP</td>
<td>IXP33</td>
<td>Sarix Professional Series Box Camera</td>
</tr>
<tr>
<td>5 MP</td>
<td>IXP53</td>
<td>Sarix Professional Series Box Camera</td>
</tr>
</tbody>
</table>

CERTIFICATIONS/RATINGS

- CE - EN55032 (Class A), EN 50130-4, EN 60950-1
- FCC (Class A) - 47 CFR Part 15
- ICES-003 (Class A)
- UL/cUL Listed - UL 60950-1, CAN/CSA C22.2 No. 60950-1-07
- KCC
- RCM
- NOM
- EAC
- BIS
- ONVIF Profile S, Profile G, Profile Q, and Profile T Conformant

RECOMMENDED MOUNT

- C11-UM Gang box mount
- CM1751 Pedestal mount
- TB1751 T-rail mount

RECOMMENDED ENCLOSURES

- EH14 Series* PoE and 24 VAC indoor/environmental enclosures
- EH20 Series* Indoor and environmental enclosures
- EHS8000 Series* Indoor and environmental enclosures

*Not all box/lens types supported.

RECOMMENDED LENSES

- M2.8-8.5P 1-5 MP CS lens, varifocal, 2.8 – 8.5 mm, f/1.2
- M9-40P 1-5 MP CS lens, varifocal, 9 – 40 mm, f/1.5
- M1-8-3 1-5 MP CS lens, varifocal, 1.8 – 3 mm, f/1.8
- YV2.3X15SR4A 1-3 MP CS lens, varifocal, 15 – 50 mm, f/1.5
- YV2.7X2.8SR4A 1-3 MP CS lens, varifocal, 2.8 – 8 mm, f/1.3
- YV2.7X2.23SR4A 1-3 MP CS lens, varifocal, 2.2 – 6 mm, f/1.3
- MI2.8-8.5P iCS lens 2.8 – 8.5 mm
- MI3.9-10P iCS lens 2.8 – 8.5 mm
- MI4-9-10P iCS lens 2.8 – 8.5 mm
- MI5-9-50P MPx iCS lens 9 – 50 mm

⚠️ WARNING: Cancer and Reproductive Harm - www.P65Warnings.ca.gov.
⚠️ AVERTISSEMENT: Cancer et Troubles de l'appareil reproducteur - www.P65Warnings.ca.gov.

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