

# CHEETAH

RUGGEDIZED CAMERA SERIES

## C2410Y/Z

CMOS 5 MP with Polarization Filters

GigE Vision® with Power over Ethernet (PoE)



### Imperx: C2410Y/Z

The POE-C2410Y/Z camera features the Sony Pregius IMX250MY/ZR 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 sensor is available in monochrome (Z) or color (Y) versions and has a unique 2x2 pixel sub-array where each pixel within the sub-array senses a different polarization angle (0, 45, 90 or 135 degrees). This allows the user to obtain images with four different polarization angles in each image capture. The camera allows the user to select and view images from each polarization angle or save raw image files with all four polarization angles. The C2410Y/Z's flexibility, outstanding sensitivity, and speed make it suitable for a broad range of diverse and demanding applications from reducing glare off glass, water, and painted surfaces to materials science or 3D image reconstruction.

### Specifications

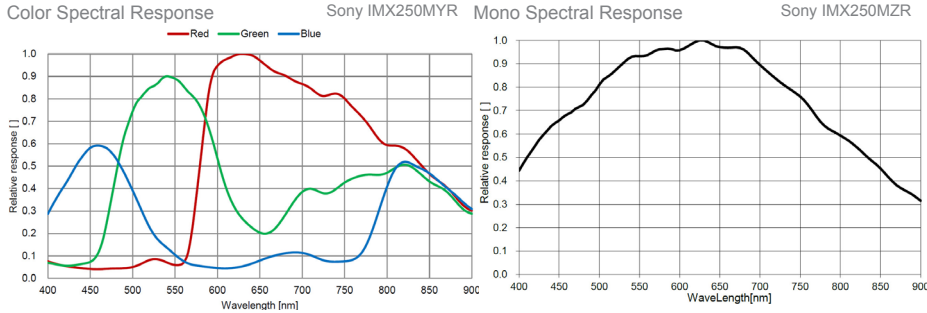
Feature	Description	Feature	Description
Output Interface	GigE Vision® with Power over Ethernet (PoE)	Strobe Output	2 strobes, programmable position and duration
Resolution	2464 (H) x 2056 (V) 1232 (H) x 1028 (V) per polarization angle	Pulse Generator	Yes, programmable
Sensor	Sony Pregius IMX250MY/ZR CMOS color (Y) or monochrome (Z)	Data Correction	4 LUTs pre-programmed with Gamma 0.45; Bad pixel correction (static, dynamic), Flat field correction
Sensor Format	8.5 mm (H) x 7.1 mm (V), 2/3" optical format	Lens Mount	C-Mount (default)
Pixel Size	3.45 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	22 fps (8-bit), 11 fps (10-bit/12-bit unpacked), 15 fps (10-bit/12-bit packed)	Power Consumption	3.24 W
Dynamic Range	71 dB	Camera Current	Typical: 270 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, Off, Once	Environmental	-30 °C to +75 °C Operating, -40 °C to +85 °C Storage
Shutter Speed	1 µs/step, 14 µs to 16.0 s	Humidity	10% to 90% non-condensing
Exposure Control	Off, Manual, Auto, External	MTBF	TBD
Regions of Interest (ROI)	2 ROI	Military Standard	MIL-STD-810G
Polarization Angles	0, 45, 90, and 135 degrees	Regulatory	FCC Part 15, CE, RoHS
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, LVTTTL) / 2 OUT (OPTO, TTL)		

## Imperx: C2410Y/Z Applications

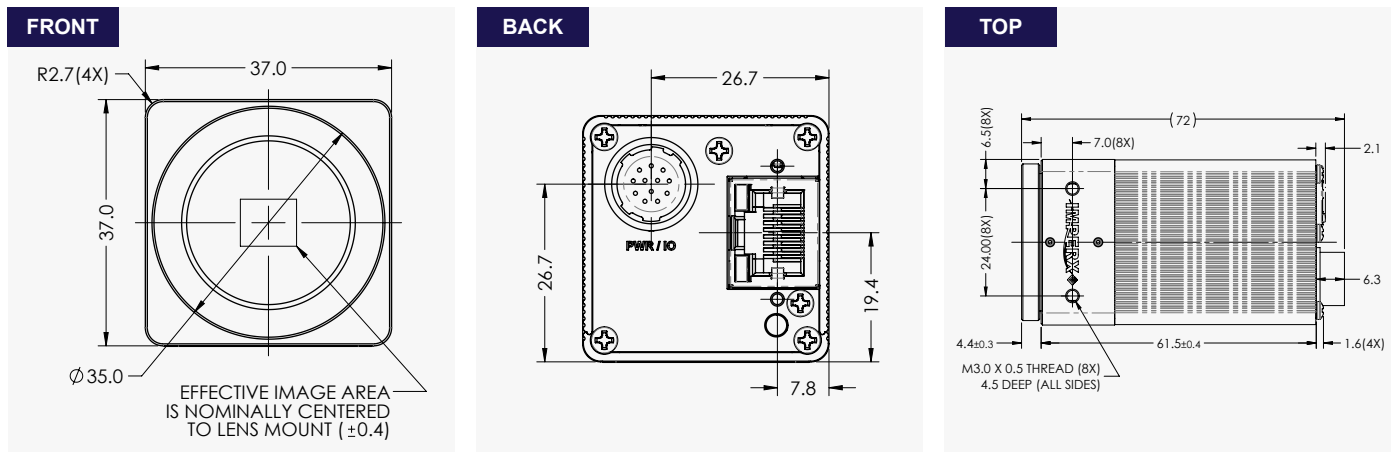
The POE-C2410Y/Z incorporates a number of unique features tailored to reduce system complexity, maximize interface bandwidth, and expand the usable operational range.

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



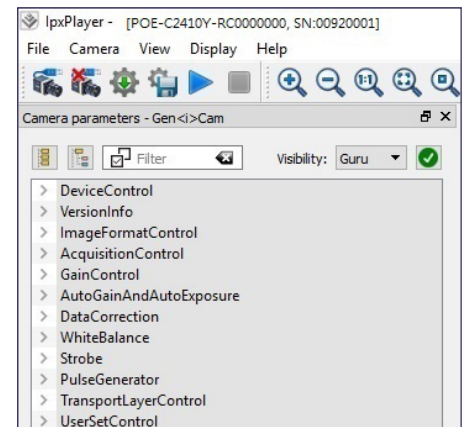
## Dimensions



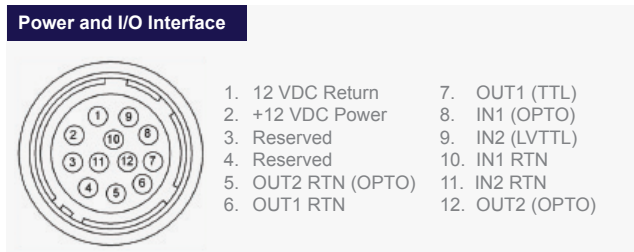
## Ordering Information

<b>Output Interface</b>	GiG Vision® with Power over Ethernet (PoE®)	<b>Lens Mounts</b>	C-Mount (Default) P-Iris (Optional)
<b>Sensor Types available</b>	C2410Y = Color C2410Z = Monochrome	<b>Accessories (Sold separately)</b>	PS12V04A-Power Supply w/ 1 input and 1 output

## Gen<I>Cam Compliant Camera Configurator



## Hirose Connectors



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

Rev: poe\_c2410Y/Z\_r2\_2019

Quality Management System ISO 9001:2015 Registered  
Environmental Management System ISO 14001:2015 Registered  
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