Sarix® IWP Series Vandal Resistant Wedge

UP TO 5 MEGAPIXEL, H.264, H.265, IR ENVIRONMENTAL IP DOMES

Product Features

- H.265, H.264 Main, High, MJPEG video encoding
- Up to 5 megapixel (MP) resolution
- Up to 60 images per second (ips) at 4 MP for 5MP cameras
- Micro SDHC & SDXC 2TB addressable, 128G or more testable
- IR illumination up to 25 m
- Operating temperature from –20° to 55°C (–4° to 131°F)
- Pelco Pro Analytics Suite including Adaptive Motion, Object Counting, Motion Detection, Camera Sabotage
- IEEE802.3af Power over Ethernet (PoE)
- Pelco Smart Compression Technology
- Vandal resistant to IK10
- IP66/67 ingress protection
- 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 are also options such as a vandal resistant wedge and a box camera. Mix and match the performance options and form factor you need for almost any lighting condition, environment, and application.

IWP Series Wedge Camera

Within the **Sarix Professional** range, the **Sarix IWP Series** IR vandal resistant wedge cameras feature multiple options on the fixed lens for surveillance needs in tight spaces. Additionally, the **Sarix IWP Series** features advanced color science and true WDR for visibility in difficult lighting conditions. IK10, IP66/67, and Type 4X compliance ensure enough robustness for 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 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™, VX Toolbox 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.
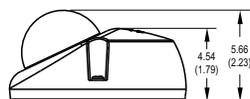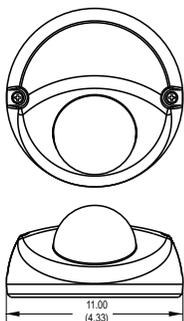
Standard Web Interface

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.

PELCO™

COMPONENT FEATURES

VALUES IN PARENTHESES ARE INCHES; ALL OTHERS ARE CENTIMETERS.

Surface Mount

- RAL 9003
- IP66/67 Ingress Protection
- Type 4X
- IK10 (20 Joules) Impact Resistance
- Aluminum Body; Polycarbonate Bubble

CAMERA

Imaging Device

MP	Sensor	Maximum Resolution
1 MP	1/2.8-inch	1280 x 960 (1 MP)
2 MP	1/2.8-inch	1920 x 1080 (2 MP)
3 MP	1/2.8-inch	2048 x 1536 (3 MP)
5 MP	1/2.8-inch	2592 x 1944 (5 MP)

Imager Type — CMOS
Imager Readout — Progressive scan
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, and Manual
Noise Reduction — Yes (ON/OFF selectable)

Minimum Illumination

Resolution	Lens	Sensitivity	Color		Mono		Mono (IR on)
			33 ms	200 ms	33 ms	200 ms	
1 MP	2.8 mm	f/2.0	0.15 lux	0.038 lux	0.01 lux	0.002 lux	0.0 lux
2 MP	2.4 mm	f/2.1	0.15 lux	0.038 lux	0.01 lux	0.002 lux	0.0 lux
2 MP	2.8 mm	f/2.0	0.15 lux	0.038 lux	0.01 lux	0.002 lux	0.0 lux
2 MP	4 mm	f/1.8	0.15 lux	0.038 lux	0.01 lux	0.002 lux	0.0 lux
2 MP	6 mm	f/2.0	0.15 lux	0.038 lux	0.01 lux	0.002 lux	0.0 lux
3 MP	2.8 mm	f/2.0	0.25 lux	0.036 lux	0.01 lux	0.002 lux	0.0 lux
5 MP	2.4 mm	f/2.1	0.30 lux	0.03 lux	0.01 lux	0.002 lux	0.0 lux
5 MP	2.8 mm	f/2.0	0.30 lux	0.03 lux	0.01 lux	0.002 lux	0.0 lux

Day/Night Capabilities — Mechanical IR Cut Filter (ON/OFF/AUTO), with different set points on lux
Signal to Noise Ratio — ≥50 dB
IR Illumination — 850 nm Adaptive IR, up to 25 m; auto ON in night mode, or OFF

LENS

Lens Type	Built-in; fixed, factory focused
Focal Length	f/1.8, 4 mm; f/2.0, 6mm; f/2.0, 2.8 mm; f/2.1, 2.4 mm

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

Angle of View	IWP133-1ERS 1 MP 2.8 mm	IWP233-1ERS 2 MP 2.8 mm	IWP333-1ERS 3 MP 2.8 mm	IWP533-1ERS 5 MP 2.8 mm	IWP234-1ERS 2 MP 4 mm	IWP236-1ERS 2 MP 6 mm	IWP232-1ERS 2 MP 2.4 mm	IWP532-1ERS 5 MP 2.4 mm
Diagonal	132°	134°	124.6°	129.6°	104°	62.8°	156°	162°
Horizontal	112°	113°	99°	104.4°	87.6°	54.4°	135°	130°
Vertical	60°	61°	74.2°	75°	46.2°	30.1°	75°	93°

VIDEO

Video Streams	Up to 3 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 Main/High, 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, 270 degrees
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 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
Input	Line Level, 3K ohm differential w/ 1Vp-p max signal
Output	Line Level, 600 ohm differential w/ 1Vp-p
Encoding	G.711 A-law/G.711 U-law

ELECTRICAL

		Power Consumption (Watts or VA)	
Model	**Power Input**	**Typical**	**Maximum**

Network Port   RJ-45 connector for 10/100Base-TX
Power Input   IEEE 802.3af PoE

Model	Power Input	Typical	Maximum
IWP13x IWP23x	PoE	3.2 W	9.6 W
IWP33x	PoE	3.9 VA	9.6 W
IWP53x	PoE	6.2 W	9.6 W

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

ENVIRONMENTAL

Operating Temperature   −20° to 55°C (−4° to 131°F)
Storage Temperature   −40° to 70°C (−40° to 158°F)
Operating Humidity   5% to 95%, RH noncondensing
Storage Humidity   20 to 80%, RH noncondensing
Ingress Protection   IP66/67
     Type 4X
Vandal Resistance   IK10 (20 Joules)
Shock and Vibration
Resistance   IEC 60068:2-6 and 2-27

GENERAL

Construction   Aluminum, polycarbonate bubble
Finish   RAL 9003
Pan/Tilt Adjustment   Manual
    Pan   ±90°
    Tilt   0°~ −80°
    Rotate   0°~ 355°
Unit Weight   0.38 kg (0.84 lb)
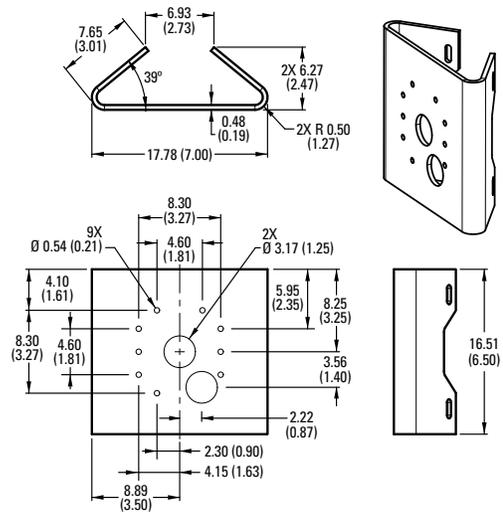Shipping Weight   0.63 kg (1.40 lb)

NETWORK

Supported Protocols   TTCP/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 802.1X, Digest Authentication, IP Filtering
Software Interface   Web browser view and setup

INTEGRATION

Video Management   VideoXpert; VXToolbox;
     Endura version 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

IBP3-PLMT ENVIRONMENTAL POLE MOUNT

SYSTEM MODEL NUMBERS*

Resolution	Lens	Model Number	Description
1 MP	2.8 mm	IWP133-1ERS	Sarix Pro IR Vandal Resistant Wedge Dome
2 MP	2.8 mm	IWP233-1ERS	Sarix Pro IR Vandal Resistant Wedge Dome
2 MP	2.4 mm	IWP232-1ERS	Sarix Pro IR Vandal Resistant Wedge Dome
2 MP	4 mm	IWP234-1ERS	Sarix Pro IR Vandal Resistant Wedge Dome
2 MP	6 mm	IWP236-1ERS	Sarix Pro IR Vandal Resistant Wedge Dome
3 MP	2.8 mm	IWP333-1ERS	Sarix Pro IR Vandal Resistant Wedge Dome
5 MP	2.8 mm	IWP533-1ERS	Sarix Pro IR Vandal Resistant Wedge Dome
5 MP	2.4 mm	IWP532-1ERS	Sarix Pro IR Vandal Resistant Wedge Dom

*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
- ICES-003 (Class A)
- RCM
- KCC
- NOM
- EAC
- BIS
- ONVIF Profile S, Profile G, Profile Q, and Profile T conformant
- Type 4x when installed properly
- IP66/67 when installed properly

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

RECOMMENDED MOUNTS

IMP3PMB-1I   Indoor dome wall bracket for indoor models
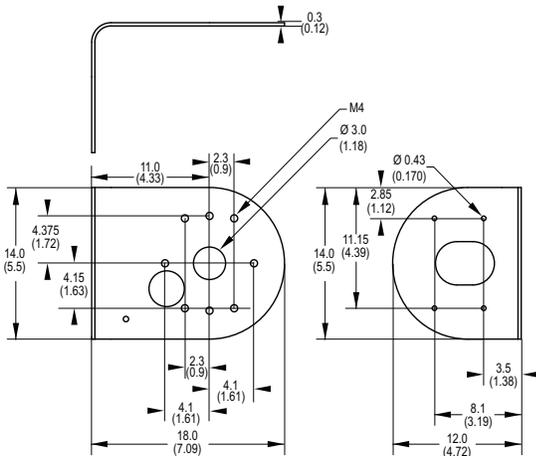IBP3-PLMT   Pole mount

OPTIONAL ACCESSORIES

IMP3EBAP   4S electrical box adapter
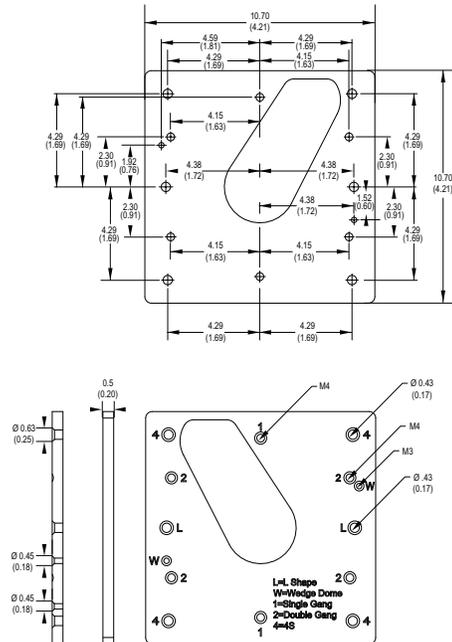IWPWPC   RJ45 waterproof connector kit

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IMP3EBAP BOX ADAPTER

Color: RAL 9003

IMP3PMB-1I WALL MOUNT BRACKET

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.