# CHEETAH
## RUGGEDIZED CAMERA SERIES

# C2400
# CMOS 5 MP
## *GigE Vision® with Power over Ethernet (PoE)*

## Imperx: *C2400*

The POE-C2400 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. The C2400 camera's compact size and simplified feature set with universally accepted Gen<I>Cam™ compliant interface makes the C2400 the easiest-to-use and most economical Imperx camera model ever! This camera's flexible architecture, frame rate and image quality make it suitable for a broad range of diverse and demanding applications.
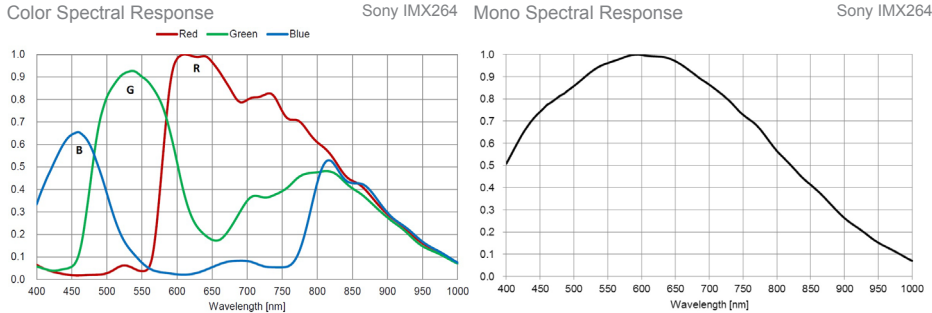
## Specifications

| Feature | Description | Feature | Description |
|---|---|---|---|
| Output Interface | GigE Vision® with Power over Ethernet (PoE) | Strobe Output | 1 strobe, programmable position and duration |
| Resolution | 2464 (H) x 2056 (V) | Pulse Generator | Yes, programmable |
| Sensor | Sony Pregius IMX264 CMOS Color/Mono | 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 | | |
| Pixel Size | 3.45 microns square | | |
| Shutter | Global shutter (GS) | Lens Mount | C-Mount (default) |
| 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 | Typical: 3.48 W |
| | | Camera Current | Typical: 290 mA @ 12 V |
| Dynamic Range | 71 dB | PoE Capable | Yes |
| Output Bit Depth | 8, 10, 12-bit | Size - Width/Height/Length | 29.0 mm (W) x 29.00 mm (H) x 59.4 mm (L) |
| Analog/Digital Gain | Manual, 0 dB – 48 dB, 480 steps | Weight | 77.6 g |
| Digital Gain | 1x (0 dB) to 4x (12 dB) with a precision of 0.001x | Vibration, Shock | 30G (20-200) Hz XYZ, 500G |
| | | Environmental | -30 °C to +70 °C Operating -40 °C to + 85 °C Storage |
| Black Level Offset | Manual (0 – 255), Auto | | |
| White Balance | Manual, Auto, Once, Off | Humidity | 10% to 90% non-condensing |
| Shutter Speed | 1 µs/step, 14 µs to 16.0 s | MTBF | TBD |
| Exposure Control | Off, Internal, External | Regulatory | FCC Part 15 Class A, CE, RoHS |
| Regions of Interest (ROI) | 1 ROI | | |
| 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 | 1 IN (3.3 V to 24 V) /1 OUT (both opto-isolated) | | |

**IMPERX**™
Industrial Cameras & Imaging Systems

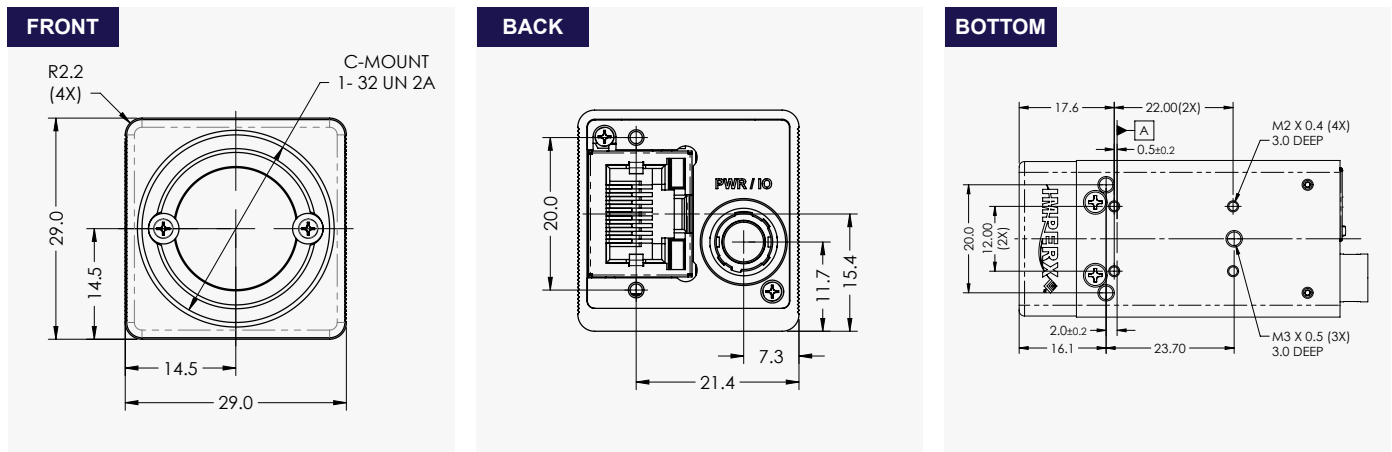## Imperx: *C2400 Applications*

The POE-C2400 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 ● Reticle Alignment ● Machine Vision ● Industrial Imaging ● Intelligent Traffic Systems ● Aerial Imaging ● Open Road Tolling Systems ● Situational Awareness
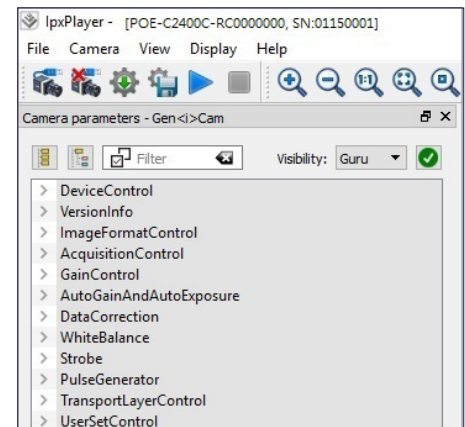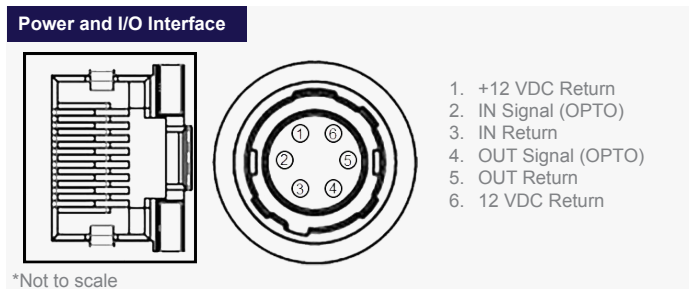
## Absolute Quantum Efficiency

Color Spectral Response    Sony IMX264  Mono Spectral Response    Sony IMX264



## Dimensions

### FRONT



### BACK



### BOTTOM



## Ordering Information

| Output Interface |
| --- |
| GigE Vision® w/PoE® (PoE) |
| **Sensor Types available** |
| Monochrome |
| Bayer Color |

| Lens Mounts |
| --- |
| C-Mount (Default) |
| **Accessories (Sold separately)** |
| CBL-COM01 – IO Input/Output, 6-pin (F) Hirose to unterminated cable, 2 m |

## Gen<I>Cam Compliant Camera Configurator



## Hirose Connectors

### Power and I/O Interface



1. +12 VDC Return
2. IN Signal (OPTO)
3. IN Return
4. OUT Signal (OPTO)
5. OUT Return
6. 12 VDC Return

*Not to scale

*Connector: Hirose HR10A-7R-6PB(73)*

*Rev: poe_c2400_r4_2019*

## IMPERX
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