GFC IBP Series Environmental Bullets
UP TO 8 MPX (4K), H.265, H.264, D/N IP BULLETS WITH INTEGRATED LENS

Product Features

- H.265/H.264/MJPEG Video Encoding
- Up to 8 MPx (4K) resolution
- Up to 30 images per second (ips) at 8 MPx
- P-Iris autofocus motorized remote zoom lens
- Integrated adaptive IR illumination
- Operating temperature up to 65°C (149°F)
- Up to 256 GB edge storage with Micro SD card
- Motion detection and camera sabotage detection
- Power over Ethernet (PoE+) Class 4, 24 VAC (18 to 32 VAC), 12 VDC
- Pelco Smart Compression Technology
- Vandal resistant to IK10, IP66 ingress protection
- Compatible with Pelco and third-party video systems
- ONVIF Profile S, Profile G, and Profile Q conformant
- Full 3-year warranty

Pelco GFC 4K Series

Powerful, versatile, and affordable, the **Pelco GFC Professional 4K Series** cameras pack the most popular features and functionality of Pelco cameras into a range of vandal and environmental options, including 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 **Pelco GFC Professional 4K Series**, the **GFC IBP Series** environmental bullet camera features a P-Iris remote zoom lens for wide angle or long range surveillance needs. Autofocus capability ensures the camera can be automatically refocused when needed. Additionally, the **GFC IBP Series** features advanced color science, a mechanical IR cut filter, and advanced integrated adaptive IR illumination for increased sensitivity in low-light installations.

Video

Pelco GFC Professional 4K Series cameras support up to three simultaneous video streams. The streams can be compressed with efficient H.265 Main profile, H.264 High or Main profiles or MJPEG. The streams can be configured to a variety of frame rates and variable bit rates to optimize image quality with bandwidth and storage efficiency.

Edge Storage

GFC Professional IBP Series bullet 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. **Pelco GFC Professional 4K Series** 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 with the entire scene. A camera sabotage alarm is triggered if the lens is obstructed or when the camera is repositioned.

Open and Integrated

Pelco GFC Professional 4K Series cameras seamlessly connect to Pelco video management systems such as VideoXpert™ as well as for most capabilities on Endura® version 2.0 (or later), and Digital Sentry® version 7.3 (or later). **Pelco GFC Professional 4K Series** cameras integrate with major third-party systems through the open Pelco API or the ONVIF Profile S, Profile G, and Profile Q 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.

CAMERA

Imaging Device

MPx	Sensor	Maximum Resolution
8 MPx	1/2.5-inch	3840 x 2160 (8.0 MPx)

Imager Type	CMOS
Imager Readout	Progressive scan
Electronic Shutter Range	1/5 ~ 1/30,000 sec (4K)
Effective Dynamic Range	Up to 120 dB with local contrast enhancement (Defog);
	100 dB per IEC62676-5
White Balance Range	2,000° to 10,000°K
3D Digital Noise Reduction	Yes (ON/OFF selectable)

Signal to Noise Ratio ≥50 dB

Minimum Illumination

MPx	Sensitivity	Color		Mono Without IR Illumination	
		33 ms	200 ms	33 ms	200 ms
8 MPx	f/1.6	0.20	0.0125	0.10 lux	0.0125 lux

Mechanical IR Cut Filter	Yes (AUTO/MANUAL selectable), with different set points on lux
IR Illumination	Adaptive IR up to 30 m; auto ON in night mode, or OFF; IR range may drop when ambient temperature goes higher than 50°C (122°F)

LENS

Lens type	Built-in; varifocal
Focal Length	f/1.6, 3.5 ~ 10 mm
Focus	Autofocus, motorized
Zoom	Remote
Auto Iris Type	P-Iris

Field of View*

Lens	Angle of View	Wide	Tele
	Diagonal	129°	43.0°
3.5 to 10 mm	Horizontal	107°	37.5°
	Vertical	55.4°	21.0°

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

VIDEO

Video Streams	Up to three simultaneous streams
Text Overlay	Camera name, time, date, and customizable text with multiple languages supported

Maximum Resolutions

Stream	Width	Height	Aspect Ratio
Stream 1	3840	2160	16:9
Stream 1	2880	2160	4:3
Stream 2	1920	1080	16:9
Stream 2	2048	1536	4:3
Stream 3	1024	576	16:9
Stream 3	960	720	4:3

Output

Stream	MPx*
Stream 1	8, 6, 5, 3.7, 3, 2, 1, 0.5, 0.3, 0.25
Stream 2	3, 2, 1, 0.5, 0.3, 0.25
Stream 3	0.7, 0.6, 0.3, 0.25

*Depends on the selected aspect ratio.

Frame Rate Range	1 to 30 ips
Video Encoding	H.265/H.264/MJPEG
Bit Rate Control	Constant bit rate (CBR), constrained variable bit rate (CVBR) with configurable maximum value
Corridor Mode	Electronic image flip and mirror: 180°, 90° and 270° (H.264 only)
Window Blanking	16 configurable windows

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 make intelligent decisions regarding 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 motion occurring, such as a store room that has limited entry and exit, up to 70% bandwidth savings can be achieved.

AUDIO

Streaming	Bi-directional
Input/Output	Differential Line In/Out with terminal block
Encoding	G.711 A-law/G.711 U-law

TECHNICAL SPECIFICATIONS

GENERAL

Construction	Die cast aluminum, cylindrical
Ingress Protection	IP66
	Type 4X
Vandal Resistance	IK10 (20J impact) per IEC 62262
Finish	RAL 7047
Unit Weight	1.45 kg (3.2 lb)
Shipping Weight	1.83 kg (4.03 lb)

ELECTRICAL

Network Port	RJ-45 connector for 100Base-TX
Power Input	PoE+ (Class 4), 24 VAC (18 to 32 VAC), 12 VDC (±10%)
Power Consumption	
Nominal	5W (8.3VA)
System with IR on	6.6W (10.8VA)
System with IR and heaters on	19W (22.3VA)
Maximum power consumption	23W (26.6VA)
Local Storage	Up to 256GB on Micro SDHC or SDXC card
Alarm	
Input	1, Unsupervised or supervised alarm input
Output	1, Relay (30 VDC, 1 A)

ENVIRONMENTAL

Operating Temperature	–40° to 60°C (–40° to 140°F), 65°C (149°F) @ 4 hours/day
	74°C (165.2° F) absolute maximum ambient temperature per NEMA TS-2
Storage Temperature	–20° to 60°C (–4° to 140°F)
Operating Humidity	5% to 90%, RH condensing
Storage Humidity	5% to 90%, RH noncondensing
Cold Start	–40°C (–40°F)

NETWORK

Supported Protocols	TCP/IP, UDP/IP (Unicast, Multicast IGMP), ICMP, IPv4, IPv6, SNMP v2c/v3, HTTP, HTTPS, SSL, SSH, SMTP, FTP, RTSP, UPnP, DNS, NTP, RTP, RTCP, LDAP (client), QoS, GB28181, IEEE802.1x
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	VideoXpert;
	Endura 2.0 (or later)*;
	Digital Sentry 7.3 (or later)*;
	Third-party VMS through Pelco API 1.0 and ONVIF Profile S, Profile G, and Profile Q

*Some capabilities have limited support.

Mobile Application	Pelco Mobile
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	Discover cameras and upgrade firmware using VX Toolbox, the Pelco Device Utility 2 version 2.2 or later; cameras discovered and firmware upgrade through Pelco 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
Multilingual User Interface	English, French, German, Italian, Portuguese, Arabic, Russian, Spanish, Turkish, Korean, Simplified Chinese

CERTIFICATIONS*

- CE (Class A)
- EAC
- BIS
- RoHS
- FCC (Class A)
- UL and cUL Listed
- ICES-003 (Class A)
- RCM
- KC
- Type 4X and IP66 rated enclosure (environmental models) when installed properly
- ONVIF Profile S, Profile G, and Profile Q conformant
- NEMA TS-2 (Temp.) para 2.2.7.3-2.2.7.7 (Environmental models only)
- IEC 62676-5
- IEC 60068-2-2
- IEC 60068-2-78
- IEC 60068-2-30
- IEC 60068-2-1
- IEC 60068-2-6
- IEC 60068-2-27

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

TECHNICAL SPECIFICATIONS

MODELS

MPx	Lens	Model Number	Description
8 MPx	3.5 to 10 mm	IBP831-1ER	GFC IBP Series 4K Environmental Bullet IR

VALUES IN PARENTHESES ARE INCHES; ALL OTHERS ARE CENTIMETERS

GFC IBP SERIES ENVIRONMENTAL BULLET

11.00 (4.33)

8.65 (3.41)

7.00 (2.76)

20.02 (7.88)

27.55 (10.85)
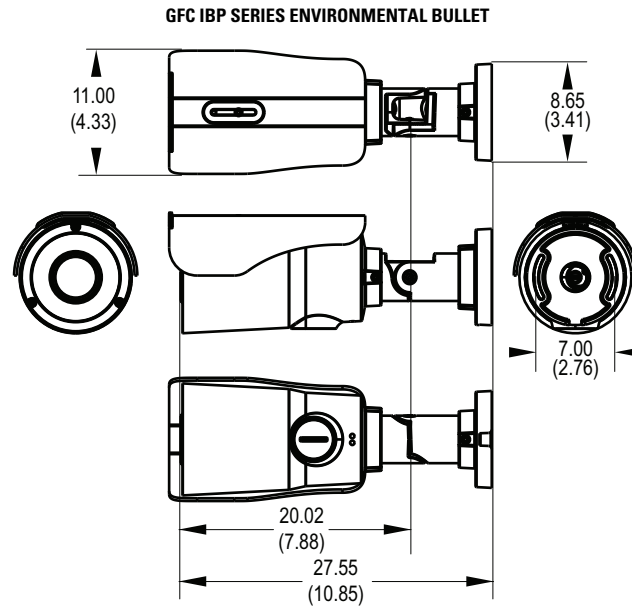
RECOMMENDED MOUNTS

IBEPLMT-E	Environmental pole mount
IBEWLMT-E	Environmental wall mount

OPTIONAL ACCESSORIES

MCS Series	Indoor, 24 VAC power supply
WCS Series	Outdoor, 24 VAC power supply
POE1AT-US	Single-port PoE+ midspan with US power cord
POE1AT-EU	Single-port PoE+ midspan with EU power cord
POE8ATN-US	8-port PoE+ midspan with US power cord
PEO8ATN-EU	8-port PoE+ midspan with EU power cord
POE16ATN-US	16-port PoE+ midspan with US power cord
POE16ATN-EU	16-port PoE+ midspan with EU power cord

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IBE-WLMT-E ENVIRONMENTAL WALL MOUNT

Ø 15.00 (5.90)
7.35 (2.89)
6.50 (2.56)
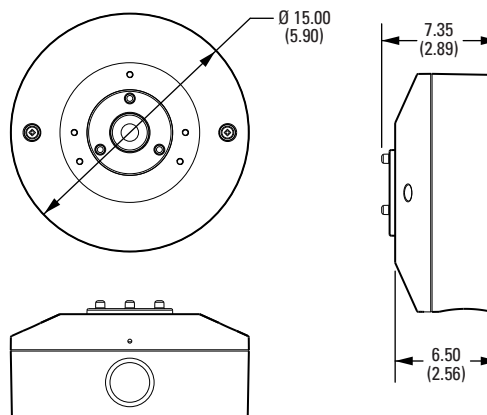
Color: RAL 7047

IBE-PLMT-E ENVIRONMENTAL POLE MOUNT

Ø 15.00 (5.90)
8.95 (3.52)
6.50 (2.56)
8.10 (3.19)
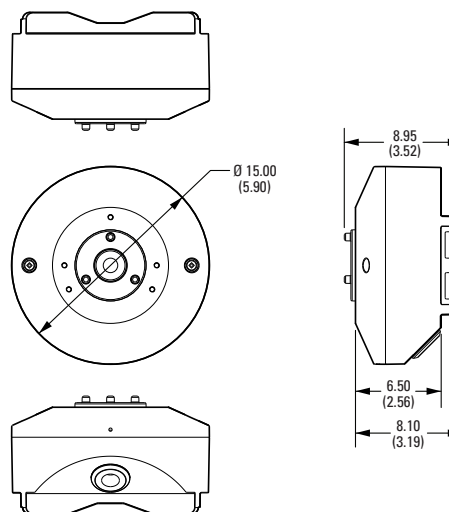
Color: RAL 7047

⚠ **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.