| Front View | Rear View |

P67-C3210
CMOS 7.1 MP
GigE Vision® with Power over Ethernet (PoE)

Imperx: *C3210*

The P67-C3210 provides the same robust camera design as the POE-C3210 with an IP67 enclosure. This camera features the Sony Pregius IMX428 Global Shutter CMOS sensor with a native resolution of 3216 x 2208 in a 1.1" optical format delivering up to 16 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.
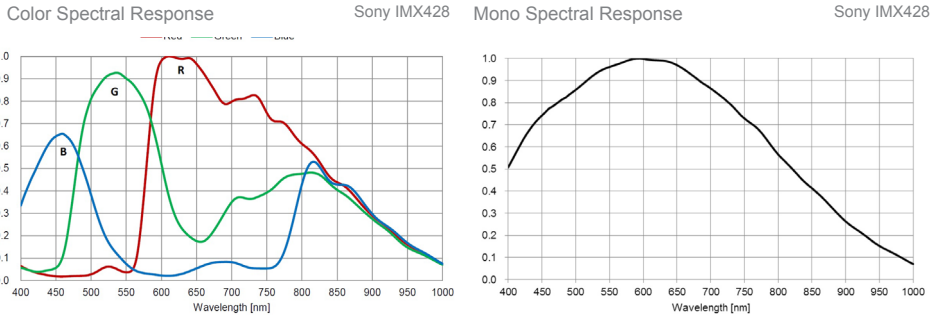
Specifications

Feature	Description
Output Interface	GigE Vision® with Power over Ethernet (PoE)
Resolution	3216 (H) x 2208 (V)
Sensor	Sony Pregius IMX428 CMOS Color/Mono
Sensor Format	14.5 mm (H) x 9.9 mm (V), 1.1" optical format, 17.6 mm diagonal
Pixel Size	4.5 microns square
Shutter	Global shutter (GS)
Sensor Digitization	12-bit
Frame Rate	16 fps (8-bit), 8 fps (10-bit/12-bit unpacked), 10 fps (10-bit/12-bit packed)
Dynamic Range	up to 77 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
Black Level Offset	Manual (0 – 4095), Auto
White Balance	Manual, Auto, Once, Off
Shutter Speed	32 µs to 16 s
Exposure Control	Off, Manual, Auto, External
Regions of Interest (ROI)	2 ROI
Binning	1x2, 2x1, 2x2 (Mono cameras only)
Sub-sampling	1x2, 2x1, 2x2
Trigger Inputs	External, Pulse generator, Software
Trigger Options	Edge, Pulse width, Trigger delay, Debounce
Trigger Modes	Free run, Standard, Fast
External Inputs/Outputs	1 IN (OPTO) / 2 OUT (OPTO, TTL)
Strobe Output	2 strobes, programmable position and duration
Pulse Generator	Yes, programmable

Feature	Description
Data Corrections	2 LUTs pre-programmed with Gamma 0.45, 2 LUTs pre-programmed with Negative LUT Bad pixel correction (static), Flat field correction
Lens Mount	C-Mount (default)
Supply Voltage Range	12 V DC (6 V – 30 V), 1.5 A inrush @ 12 V PoE (IEEE 802.3af / IEEE 802.3at)
Power Consumption	Typical: 4.32 W @ 12 V; PoE: 5.95 W
Camera Current	Typical: 360 mA @ 12 V
Size - Width/Height/Length	48.5 mm (W) x 42.0 mm (H) x 61 mm (L) (without connectors and a lens tube)
Lens Tube Dimensions	44 mm Lens tube: -Inner diameter 44 mm -Outer diameter 50 mm -Length varies (see IP67 lens tubes spec sheet)
	64 mm Lens tube: -Inner diameter 64 mm -Outer diameter 70 mm -Length varies (see IP67 lens tubes spec sheet)
Weight	196 g (without a lens tube)
Vibration, Shock	20G (20 – 200 Hz XYZ) / 100G
Environmental	-30 °C to +75 °C Operating (-40 °C to +85 °C tested), -40 °C to +85 °C Storage
Humidity	10% to 90% non-condensing – for exposure longer than 30 minutes
	100% non-condensing – for exposure up to 30 minutes
MTBF	550,000 hours @ 50 °C (EST) (Telcordia SR-332)
Military Standard	MIL-STD-810G
Regulatory	FCC Part 15 Class A, CE, RoHS, UKCA

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Industrial Cameras & Imaging Systems
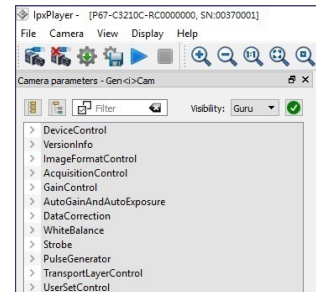
Imperx: *C3210 Applications*

The P67-C3210 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
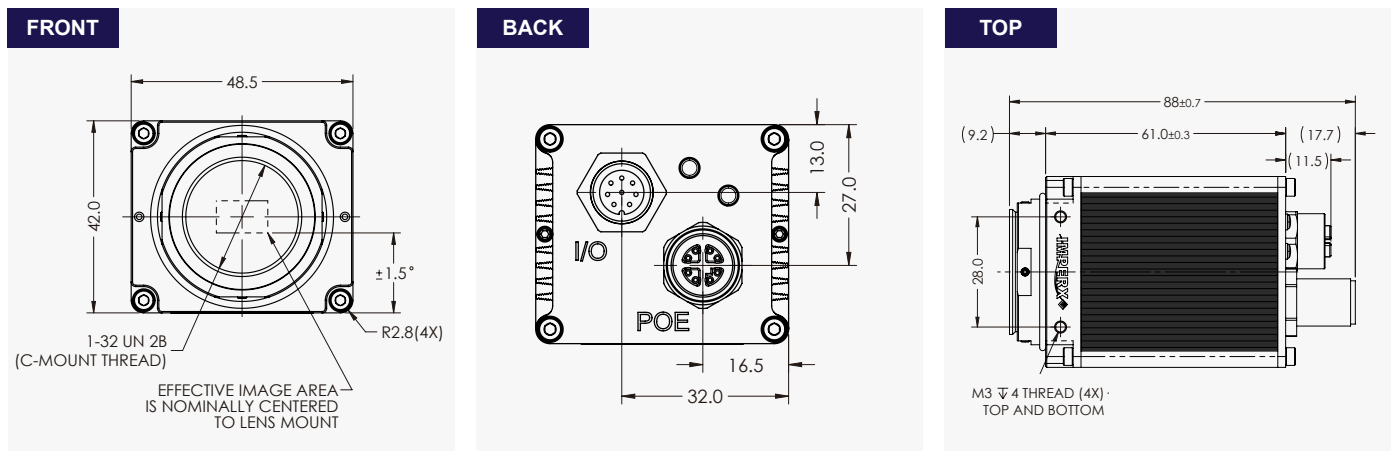
Absolute Quantum Efficiency

Color Spectral Response   Sony IMX428

Mono Spectral Response   Sony IMX428

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)

Connector: BULGIN PXMBNI12RPM08APCM12

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: MACOM MMT361A315

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