

# Sarix® IXE Series Box Cameras with SureVision

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

### Product Features

- Next Generation SureVision Technology, Including:
  - True Wide Dynamic Range (WDR)
  - Advanced Low-Light Performance
  - Anti-Bloom Technology
- Up to 3 Megapixel (MPx) Resolution
- Up to 30 Images per Second (ips) at 3 MPx
- CS Lens Mounts with Auto Back Focus (ABF)
- Power over Ethernet (PoE), IEEE 802.3af
- Adaptive Motion Detection and Camera Sabotage Analytics
- Local Storage (Micro SD)

### Sarix Enhanced Range with SureVision

**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 auto back focus (ABF), built-in analytics, and other advanced features needed for demanding security applications.

### Camera

Within the **Sarix Enhanced Range**, the **IXE 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 IXE Series features advanced color science and a mechanical IR cut filter for increased sensitivity in low-light installations.

### Video

The **IXE Series** supports multiple simultaneous video streams with up to two different configurations. The streams can be compressed in MJPEG and H.264 formats across several resolution configurations. The **IXE 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.

SureVision™ 2.0  
A Pelco® by Schneider Electric™ Technology



- Compatible with Pelco and Third-Party Video Systems
- ONVIF Profile S Conformant
- 3-Year Warranty and Support

The streams can be configured to a variety of frame rates, bit rates, and group of pictures (GOP) structures for additional bandwidth administration.

### 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 open ONVIF Profile S standard.

### Built-In Analytics

**Sarix Enhanced** range cameras feature adaptive motion detection, allowing the camera to record or send an alarm when there is motion in selected zones or in an entire scene. A camera sabotage alarm is triggered if the lens is obstructed, or when the camera is repositioned.

### 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 increases camera fail safety through an uninterruptable power supply (UPS).



by Schneider Electric



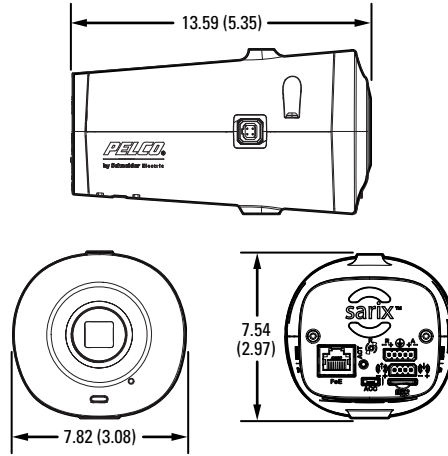
International Standards  
Organization Registered Firm,  
ISO 9001 Quality System



C3943 / NEW 9-20-13

# TECHNICAL SPECIFICATIONS

 VALUES IN PARENTHESES ARE INCHES; ALL OTHERS ARE CENTIMETERS.



REAR VIEW

# TECHNICAL SPECIFICATIONS

## MODELS

IXES1	Sarix 0.5 MPx with SureVision, low-light, WDR, day-night, network camera with built-in Pelco analytics
IXE11	Sarix 1 MPx (720p) with SureVision, low-light, WDR, day-night, network camera with built-in Pelco analytics
IXE21	Sarix 2 MPx (1080p) with SureVision, low-light, WDR, day-night, network camera with built-in Pelco analytics
IXE31	Sarix 3 MPx (1080p) with SureVision, low-light, WDR, day-night, network camera with built-in Pelco analytics

## 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 1024
0.5 MPx	800 x 608
Signal-to-Noise Ratio	>60 dB
Auto Back Focus	Yes
Electronic Shutter Range	1 ~ 1/77,000 sec
True Wide Dynamic Range	Up to 100 dB*
White Balance Range	2,000° to 10,000°K
Sensitivity	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
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.

## 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
Compression	G.711 PCM 8 bit, 8 kHz mono at 64 kbit/s

## 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)
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**Note:** IPv6 protocol supports mixed IPv4 and IPv6 installations, but not IPv6-only deployments.

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	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	Mbps	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 MPx	1.2	3.8	1280	960	4:3
	0.5 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	16:9
	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

## MECHANICAL

Lens Mount	CS mount; adjustable
Auto Iris Type	DC drive
Camera Mount	1/4 in. UNC-20 screw; top and bottom of camera housing

## 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>	9 W nominal
Current Consumption	350 mA maximum
Local Storage	Micro SD
Alarm	
Input	10 VDC maximum, 5 mA maximum
Output	0 to 15 VDC maximum, 75 mA maximum
Relay Output	32 VDC maximum; 150 mA maximum

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

# TECHNICAL SPECIFICATIONS

## ENVIRONMENTAL

Operating Temperature	-10° to 50°C (14° to 122°F)
Storage Temperature	-10° to 60°C (14° to 140°F)
Operating Humidity	20 to 80%, RH noncondensing
Storage Humidity	20 to 80%, RH noncondensing

## PHYSICAL

Construction	
Material	Aluminum
Finish	Silver powder paint
Weight	
Unit	0.52 kg (1.16 lb)
Shipping	0.64 kg (1.41 lb)
Product Box Dimensions (approximate)	12.7 x 19.69 x 12.7 cm (5.0" D x 7.75" W x 5.0" H)

## 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

## 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>

## CERTIFICATIONS/RATINGS/PATENTS

- CE, Class A<sup>‡</sup>
- FCC, Class A<sup>‡</sup>
- UL/cUL Listed<sup>‡</sup>
- KCC<sup>‡</sup>
- C-Tick<sup>‡</sup>
- CB<sup>‡</sup>
- Cisco® Medianet Media Services Proxy 2.0 compatible
- ONVIF Profile S Conformant<sup>‡</sup>
- MTBF ≥ 200,000 POH (reporting standard is RELEX Modeling)

<sup>‡</sup>At the time of this publication, these certifications are pending. Consult the factory, our Web site ([www.pelco.com](http://www.pelco.com)), or the most recent B.O.S.S.® update for the current status of certifications.

## INTEGRATION

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

## RECOMMENDED MOUNT

C10-UM	Universal camera mount
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## RECOMMENDED ENCLOSURES

EH1512	Indoor/environmental, IP66
EH3512	Indoor/environmental, IP66

## RECOMMENDED LENSES

13M2.2-6	MPx lens, varifocal, 2.2 ~ 6.0 mm, f/1.3 ~ 2.0
13M2.8-8	MPx lens, varifocal, 2.8 ~ 8.0 mm, f/1.2 ~ 1.9
13M2.8-12	MPx lens, varifocal, 2.8 ~ 12.0 mm, f/1.4 ~ 2.7
13M15-50	MPx lens, varifocal, 15.0 ~ 50.0 mm, f/1.5 ~ 2.1

**Note:** Pelco megapixel (MPx) lenses have been designed and tested to deliver optimal image quality for the IXE Series camera. The use of a standard definition lens or any other lens not tested by Pelco on an IXE Series MPx camera could limit the resolution of the camera, creating poor image quality.

## OPTIONAL ACCESSORIES

IPCT01	Pelco IP camera tester <sup>§</sup>
ALM-1	External alarm accessory
POE1AT-US	1-port PoE midspan with US power cord
POE1AT-EU	1-port PoE midspan with European power cord

<sup>§</sup>Contact Pelco Product Support for more information about the use of the Pelco IP camera tester with cameras.

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