Sarix® IMP Series Environmental Mini Domes

STD DEF/MEGAPIXEL, H.264, DAY/NIGHT IP DOMES

Product Features

- Up to 5 Megapixel (MPx) Resolution
- Up to 30 Images per Second (ips) at 1080p
- Autofocus Motorized Remote Zoom Lens
- Accessible Edge Storage with Micro SD Card
- Motion Detection and Camera Sabotage Detection
- Operating Temperature from –45° to 50°C (–50° to 122°F)
- Power over Ethernet (PoE) and 24 VAC Power Input
- Compatible with Pelco and Third-Party Video Systems
- ONVIF Profile S and Profile G Conformant
- 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 environmental options, including IP box cameras, bullet cameras, and domes. 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 IMP Series** mini 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 a mechanical IR cut filter 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 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 within 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 Endura® version 2.0 (or later) and Digital Sentry® version 7.3 (or later). **Sarix Professional** 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 and Profile G standards.
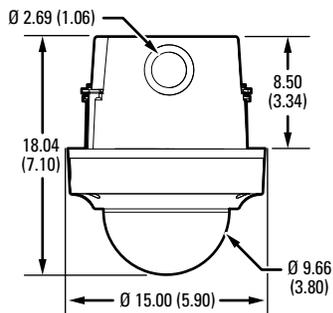
Standard Web Interface

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.
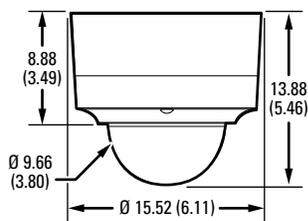
BACK BOX FEATURES

✋ VALUES IN PARENTHESES ARE INCHES; ALL OTHERS ARE CENTIMETERS.

Ø 2.69 (1.06)
8.50 (3.34)
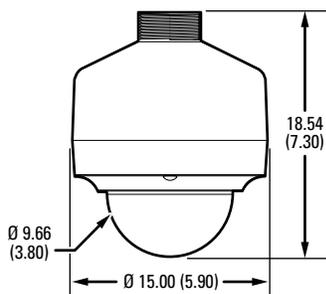18.04 (7.10)
Ø 9.66 (3.80)
Ø 15.00 (5.90)

Environmental, In-Ceiling

- Clearance Above Ceiling 10.16 cm (4 in.)
- Maximum Ceiling Thickness 3.81 cm (1.5 in.)
- 3/4-Inch NPT or 25 mm Conduit Attachments On Side and Top of Back Box
- IP66 Ingress Protection
- NEMA Type 4X
- NEMA TS-2 (Temp.) para 2.2.7.3 - 2.2.7.7
- IK10 (20J) Impact Resistance
- Plenum Rated Back Box

8.88 (3.49)
13.88 (5.46)
Ø 9.66 (3.80)
Ø 15.52 (6.11)

Environmental, Surface Mount

- Attaches to Standard 4-Inch Square Outlet Box and Standard 2-Gang Electrical Box
- 3/4-Inch NPT or 25 mm Conduit Attachments On Side and Top of Back Box
- IP66 Ingress Protection
- NEMA Type 4X
- NEMA TS-2 (Temp.) para 2.2.7.3 - 2.2.7.7
- IK10 (20J) Impact Resistance

18.54 (7.30)
Ø 9.66 (3.80)
Ø 15.00 (5.90)

Environmental, Pendant

- 1.5-Inch NPT Thread for Use With Pelco Wall Mounts
- IP66 Ingress Protection
- NEMA Type 4X
- NEMA TS-2 (Temp.) para 2.2.7.3 - 2.2.7.7
- IK10 (20J) Impact Resistance

CAMERA

Imaging Device

MPx	Sensor	Maximum Resolution
5 MPx	1/3.2-inch	2592 x 1944 (5.0 MPx)
3 MPx	1/3-inch	2048 x 1536 (3.1 MPx)
2 MPx	1/3-inch	1920 x 1080 (2.1 MPx)
1 MPx	1/4-inch	1280 x 720 (0.9 MPx)
SD	1/4-inch	800 x 600 (0.5 MPx)

Imager Type   CMOS
Imager Readout   Progressive scan
Electronic Shutter Range   1 ~ 1/8,000 sec
Electronic Wide Dynamic Range   65 db
White Balance Range   2,500° to 8,000°K
Digital Noise Reduction   Yes (ON/OFF selectable)
Signal to Noise Ratio   50 dB

Minimum Illumination

MPx	Sensitivity	Color		Mono	
		33 ms	200 ms	33 ms	200 ms
5 MPx	f/1.2	0.30 lux	0.02 lux	0.10 lux	0.01 lux
3 MPx	f/1.2	0.30 lux	0.02 lux	0.10 lux	0.01 lux
2 MPx	f/1.2	0.30 lux	0.02 lux	0.10 lux	0.01 lux
1 MPx	f/1.4	0.30 lux	0.02 lux	0.10 lux	0.01 lux
SD	f/1.4	0.30 lux	0.02 lux	0.10 lux	0.01 lux

Mechanical IR Cut Filter   Yes (AUTO/MANUAL selectable), with different set points on lux

LENS

Lens Type   Built-in; varifocal
Focal Length   f/1.2, 3 ~ 9 mm; f/1.4, 2.8 ~ 10 mm
Focus   Autofocus, motorized
Zoom   Remote
Auto Iris Type   DC drive lens

Maximum Field of View*

MPx	Focal Length	Mode (Aspect Ratio)	Angle of View		
			Diagonal	Horizontal	Vertical
5	Wide	4:3	112°	88°	64°
5	Tele	4:3	37°	30°	22°
3	Wide	4:3	111°	87°	64°
3	Tele	4:3	37°	30°	22°
2	Wide	4:3	85°	67°	49°
2	Tele	4:3	29°	23°	17°
2	Wide	16:9	94°	81°	44°
2	Tele	16:9	32°	28°	16°
1	Wide	4:3	74°	58°	41°
1	Tele	4:3	23°	19°	14°
1	Wide	16:9	84°	71°	37°
1	Tele	16:9	26°	22°	13°
SD	Wide	4:3	74°	58°	41°
SD	Tele	4:3	23°	19°	14°

*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 supported languages

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
1.9	1600	1200	4:3
1.2	1280	960	4:3
0.9	1280	720	16:9
0.6	1024	576	16:9
0.5	960	540	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	12 (full), 10, 5, 1
3 MPx	20 (full), 16.67, 15, 12.5, 10, 5, 1
2 MPx	30 (full), 20, 25, 16.67, 15, 12.5, 10, 5, 1
1 MPx	30 (full), 20, 25, 16.67, 15, 12.5, 10, 5, 1
SD	30 (full), 20, 25, 16.67, 15, 12.5, 10, 5, 1

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

Video Encoding	H.264 High or Main profiles; and MJPEG
Bit Rate Control	Constant bit rate (CBR), constrained variable bit rate (CVBR) with configurable maximum value
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

ELECTRICAL

Network Port	RJ-45 connector for 100Base-TX
Power Input	PoE (IEEE 802.3af) Class 3
	24 VAC nominal, 18 to 32 VAC range
Power Consumption	<8 W
Local Storage	Up to 32 GB on Micro SDHC or SDXC card
Alarm	
Input	1
Output	1; PhotoMOS™ relay (30 V, 1 A)
Triggers	Unsupervised mode that detects switch closures (N.O. and N.C.)

ENVIRONMENTAL

Operating Temperature	−45° to 55°C (−50° to 131°F)*
	74°C (165.2°F) absolute maximum ambient temperature per NEMA TS-2.
Storage Temperature	−40° to 60°C (−40° to 140°F)
Operating Humidity	15% to 85%, RH condensing
Storage Humidity	20% to 80% 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).

GENERAL

Construction	Die-cast aluminum; polycarbonate bubble
Ingress Protection	IP66 per IEC 60529
	NEMA Type 4X
Vandal Resistance	IK10 (20J impact) per IEC 62262
Finish	Light gray, RAL 7047; satin texture
Pan/Tilt Adjustment	Manual
Pan	355°
Tilt	75°
Rotate	360°
Weight	0.81 kg (1.79 lb)
Shipping Weight	1.02 kg (2.25 lb)

NETWORK

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

INTEGRATION

Video Management	Digital Sentry 7.3 (or later); Endura 2.0 (or later); Third-party VMS through Pelco API 1.0 and ONVIF Profile S and Profile G
Mobile Application	Integrated to Pelco Mobile App
Analytics	Simple motion detection and camera sabotage detection
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 and Firmware	Cameras discovered and firmware upgrade through the Pelco Device Utility 2 version 2.2 or later; cameras discovered and firmware upgrade through Endura Utilities
Web Browser Support	Microsoft® Internet Explorer® 9.0, Apple® Safari® 7.0.6, Mozilla® Firefox® 31.0, Google® Chrome™ 37.0.2062.124 m and later

SYSTEM MODEL NUMBERS*

Back Box	Resolution	Lens	Model Number
In-Ceiling	5 MPx	3 to 9 mm	IMP519-1EI
	3 MPx	3 to 9 mm	IMP319-1EI
	2 MPx	3 to 9 mm	IMP219-1EI
	1 MPx	2.8 to 10 mm	IMP1110-1EI
	SD	2.8 to 10 mm	IMPS110-1EI
Surface	5 MPx	3 to 9 mm	IMP519-1ES
	3 MPx	3 to 9 mm	IMP319-1ES
	2 MPx	3 to 9 mm	IMP219-1ES
	1 MPx	2.8 to 10 mm	IMP1110-1ES
	SD	2.8 to 10 mm	IMPS110-1ES
Pendant	5 MPx	3 to 9 mm	IMP519-1EP
	3 MPx	3 to 9 mm	IMP319-1EP
	2 MPx	3 to 9 mm	IMP219-1EP
	1 MPx	2.8 to 10 mm	IMP1110-1EP
	SD	2.8 to 10 mm	IMPS110-1EP

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

COMPONENT MODEL NUMBERS

Back Box		Lower Dome		Camera Base	
IMPBB-ES	Environmental surface mount	IMPLD-0E	Environmental smoked dome	IMP519-EBASE	5 MP environmental camera
IMPBB-EP	Environmental pendant mount	IMPLD-1E	Environmental clear dome	IMP319-EBASE	3 MP environmental camera
IMPBB-EI	Environmental in-ceiling mount			IMP219-EBASE	2 MP environmental camera
				IMP1110-EBASE	1 MP environmental camera
				IMPS110-EBASE	SD environmental camera

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
- ICES-003
- KCC
- NEMA Type 4X and IP66 rated enclosure when installed properly
- NEMA TS-2 (Temp.) para 2.2.7.3 - 2.2.7.7
- ONVIF Profile S and Profile G conformant

RECOMMENDED MOUNTS

WMVE-SR — Wall mount, light gray; for use with the environmental pendant mount option

OPTIONAL ACCESSORIES

POE1AT-US — Single-port PoE midspan with US power cord
POE1AT-EU — Single-port PoE midspan with European power cord
IR850M-120 — Semi-covert IR illuminator with 120 m range
WLEDM-90 — White light LED illuminator with 90 m range
IPCT01 — Pelco IP camera tester[†]

[†] Contact Pelco Product Support for more information about the use of the Pelco IP camera tester with cameras.