

# Pelco Fisheye Camera

8 MP

12 MP

5-YEAR WARRANTY

The Pelco Fisheye camera features built-in AI-powered Pelco Smart Analytics, powered by Motorola Solutions. This helps to detect critical events and helps to increase security teams' productivity by expediting real-time responses and forensic investigations. This panoramic camera is a cost-effective and easy-to-install solution that provides 360-degree views of large areas from a single vantage point, bringing superior situational awareness, free from any blind spots. With a sleek, low-profile design the fisheye camera provides a discreet video security solution. Facilities such as schools, retailers, commercial buildings, casinos, hotels and airports or train platforms can leverage the camera's high-



## Features



### Built-In Analytics

Brings higher accuracy, detection and classification of people through Pelco Smart Analytics, powered by Motorola Solutions.



### 360 Degree Panoramic Views

Provides 360-degree coverage from a single vantage point to help lower overall video security deployment costs.



### Wide Dynamic Range

Captures details in scenes with both very bright and very dark areas to maximize image quality.



### Adaptive IR Technology<sup>1</sup>

Provides optimal brightness in scenes with low-light for high-resolution image detail.



### Pelco Smart Compression Technology<sup>1</sup>

Reduces bandwidth and storage needs with Pelco Smart Compression technology without compromising image quality.



### Sleek, Low-Profile & Easy To Install

Offers a discreet video security solution with a paintable front plate<sup>2</sup> that can blend in with interior aesthetics, backed by a quick and simple installation.



### Vandal & Water Resistant

Rated IK10 for vandal resistance and IP66/67 Type 4X for water resistance<sup>1</sup>, enabling indoor and outdoor use<sup>1</sup>.



### Audio Recording

Offers optional audio recording capability for additional evidentiary detail with a built-in microphone.



### ONVIF<sup>®</sup> Compliant

Enables connectivity to Pelco VideoXpert<sup>®</sup> and other leading Video Management Systems and is ONVIF Profile S, G, T and M compliant.

ONVIF is a trademark of Onvif, Inc.

<sup>1</sup> Available on surface mount only.

<sup>2</sup> Available on in-ceiling mount only.

# Specifications

Image Performance		8.0 MP	12.0 MP
Image Sensor		1/1.8" progressive scan CMOS	1/2.3" progressive scan CMOS
Maximum Resolution (H x V) and Aspect Ratio: Client-side dewarped streams	Primary Stream	2048 x 2048	3008 x 3008
	Secondary Stream	512 x 512; 384 x 384	720 x 720; 512 x 512; 384 x 384
	Tertiary Stream	320 x 320	320 x 320
Maximum Resolution (H x V) and Aspect Ratio: In-camera dewarped streams	Primary Stream	180° x 2 (2304 x 928); 120° x 3 (1536 x 928); 90° x 4 (1152 x 928)	180° x 2 (3072 x 1232); 120° x 3 (2048 x 1232); 90° x 4 (1536 x 1232)
	Secondary Stream	180° x 2 (576 x 232); 120° x 3 (384 x 232); 90° x 4 (288 x 232)	180° x 2 (768 x 304); 120° x 3 (512 x 304); 90° x 4 (384 x 304)
Imaging Area (H x V)		4.096 mm x 4.096 mm	4.662 mm x 4.662 mm
Dynamic Range	WDR Off	Up to 83 dB	
	WDR On	Up to 120 dB	
Max Frame Rate		(50 Hz/60 Hz): 25 fps/30 fps	
Camera Operating Mode		Full feature or Dewarped video mode (Analytics disabled in Dewarped video mode)	Full feature, High framerate, or Dewarped video mode (Analytics disabled in High framerate and Dewarped video modes)
High Framerate	WDR Off	N/A	60 Hz: 30 fps 50 Hz: 25 fps
	WDR On		60 Hz: 24 fps 50 Hz: 25 fps
Full Feature	WDR Off	60 Hz: 30 fps 50 Hz: 25 fps	60 Hz: 15 fps 50 Hz: 14.28 fps
	WDR On	60 Hz: 20 fps 50 Hz: 20 fps	60 Hz: 15 fps 50 Hz: 14.28 fps
3D Noise Reduction Filter		Yes	

Lens and IR Illumination		8.0 MP	12.0 MP
Lens		1.4 mm	1.6 mm
IR Illumination Max Distance (high power 850 nm LEDs)		17 m (55 ft) max distance at 0 lux	12 m (39 ft) max distance at 0 lux
Horizontal Angle of View (HFOV)		180°	
Field of View		360°	
Minimum Illumination	With IR	0 lux	0 lux
	Without IR	0.10 lux in monochrome mode; 0.20 lux in color mode	0.19 lux in monochrome mode; 0.38 lux in color mode
Max Aperture		F2.0	
Iris Control		Fixed iris	

Image Control	
Image Compression Method	H.264, H.265, Motion JPEG, Pelco Smart Compression
Streaming	Multi-stream H.264, Multi-stream H.265, Motion JPEG
Electronic Shutter Control	Automatic, Manual (1/6 to 1/8000 sec)
Day/Night Control	Automatic, Manual
Flicker Control	60 Hz, 50 Hz

Image Control	
Iris Control	Fixed
White Balance	Automatic, Manual
Backlight Compensation	Adjustable
Privacy Zones	Up to 64 zones

Analytics	
Motion Detection	Pixel motion and classified object detection
Camera Sabotage	Yes, video analytics based

Network	
Network	100BASE-TX, RJ45 Connector, CAT5e Cabling
Open API	ONVIF compliance Profile S, Profile T, Profile G, and Profile M ( <a href="http://www.onvif.org">www.onvif.org</a> )
Security	Password protection, HTTPS encryption, digest authentication, WS authentication, user access log, 802.1x port based authentication, FIPS 140-2 L1 (with optional camera license), FIPS 140-2 L3 (with optional accessory), Signed and encrypted firmware
Protocols	IPv6, IPv4, HTTP, HTTPS, SOAP, DNS, NTP, RTSP, RTCP, RTP, TCP, UDP, IGMPv3, ICMP, DHCP, Zeroconf, QoS, DSCP
Streaming Protocols	RTP/UDP, RTP/UDP multicast, RTP/RTSP/TCP, RTP/RTSP/HTTP/TCP, RTP/RTSP/HTTPS/TCP, HTTP, SRTP
Device Management Protocols	SNMP v2c, SNMP v3

Peripherals	
Onboard Storage	2 x microSD/microSDHC/microSDXC slots - video speed class card required. Class V10 or better recommended. One of the two SD card slots is available for onboard storage.

Auxiliary I/O	
Audio Compression Method	Opus, G.711 PCM 8 kHz
Audio Input/Output	Line level I/O and built-in microphone (can be enabled)
External I/O Terminals	Alarm In: Digital input for connecting an external input sensor (for example, a motion detector); Alarm Out: Digital output for controlling an external output device (for example, a siren)

Mechanical		Surface Mount	In-Ceiling Mount
Dimensions (LxWxH)	Camera	153 mm x 153 mm x 61 mm; 6" x 6" x 2.4"	200.6 mm x 200.6 mm x 14.2 mm; 7.9" x 7.9" x 0.56"
	With Wall Mount	153 mm x 153 mm x 61 mm; 6" x 6" x 2.4"	N/A
	With Pendant Mount	168 mm x 168 mm x 113 mm; 6.6" x 6.6" x 4.5"	N/A
Weight	Camera	0.678 kg (1.49 lbs)	0.595 kg (1.31 lbs)
	With Wall Mount	0.753 kg (1.66 lbs)	N/A
	With Pendant Mount	1.004 kg (2.21 lbs)	N/A
Max. Ceiling Thickness		N/A	31.75 mm; 1.25"
Dome Bubble		Polycarbonate, clear	N/A
Body		Aluminum	Polycarbonate
Housing		Aluminum	Polycarbonate
Finish		Cast, powder coated, Pantone 427C	Plastic, injection molded, Pantone 427C

Electrical		Surface Mount	In-Ceiling Mount
Power Consumption		With IR: 26 W Without IR: 11 W	11 W

Electrical	Surface Mount	In-Ceiling Mount
Power Source	VDC: 12 V +/-10%, 26 W min PoE (with IR at reduced IR power, and without IR): IEEE 802.3af Class 3 PoE+(with IR at full IR power): IEEE 802.3at Class 4	VDC: 12 V +/-10%, 11 W min PoE: IEEE 802.3af Class 3
Power Connector	2-pin terminal block	
RTC Battery Backup	3V manganese lithium	
Memory	2 GB RAM, 512 MB Flash	

Environmental	Surface Mount	In-Ceiling Mount
Operating Temperature	-40 °C to +60 °C (-40 °F to 140 °F)	-10 °C to +60 °C (14 °F to 140 °F)
IR Illuminator Behavior	IR illuminator will turn off if the temperature is 55 °C (131 °F) or higher. The illuminator will operate at 75% power if the temperature is between 27 °C (80 °F) and 39 °C (102 °F) and will operate at 40% power if the temperature is between 39 °C (102 °F) and 55 °C (131 °F). Hysteresis: 2 °C (3.6 °F).	N/A
Storage Temperature	-10 °C to +70 °C (14 °F to 158 °F)	
Humidity	0 - 95% non-condensing	

Certifications	Surface Mount	In-Ceiling Mount
Certifications/Directives	UL, cUL, CE, ROHS, RCM, EAC, UKCA, KC, BIS, NOM	
Safety	UL 62368-1, CSA 62368-1, IEC/EN 62368-1, IEC 62471	
Environmental	IK10 Impact Rating, IP66 and IP67 Weather Rating, and Type 4X Rating	IP5X Ingress Rating
Electromagnetic Emissions	FCC Part 15 Subpart B Class B, IC ICES-003 Class B, EN 50121-4, EN 50130-4, EN 55032 Class B, EN 61000-6-3, EN 61000-3-2, EN 61000-3-3	
Electromagnetic Immunity	EN 50121-4, EN 50130-4, EN 55035, EN 61000-6-1	

## Analytics Specifications

Supported Analytics Events <sup>1</sup>	
Objects in Area	The event is triggered when the selected object type moves into the region of interest. This event can be used to count objects.
Object Loitering	The event is triggered when the selected object type moves into the region of interest and then stays for an extended amount of time.
Objects Crossing Beam	The event is triggered when the specified number of objects have crossed the directional beam that is configured over the camera's field of view. The beam can be unidirectional or bidirectional.
Object Appears or Enters Area	The event is triggered by each object that enters the region of interest.
Object Not Present in Area	The event is triggered when no objects are present in the region of interest.
Objects Enter Area	The event is triggered when the specified number of objects have entered the region of interest.
Objects Leave Area	The event is triggered when the specified number of objects have left the region of interest.
Object Stops in Area	The event is triggered when an object moves into a region of interest and then stops moving for the specified threshold time.
Direction Violated	The event is triggered when an object moves in the prohibited direction of travel.

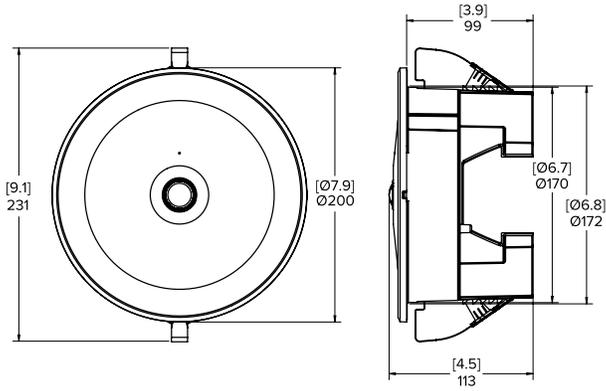
<sup>1</sup>Fisheye camera only supports people detection. Fisheye camera has a blindspot in the center 20% of the fisheye. Objects will be detected moving in and out of the blindspot but will not be detected within it.

Pelco Elevate Supported Features	
Image Health	Detects incremental changes in the cameras view, such as position shifts or obstructions. Notifies users through ONVIF conformant events and summarized email reports.
Firmware Management	Schedule and deploy automatic firmware updates to multiple cameras, or update individual cameras on-demand.

# Outline Dimensions

## In-Ceiling Mount Camera

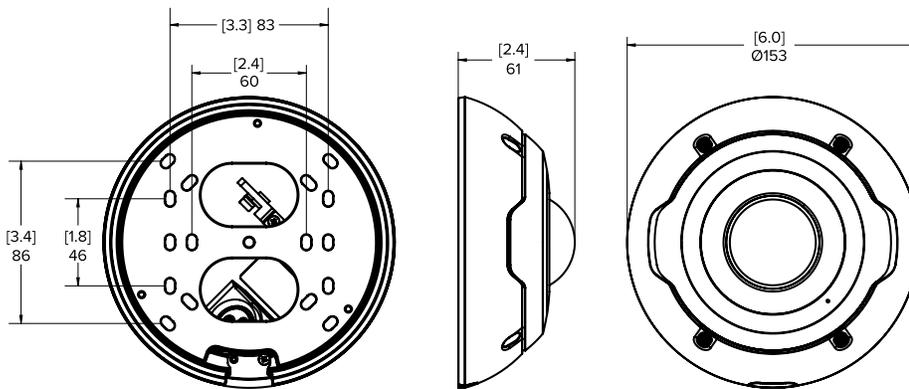
[X.X]	INCHES
X	MM



## Surface Mount Camera

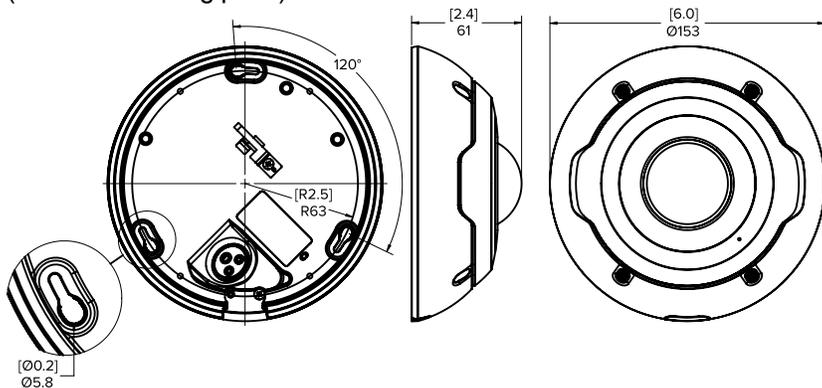
(with mounting plate)

[X.X]	INCHES
X	MM

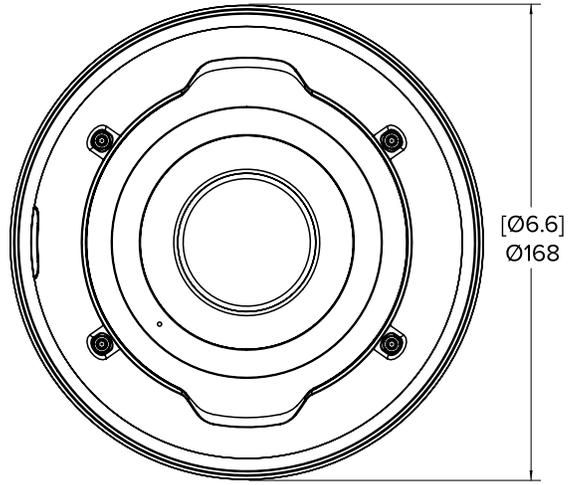
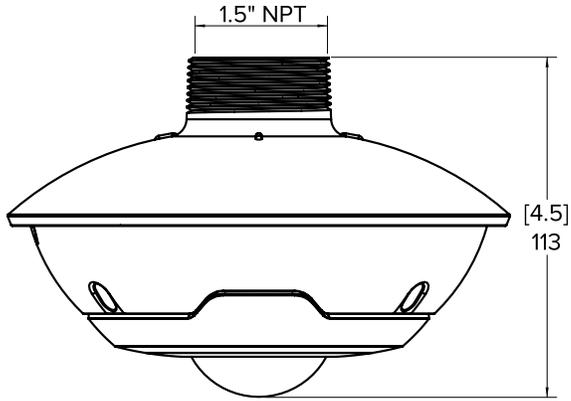


(without mounting plate)

[X.X]	INCHES
X	MM



# Pendant Mount Camera



[X.X]	INCHES
X	MM

# Ordering Information

## Surface Mount Camera

	MP	WDR	Analytics <sup>1</sup>	Lens	IR	IP66/IP67, Type4x	Smart Compression	SureVision Technology
IMF82-1ES	8.0	✓	✓	Fisheye 1.4 mm		✓	✓	✓
IMF82-1ERS	8.0	✓	✓	Fisheye 1.4 mm	✓	✓	✓	✓
IMF122-1ES	12.0	✓	✓	Fisheye 1.6 mm		✓	✓	✓
IMF122-1ERS	12.0	✓	✓	Fisheye 1.6 mm	✓	✓	✓	✓

<sup>1</sup>Analytics are supported when the camera is installed in the ceiling-mounted orientation mode.

## In-Ceiling Mount Camera

	MP	WDR	Analytics <sup>2</sup>	Lens	IR	IP66/IP67, Type4x	Smart Compression	SureVision Technology
IMF82-1I	8.0	✓	✓	Fisheye 1.4 mm			✓	✓
IMF122-1I	12.0	✓	✓	Fisheye 1.6 mm			✓	✓

<sup>2</sup>Analytics are supported when the camera is installed in the ceiling-mounted orientation mode.

## System Models

Model Number	Description
IMF82-1I	8 MP Fisheye in-ceiling mount indoor IP camera
IMF82-1ES	8 MP Fisheye environmental surface mount IP camera
IMF82-1ERS	8 MP Fisheye environmental built-in IR illumination surface mount IP camera
IMF122-1I	12 MP Fisheye in-ceiling mount indoor IP camera
IMF122-1ES	12 MP Fisheye environmental surface mount IP camera
IMF122-1ERS	12 MP Fisheye environmental built-in IR illumination surface mount IP camera

## Accessories

Part Number	Description
IMF-PM	Pendant mount adapter for environmental IMF Series cameras
IMF-LD1	Replacement lower dome bubbles clear 3-pack for environmental IMF Fisheye cameras up to 12 MP resolution
IMF-PNL	Ceiling panel for IMF Series In-ceiling camera
WLMT-1021	Wall mount arm for 1.5" NPT Pendant
CRNMT-1001	Corner mount for WLMT-1021
PLMT-1001	Pole mount adapter for WLMT-1021
PP350-AW	Parapet wall mount, Pantone 427C
PP351-AW	Parapet rooftop mount, Pantone 427C
POE130-XT	Single-port PoE Gigabit extender powered by POE190-BT injector
POE130-AT (US or EU)	Single-port PoE+ midspan with power cord
PEO430-AT (US or EU)	4-port, 30 W per port PoE midspan with power cord
PEO1236-AT (US or EU)	12-port, 36 W PoE midspan
PEO2436-AT (US or EU)	24-port, 36 W PoE midspan

# Support

Learn more and find additional documentation at [pelco.com](https://pelco.com) or email [support@pelco.com](mailto:support@pelco.com) for specific product support.



Jul 2024 | C5055S-A | Rev 3

© 2021 - 2024, Motorola Solutions, Inc. All rights reserved. MOTOROLA, MOTO, MOTOROLA SOLUTIONS, and the Stylized M Logo are trademarks or registered trademarks of Motorola Trademark Holdings, LLC and are used under license. Pelco, the Pelco logo, and other trademarks associated with Pelco products referred to in this publication are trademarks of Pelco, Inc. or its affiliates. All other product names and services are the property of their respective companies. Product specifications and availability are subject to change without notice.