IMPERX

C2410
CMOS 5 MP
GigE Vision® with Power over Ethernet (PoE)

Imperx: *C2410*

The POE-C2410 camera features the Sony Pregius IMX264 Global Shutter CMOS sensor with a native resolution of 2464 x 2056 in a 2/3" optical format delivering up to 22 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 C2410'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.
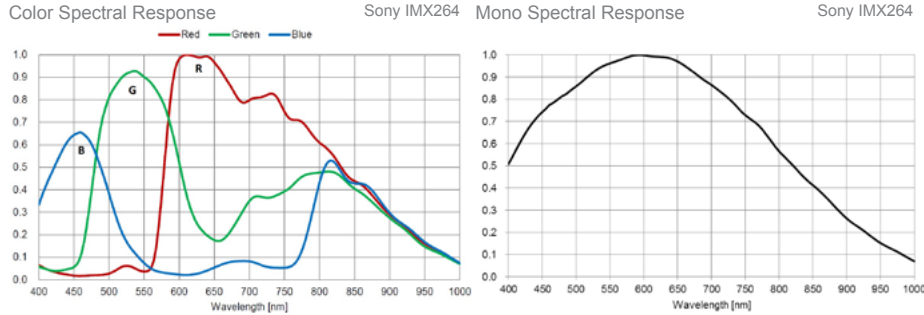
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Specifications

Feature	Description
Output Interface	GigE Vision® with Power over Ethernet (PoE)
Resolution	2464 (H) x 2056 (V)
Sensor	Sony Pregius IMX264 CMOS Color/Mono
Sensor Format	8.5 mm (H) x 7.1 mm (V), 2/3" optical format
Pixel Size	3.45 microns square
Shutter	Global shutter (GS)
Sensor Digitization	12-bit
Frame Rate	22 fps (8-bit), 11 fps (10-bit/12-bit unpacked), 15 fps (10-bit/12-bit packed)
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
Black Level Offset	Manual (0 – 255), Auto
White Balance	Manual, Auto, Off
Shutter Speed	1 µs/step, 14 µs to 16.0 s
Exposure Control	Off, Manual, Auto, External
Regions of Interest (ROI)	2 ROI
Sub-sampling	1x2, 2x1, 2x2
Trigger Inputs	External, Pulse Generator, Software
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)

Feature	Description
Strobe Output	2 strobes, programmable position and duration
Pulse Generator	Yes, programmable
Data Correction	4 LUTs pre-programmed with Gamma 0.45; Bad pixel correction (static, dynamic)
Lens Mount	C-Mount (default)
P-Iris	Optional
P-Iris Control	Auto, Programmable
Supply Voltage Range	12 V DC (6 V – 30 V), 1.5 A inrush
Power Consumption	3.8 W (EST)
Camera Current	Typical: 320 mA/12 V (EST)
PoE Capable	Yes
Size - Width/Height/Length	37 mm (W) x 37 mm (H) x 61.5 mm (L)
Weight	~100 g
Vibration, Shock	20G/100G
Environmental	-30 °C to +75 °C
Humidity	10% to 90% non-condensing
MTBF	TBD
Military Standard	MIL-STD-810G
Regulatory	FCC Part 15, CE, RoHS

IMPERX
Industrial Cameras & Imaging Systems

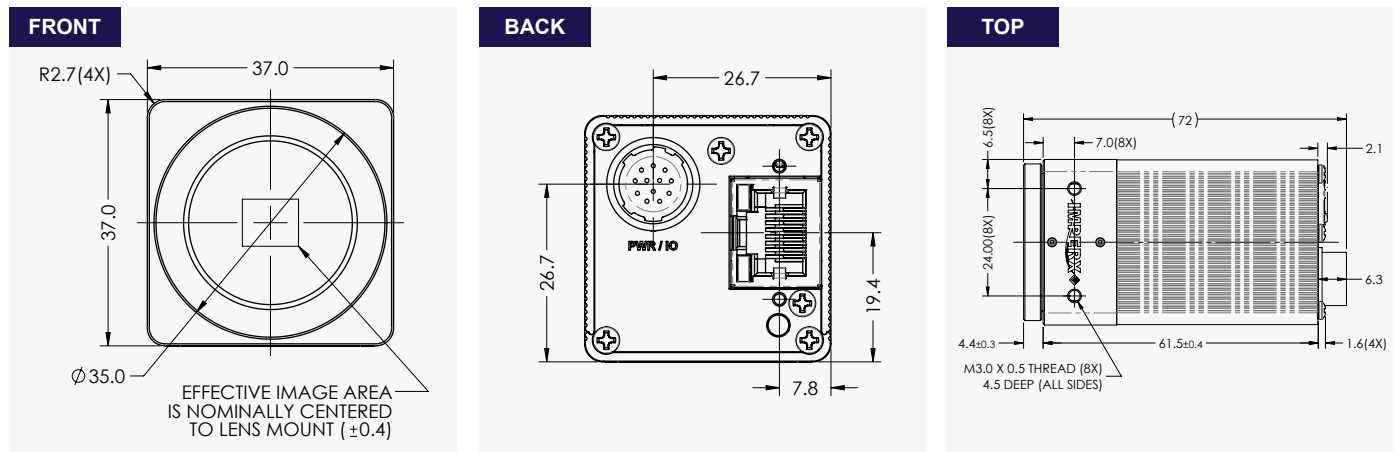## Imperx: *C2410 Applications*

The POE-C2410 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
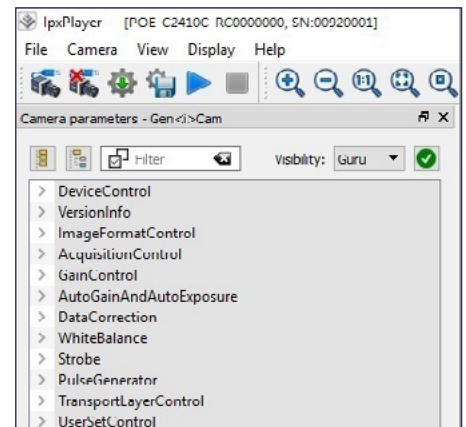
Absolute Quantum Efficiency

Color Spectral Response   Sony IMX264   Mono Spectral Response   Sony IMX264

Dimensions

FRONT

R2.7(4X)   37.0

37.0

Ø 35.0

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

BACK

26.7

26.7

PWR / IO

19.4

7.8

TOP

6.5(8X)   (72)   2.1

7.0(8X)

24.00(8X)

6.3

4.4±0.3   61.5±0.4   1.6(4X)

M3.0 X 0.5 THREAD (8X) 4.5 DEEP (ALL SIDES)

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)

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