CHEETAH
RUGGEDIZED CAMERA SERIES

Front View | Rear View

P67-C4010
CMOS 9 MP
GigE Vision® with Power over Ethernet (PoE)

Imperx: *C4010*

The P67-C4010 provides the same robust camera design as the POE-C4010 with an IP67 enclosure. This camera features the Sony Pregius IMX267 Global Shutter CMOS sensor with a native resolution of 4112 x 2176 in a 1" optical format delivering up to 36 frames per second with GigE Vision®, Power over Ethernet (PoE)® output. Imperx puts you in control by providing the user the ability to set the camera up very easily. The Cheetah is designed to provide the optimal image quality for simple imaging applications to the most demanding of applications. Using the simple Gen<i>Cam™ compliant user interface, you can easily apply image corrections to enhance recognition or quality. By combining the powerful Imperx camera control with an IP67 rated housing to protect the camera from dust, water and other contaminants the camera can be utilized in harsh environments.
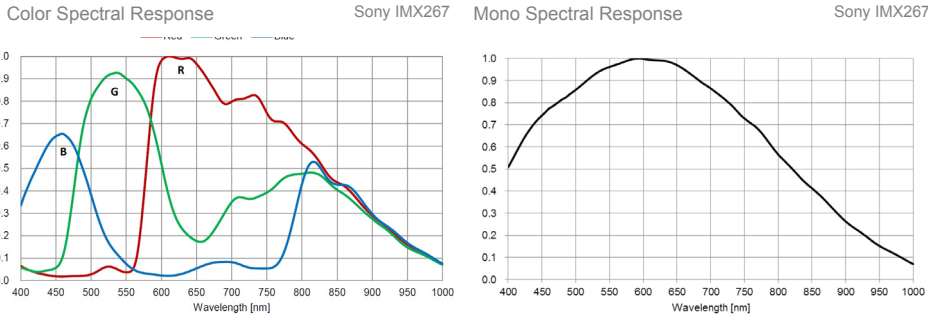
Specifications

Feature	Description	Feature	Description
Output Interface	GigE Vision® with Power over Ethernet (PoE)	Data Corrections	2 LUTs pre-programmed with Gamma 0.45, 2 LUTs pre-programmed with Negative LUT Bad pixel correction (static), Flat field correction
Resolution	4112 (H) x 2176 (V)		
Sensor	Sony Pregius IMX267 CMOS Color/Mono	Lens Mount	C-Mount
Sensor Format	14.2 mm (H) x 7.5 mm (V), 1" optical format, 16.1 mm diagonal	Supply Voltage Range	12 V DC (6 V – 30 V), 1.5 A inrush @ 12 V PoE (IEEE 802.3af / IEEE 802.3at)
Pixel Size	3.45 microns square	Power Consumption	Typical: 3.36 W @ 12 V; PoE: 4.91 W
Shutter	Global shutter (GS)	Camera Current	Typical: 280 mA @ 12 V
Sensor Digitization	12-bit	Size - Width/Height/Length	48.5 mm (W) x 42.0 mm (H) x 61 mm (L) (without connectors and a lens tube)
Frame Rate	13.2 fps (8-bit), 6.6 fps (10-bit/12-bit unpacked), 8.8 fps (10-bit/12-bit packed)	Lens Tube Dimensions	44 mm Lens tube: -Inner diameter 44 mm -Outer diameter 50 mm -Length varies (see IP67 lens tubes spec sheet)
Dynamic Range	71 dB		
Output Bit Depth	8, 10, 12-bit		
Analog/Digital Gain	Manual, Auto; 0 dB – 48 dB, 480 steps		
Digital Gain	1x (0 dB) to 4x (12 dB) with a precision of 0.001x	64 mm Lens tube: -Inner diameter 64 mm -Outer diameter 70 mm -Length varies (see IP67 lens tubes spec sheet)
Black Level Offset	Manual (0 – 4095), Auto		
White Balance	Manual, Auto, Once, Off	Weight	196 g (without a lens tube)
Shutter Speed	49 µs to 16 s	Vibration, Shock	20G (20 – 200 Hz XYZ) / 100G
Exposure Control	Off, Manual, Auto, External	Environmental	-30 °C to +75 °C Operating (-40 °C to +85 °C tested), -40 °C to +85 °C Storage
Regions of Interest (ROI)	2 ROI		
Sub-sampling	1x2, 2x1, 2x2	Humidity	10% to 90% non-condensing – for exposure longer than 30 minutes
Trigger Inputs	External, Pulse generator, Software		
Trigger Options	Edge, Pulse width, Trigger delay, Debounce	100% non-condensing – for exposure up to 30 minutes
Trigger Modes	Free run, Standard, Fast		
External Inputs/Outputs	1 IN (OPTO) / 2 OUT (OPTO, TTL)	MTBF	550,000 hours @ 50 °C (EST) (Telcordia SR-332)
Strobe Output	2 strobes, programmable position and duration	Military Standard	MIL-STD-810G
Pulse Generator	Yes, programmable	Regulatory	FCC Part 15 Class A, CE, RoHs, UKCA

IMPERX™
Industrial Cameras & Imaging Systems

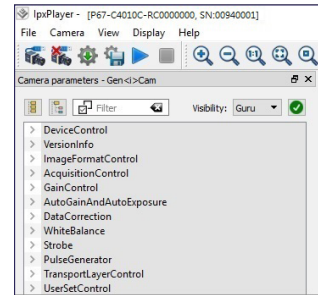# Imperx: *C4010 Applications*

The P67-C4010 incorporates a number of unique features tailored to reduce system complexity, maximize interface bandwidth, and expand the usable operational range.

Aerospace ● Satellites ● Surveillance ● Ball Grid Array ● Printed Circuit Board Inspection ● Motion Analysis ● Broadcast Television ● Telepresence ● Unmanned Aerial Vehicles ● Machine Vision ● Intelligent Traffic Systems ● Aerial Imaging ● Open Road Tolling Systems ● Situational Awareness
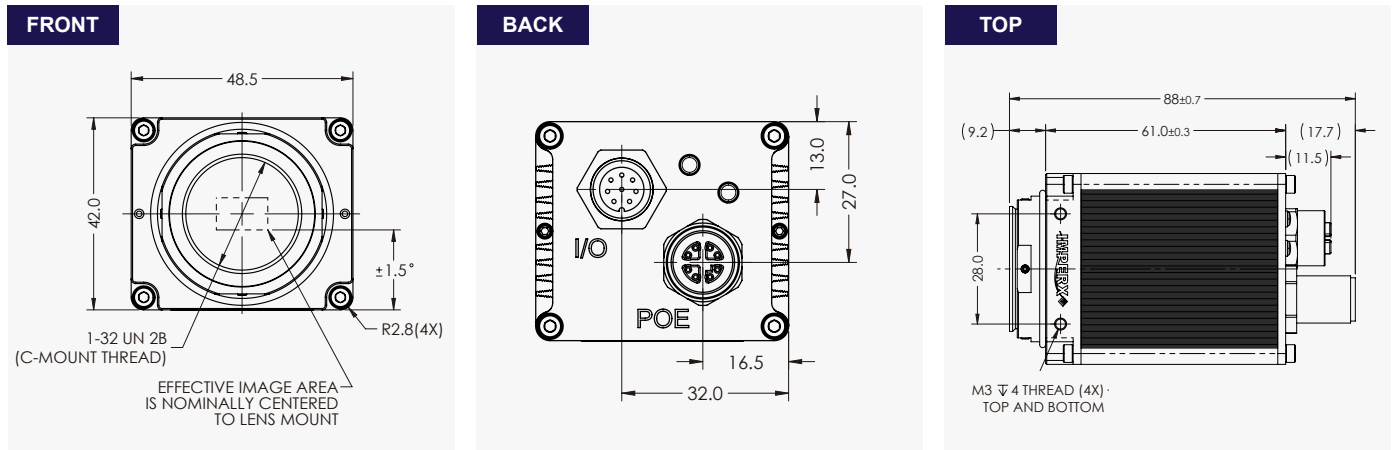
Absolute Quantum Efficiency

Color Spectral Response   Sony IMX267

Mono Spectral Response   Sony IMX267

Gen\<I\>Cam Compliant Camera Configurator

Dimensions

FRONT

48.5

42.0

± 1.5°

1-32 UN 2B
(C-MOUNT THREAD)

R2.8(4X)

EFFECTIVE IMAGE AREA
IS NOMINALLY CENTERED
TO LENS MOUNT

BACK

13.0

27.0

I/O

POE

16.5

32.0

TOP

88±0.7

(9.2)   61.0±0.3   (17.7)

(11.5)

28.0

M3 ▽ 4 THREAD (4X)·
TOP AND BOTTOM

Ordering Information

Please specify the camera model code and select an IP67 lens tube (see IP67 lens tubes spec sheet).

Output Interface
GigE Vision® with Power over Ethernet (PoE)® in IP67 enclosure (P67)

Sensor Types available
Monochrome
Bayer Color

Lens Mounts
C-Mount

Accessories (Sold separately)
CBL-IO08-0001 – Cable, 8 pin I/O, BULGIN CONN to Pigtail, 2 m
CBL-XRJ45-0002 – Cable, RJ45 to 8 position M12/Xcode (IP67 METZ CONN), 2 m
CBL-XRJ45-0003 – Cable, RJ45 to 8 position M12/Xcode (IP67 METZ CONN), 3 m
CBL-XRJ45-0005 – Cable, RJ45 to 8 position M12/Xcode (IP67 METZ CONN), 5 m
CBL-XRJ45-0010 – Cable, RJ45 to 8 position M12/Xcode (IP67 METZ CONN), 10 m
CBL-XRJ45-0015 – Cable, RJ45 to 8 position M12/Xcode (IP67 METZ CONN), 15 m
CBL-XRJ45-0020 – Cable, RJ45 to 8 position M12/Xcode (IP67 METZ CONN), 20 m

Connectors

Power and I/O Interface
1. Reserved
2. +12V DC
3. IN1 (OPTO)
4. IN1/OUT1 RETURN
5. OUT2 RETURN
6. OUT1 (OPTO)
7. +12V DC RETURN
8. OUT2 (TTL)

1000BASE-T Ethernet Interface		Cable Wires:
1.	TD0+	White/Orange
2.	TD0-	Orange
3.	TD1+	White/Green
4.	TD1-	Green
5.	TD3+	White/Brown
6.	TD3-	Brown
7.	TD2-	White/Blue
8.	TD2+	Blue

Connector: BULGIN PXMBNI12RPM08APCM12

Connector: MACOM MMT361A315

Rev: p67_c4010_r10_2022

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