CHEETAH
RUGGEDIZED CAMERA SERIES

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

Imperx: *C3210*

The POE-C3210 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. The Sony Pregius image sensor delivers outstanding sensitivity and excellent image quality. Imperx puts you in control by providing full access to raw data without corrections. Using the simple intuitive graphical user interface, you can quickly apply image corrections, if desired. The C3210's flexibility, image quality, and speed make it suitable for a broad range of diverse and demanding applications, but "one size doesn't fit all," and Imperx can help optimize the camera to your exact requirements.
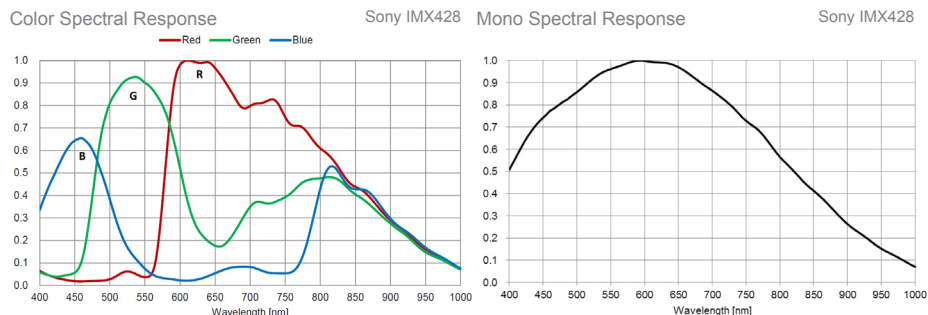
Specifications

Feature	Description	Feature	Description
Output Interface	GigE Vision® with Power over Ethernet (PoE)	Strobe Output	2 strobes, programmable position and duration
Resolution	3216 (H) x 2208 (V)	Pulse Generator	Yes, programmable
Sensor	Sony Pregius IMX428 CMOS Color/Mono	Data Correction	4 LUTs pre-programmed with Gamma 0.45; Bad pixel correction (static, dynamic), Flat field correction
Sensor Format	14.5 mm (H) x 9.9 mm (V), 1.1" optical format, 17.6 mm diagonal	Lens Mount	C-Mount (default)
Pixel Size	4.5 microns square	P-Iris	Optional
Shutter	Global shutter (GS)	P-Iris Control	Auto, Programmable
Sensor Digitization	12-bit	Supply Voltage Range	12 V DC (6 V – 30 V), 1.5 A inrush
Frame Rate	16 fps (8-bit), 8 fps (10-bit/12-bit unpacked), 10 fps (10-bit/12-bit packed)	Power Consumption	Typical: 4.32 W
Dynamic Range	up to 77 dB	Camera Current	Typical: 360 mA @ 12 V
Output Bit Depth	8, 10, 12-bit	PoE Capable	Yes
Analog/Digital Gain	Manual, Auto; 0 dB – 48 dB, 480 steps	Size - Width/Height/Length	37 mm (W) x 37 mm (H) x 61.5 mm (L)
Digital Gain	1x (0 dB) to 4x (12 dB) with a precision of 0.001x	Weight	113.2 g
Black Level Offset	Manual (0 – 255), Auto	Vibration, Shock	20G (20 – 200 Hz XYZ)/100G
White Balance	Manual, Auto, Once, Off	Environmental	-30 °C to +75 °C Operating (-40 °C to +85 °C tested) -40 °C to +85 °C Storage
Shutter Speed	5 µs to 16.0 s, 1 µs/step		
Exposure Control	Off, Manual, Auto, External	Humidity	10% to 90% non-condensing
Regions of Interest (ROI)	2 ROI	MTBF	TBD
Sub-sampling	N/A	Military Standard	MIL-STD-810G
Trigger Inputs	External, Pulse generator, Software	Regulatory	FCC Part 15 Class A, CE, RoHS
Trigger Options	Edge, Pulse width, Trigger filter, Trigger delay, Debounce		
Trigger Modes	Free run, Standard, Fast		
External Inputs/Outputs	2 IN (OPTO, LVTTL) / 2 OUT (OPTO, TTL)		

IMPERX
Industrial Cameras & Imaging Systems
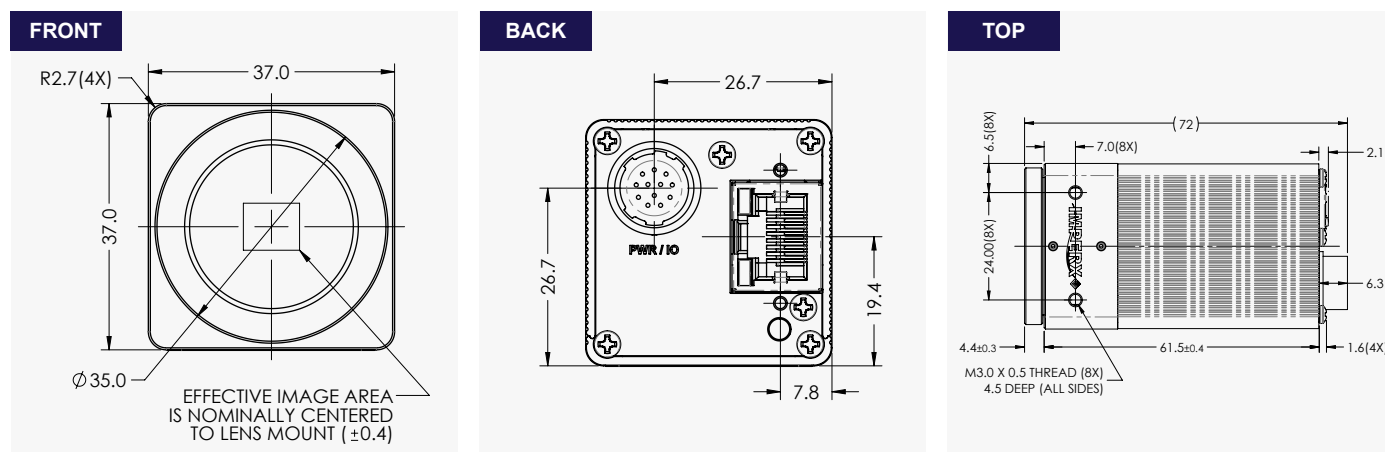
Imperx: *C3210 Applications*

The POE-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
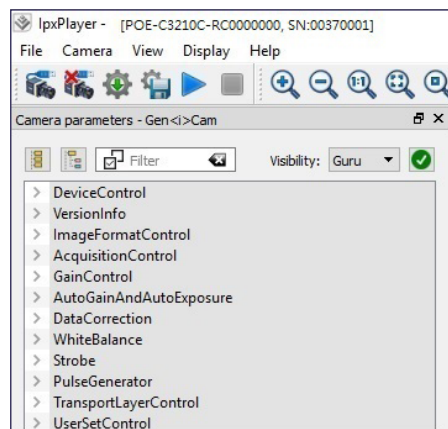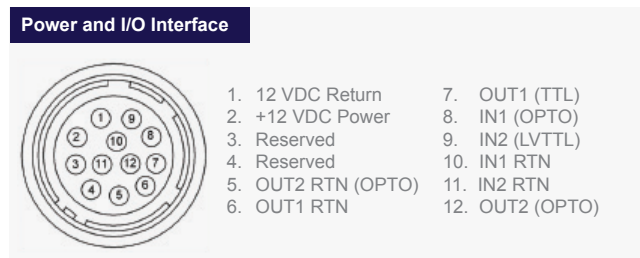
Absolute Quantum Efficiency

Color Spectral Response   Sony IMX428   Mono Spectral Response   Sony IMX428

Dimensions

FRONT

BACK

TOP

EFFECTIVE IMAGE AREA IS NOMINALLY CENTERED TO LENS MOUNT (±0.4)

Ordering Information

Output Interface
GigE Vision® with Power over Ethernet (PoE®)

Sensor Types available
Monochrome
Bayer Color

Lens Mounts
C-Mount (Default)
P-Iris (Optional)

Accessories (Sold separately)
PS12V04A-Power Supply w/ 1 input and 1 output

Gen<I>Cam Compliant Camera Configurator

Hirose Connectors

Power and I/O Interface

1. 12 VDC Return
2. +12 VDC Power
3. Reserved
4. Reserved
5. OUT2 RTN (OPTO)
6. OUT1 RTN
7. OUT1 (TTL)
8. IN1 (OPTO)
9. IN2 (LVTTL)
10. IN1 RTN
11. IN2 RTN
12. OUT2 (OPTO)

Connector: Hirose HR10A-10R-12PB(71)

Rev: poe_c3210_r3_2019

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