

CHEETAH

RUGGEDIZED CAMERA SERIES

Front View

Rear View

C2010 CMOS 3 MP

GigE Vision® with Power over Ethernet (PoE)

Imperx: C2010

The POE-C2010 camera features the Sony Pregius IMX265 Global Shutter CMOS sensor with a native resolution of 2064 x 1544 in a 1/1.8" optical format delivering up to 36 frames per second with GigE Vision Power over Ethernet 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 C2010'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

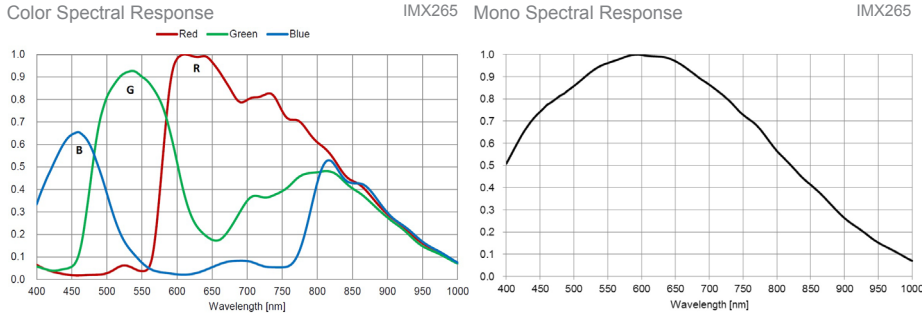
Feature	Description	Feature	Description
Output Interface	GigE Vision® with Power over Ethernet (PoE)	Strobe Output	2 strobes, programmable position and duration
Resolution	2064 (H) x 1544 (V)	Pulse Generator	Yes, programmable
Sensor	Sony Pregius IMX265 CMOS Color/Mono	Data Corrections	2 LUTs pre-programmed with Gamma 0.45, 2 LUTs pre-programmed with Negative LUT Bad pixel correction (static) 2 Flat Field Correction tables
Sensor Format	7.0 mm (H) x 5.3 mm (V), 1/1.8" optical format, 8.9 mm diagonal	Lens Mount	C-Mount
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 VDC (6 V – 30 V), 1.5 A inrush @ 12 V PoE (IEEE 802.3af / IEEE 802.3at)
Frame Rate	36 fps (8-bit), 18 fps (10-bit/12-bit unpacked), 24 fps (10-bit/12-bit packed)	Power Consumption	Typical: 3 W @ 12 V; PoE: 4.64 W
Dynamic Range	71 dB	Camera Current	Typical: 250 mA @ 12 V
Output Bit Depth	8, 10, 12-bit	Size - Width/Height/Length	37 mm (W) x 37 mm (H) x 61.6 mm (L)
Analog/Digital Gain	Manual, Auto; 0 dB – 48 dB, 480 steps	Weight	125.2 g
Digital Gain	1x (0 dB) to 4x (12 dB) with a precision of 0.001x	Vibration, Shock	20G (20 – 200 Hz XYZ) /100G
Black Level Offset	Manual (0 – 4095), Auto	Environmental	-30 °C to +75 °C Operating (-40 °C to +85 °C tested) -40 °C to +85 °C Storage
White Balance	Manual, Auto, Once, Off	Humidity	10% to 90% non-condensing
Shutter Speed	31 µs to 16 s	MTBF (Telcordia SR-332)	530,000 hours @ 50 °C (EST)
Exposure Control	Off, Manual, Auto, External	Military Standard	MIL-STD-810G
Regions of Interest (ROI)	2 ROI	Regulatory	FCC Part 15 Class A, CE, RoHS, UKCA
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	2 IN (OPTO, LVTTTL) / 2 OUT (OPTO, TTL)		

Imperx: C2010 Applications

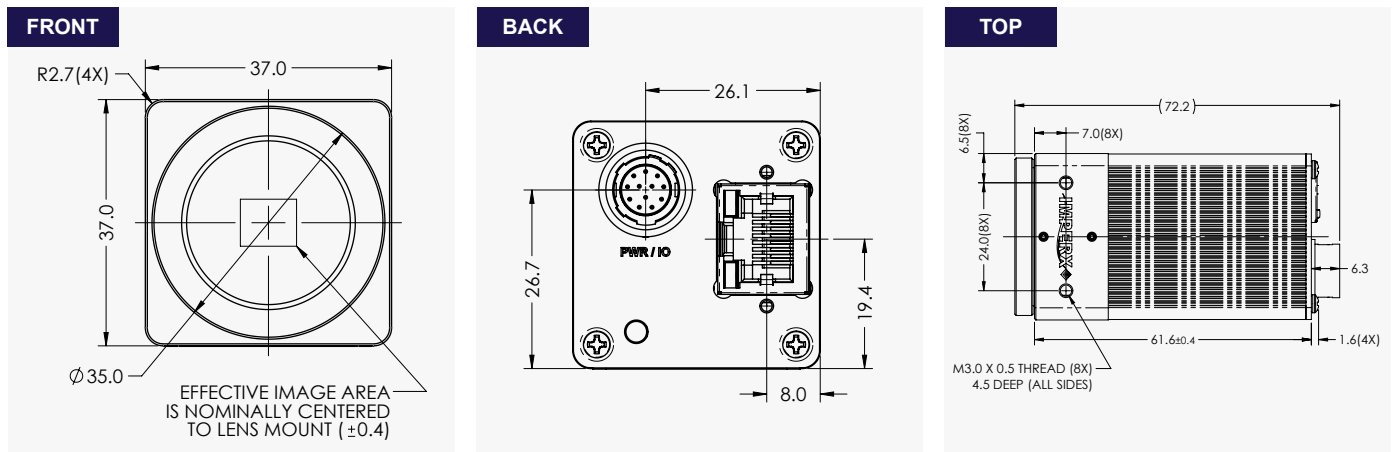
The POE-C2010 incorporates a number of unique features tailored to reduce system complexity, maximize interface bandwidth, and expand the usable operational range.

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

Relative Quantum Efficiency



Dimensions

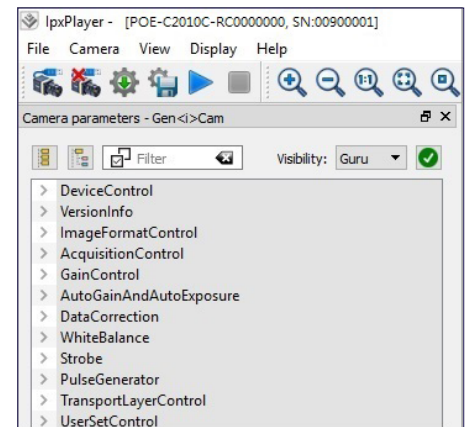


Ordering Information

Output Interface
GigE Vision® with PoE® (PoE)
Sensor Types available
Monochrome
Bayer Color

Lens Mounts
C-Mount (Default) P-Iris (Optional)
Accessories (Sold separately)
PS12V14A – Power Supply w/ 1 input and 1 output
PS12V18A – Power Supply w/ 1 input, 1 output, and a P-Iris connector

Gen<I>Cam Compliant Camera Configurator



Hirose Connectors

Power and I/O Interface	
	<ul style="list-style-type: none"> 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 (LVTTTL) 10. IN1 RTN 11. IN2 RTN 12. OUT2 (OPTO)

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

Rev: poe_c2010_r7_2022

Quality Management System ISO 9001:2015 Registered
 Environmental Management System ISO 14001:2015 Registered
 DDTC Registered (Directorate of Defense Trade Controls, US Department of State)



IMPERX 6421 Congress Ave., Boca Raton, FL 33487, USA
 Tel: +1-561-989-0006. Email: sales@imperx.com

WWW.IMPERX.COM

Technical data has been fully checked, but accuracy of printed matter is not guaranteed. Subject to change without notice. Copyright 2022.

