CHEETAH
RUGGEDIZED CAMERA SERIES

C5410
CMOS 17 MP
GigE Vision® with Power over Ethernet (PoE)

PRELIMINARY

Imperx: *C5410*

The POE-C5410 camera features the Sony Pregius IMX387 Global Shutter CMOS sensor with a native resolution of 5472 x 3084 in a 4/3" optical format delivering up to 7 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 C5410'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.
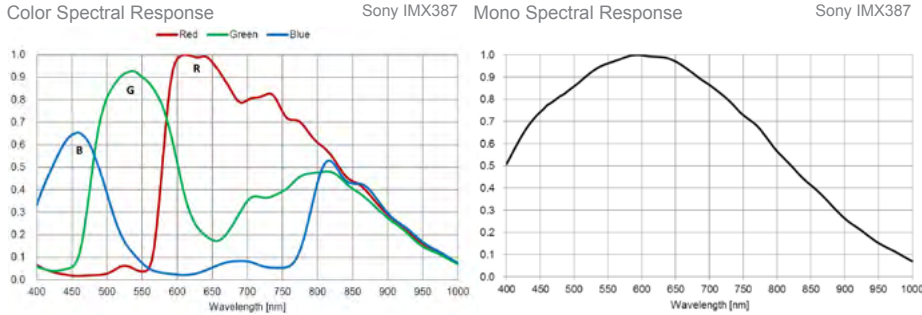
Specifications

Feature	Description
Output Interface	GigE Vision® with Power over Ethernet (PoE)
Resolution	5472 (H) x 3084 (V)
Sensor	Sony Pregius IMX387 CMOS Color/Mono
Sensor Format	18.9 mm (H) x 10.6 mm (V), 4/3" optical format
Pixel Size	3.45 microns square
Shutter	Global shutter (GS)
Sensor Digitization	12-bit
Frame Rate	7 fps (8-bit), 3.5 fps (10-bit/12-bit unpacked), 4.6 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, 30 µs to 16.0 s
Exposure Control	Off, Manual, External, Auto
Regions of Interest (ROI)	2 ROI
Binning	1x2, 2x1, 2x2
Sub-sampling	1x2, 2x1, 2x2
Trigger Inputs	External, Pulse generator, Software, Computer
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	F-Mount (default)
Canon EF Mount	Optional, Active or Passive
Supply Voltage Range	12 VDC (5 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	60 mm (W) x 60 mm (H) x 59.5 mm (L)
Weight	TBD
Vibration, Shock	20G/100G
Environmental	-30 °C to +75 °C Operating; -40 °C to +85 °C Storage
Humidity	10% to 90% non-condensing
MTBF	TBD
Military Standard	MIL-STD-810G
Regulatory	FCC Part 15 Class A, CE, China RoHS

IMPERX
Industrial Cameras & Imaging Systems
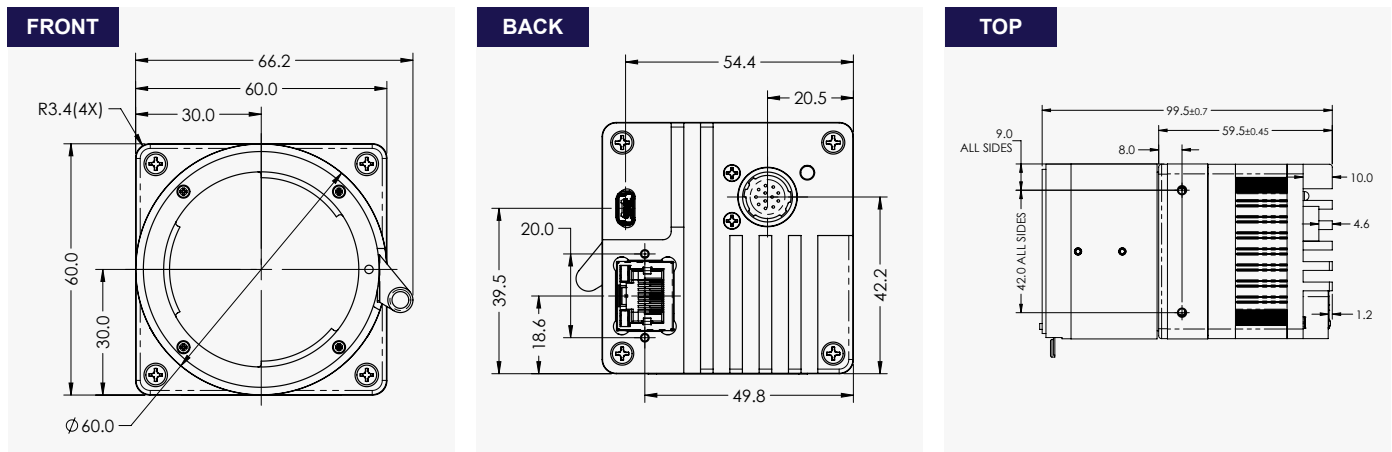
Imperx: *C5410 Applications*

The POE-C5410 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
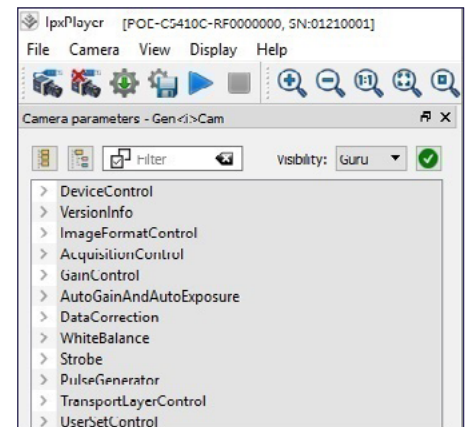
Absolute Quantum Efficiency

Color Spectral Response   Sony IMX387   Mono Spectral Response   Sony IMX387

Dimensions

FRONT	BACK	TOP

Ordering Information

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

Sensor Types available
Monochrome
Bayer Color

Lens Mounts
F-Mount (Default)
M42 (Optional)
Canon EF Mount (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_c5410_r4_2019

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