

# CHEETAH

RUGGEDIZED CAMERA SERIES

Front View

Rear View

## C6410-T CMOS 31 MP

*GigE Vision® with Power over Ethernet (PoE)*

### Imperx: C6410-T

The POE-C6410-T camera features the Sony Pregius IMX342 Global Shutter CMOS sensor with a native resolution of 6480 x 4860 in an APS-C optical format delivering up to 3.7 frames per second with GigE Vision® Power over Ethernet (PoE) output. The Sony Pregius image sensor delivers outstanding sensitivity and excellent image quality. The camera is equipped with thermoelectric Peltier cooling module (TEC) to stabilize the image sensor temperature. 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 C6410'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

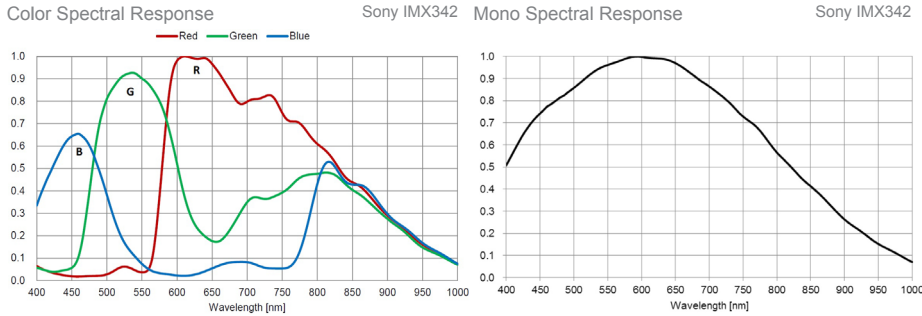
Feature	Description	Feature	Description
Output Interface	GigE Vision® with Power over Ethernet (PoE)	Strobe Output	2 strobes, programmable position and duration
Resolution	6480 (H) x 4860 (V)	Pulse Generator	Yes, programmable
Sensor	Sony Pregius IMX342 CMOS Color/Mono	Data Corrections	2 LUTs pre-programmed with Gamma 0.45, 2 LUTs pre-programmed with Negative LUT
Sensor Format	22.3 mm (H) x 16.6 mm (V), 27.9 mm diagonal, APS-C optical format		Bad pixel correction (static), Flat field correction
Pixel Size	3.45 microns square	TEC	Up to 20 °C below camera heat-sink temperature
Shutter	Global shutter (GS)	TEC Control	On, Off, Auto
Sensor Digitization	12-bit	Forced Air Cooling Control	Auto
Frame Rate	3.7 fps (8-bit), 1.8 fps (10-bit/12-bit unpacked), 2.5 fps (10-bit/12-bit packed)	Lens Mount	F-Mount (Default)
Dynamic Range	71 dB	Canon EF Mount	Optional, Active or Passive
Output Bit Depth	8, 10, 12-bit	Supply Voltage Range	12 VDC (6 V – 30 V), 1.5 A inrush @ 12 V PoE (IEEE 802.3af / IEEE 802.3at)
Analog/Digital Gain	Manual, Auto; 0 dB – 48 dB, 480 steps	Power Consumption	Typ. (TEC off): 5.4 W @ 12 V; PoE: 6.5 W
Digital Gain	1x (0 dB) to 4x (12 dB) with a precision of 0.001x		Max. (TEC on): 11.4 W @ 12 V; PoE: 12.5 W
Black Level Offset	Manual (0 – 4095), Auto	Camera Current	Typ. (TEC off): 450 mA @ 12 V
White Balance	Manual, Auto, Off		Max (TEC on): 950 mA @ 12 V
Shutter Speed	85 µs to 16.0 s	Size - Width/Height/Length	60 mm (W) x 64.4 mm (H) x 70 mm (L)
Exposure Control	Off, Manual, External, Auto	Weight	453 g
Regions of Interest (ROI)	2 ROI	Vibration, Shock	20G/100G
Binning	1x2, 2x1, 2x2 (Mono cameras only)	Environmental	-30 °C to +70 °C Operating; -40 °C to +85 °C Storage
Sub-sampling	1x2, 2x1, 2x2	Humidity	10% to 90% non-condensing
Trigger Inputs	External, Pulse generator, Software	MTBF	TBD
Trigger Options	Edge, Pulse width, Trigger delay, Debounce	Military Standard	MIL-STD-810G
Trigger Modes	Free run, Standard, Fast	Regulatory	FCC Part 15 Class A, CE, RoHS, UKCA
External Inputs/Outputs	2 IN (OPTO, LVTTTL) / 2 OUT (OPTO, TTL)		

## Imperx: C6410-T Applications

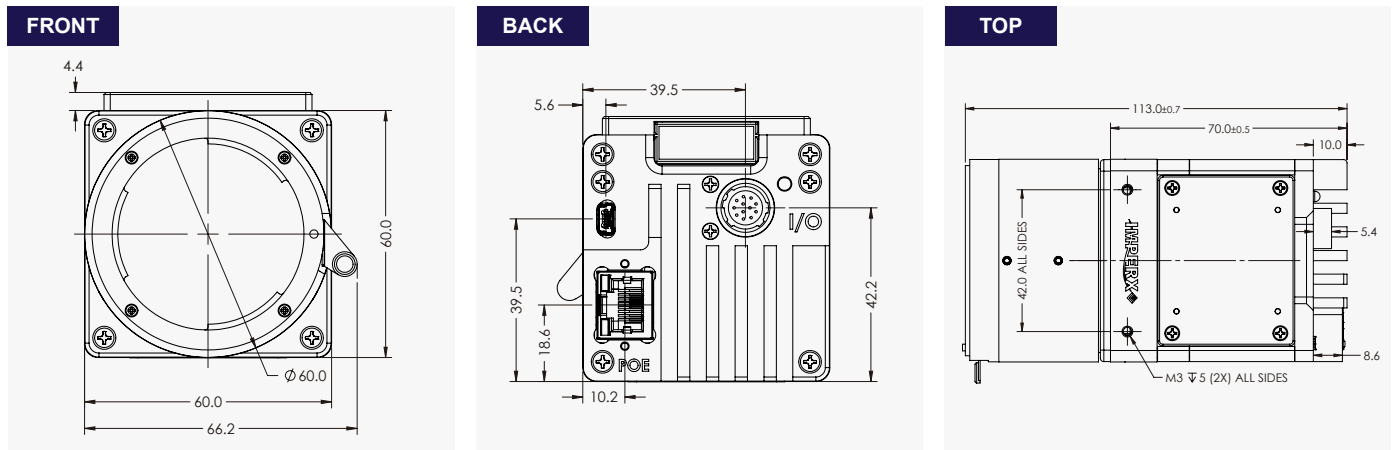
The POE-C6410-T incorporates a number of unique features tailored to reduce system complexity, maximize interface bandwidth, and expand the usable operational range.

Metrology • Microscopy • Flat Panel Display Inspection • Scientific Imaging • Ophthalmology • Fluorescence • Long Exposures • Chemiluminescence • Astronomy • Pathology • Histology • Cytometry • Aerospace • Satellites • Surveillance • Motion Analysis • Broadcast Television • Telepresence • Unmanned Aerial Vehicles • Machine Vision • Intelligent Traffic Systems • Aerial Imaging • Open Road Tolling Systems • Situational Awareness

## Absolute Quantum Efficiency



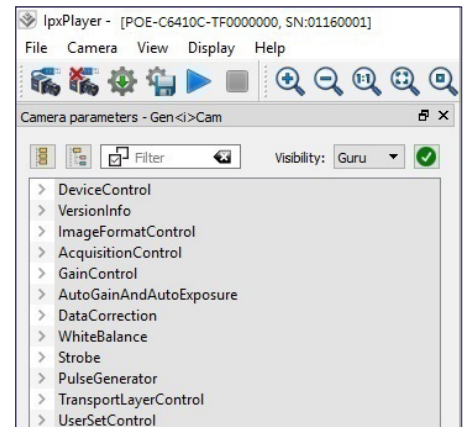
## Dimensions



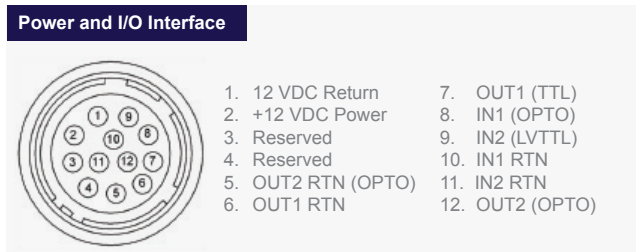
## Ordering Information

<b>Output Interface</b>	GigE Vision® with Power over Ethernet (PoE®)	<b>Lens Mounts</b>	F-Mount (Default) M42 (Optional) Canon EF Mount (Optional)
<b>Sensor Types available</b>	Monochrome      Bayer Color	<b>Accessories (Sold separately)</b>	PS12V14A-Power Supply w/ 1 input and 1 output
<b>Ordering</b>	T –Thermoelectric cooling (TEC)		

## Gen<I>Cam Compliant Camera Configurator



## Hirose Connectors



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

Rev: poe\_c6410t\_r5\_2021

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)



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