

CHEETAH

RUGGEDIZED CAMERA SERIES

C2000

CMOS 3.1 MP

GigE Vision® with Power over Ethernet (PoE)



Imperx: C2000

The POE-C2000 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. The C2000 camera's compact size and simplified feature set with universally accepted Gen<I>Cam™ compliant interface makes the C2000 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

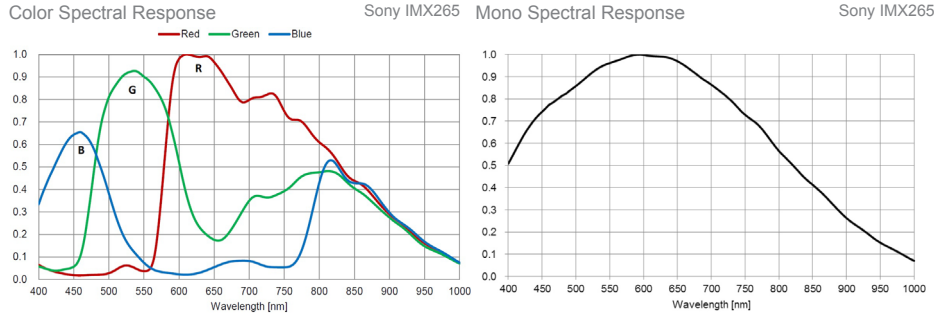
Feature	Description	Feature	Description
Output Interface	GigE Vision® with Power over Ethernet (PoE)	Strobe Output	1 strobe, programmable position and duration
Resolution	2064 (H) x 1544 (V)	Pulse Generator	Yes, programmable
Sensor	Sony Pregius IMX265 CMOS Color/Mono	Data Corrections	2 LUTs pre-programmed with Gamma 0.45; 2 LUTs pre-programmed with Negative LUT Bad pixel correction (static, dynamic)
Sensor Format	7.1 mm (H) x 5.3 mm (V), 1/1.8" optical format	Lens Mount	C-Mount (default)
Pixel Size	3.45 microns square	Supply Voltage Range	12 V DC (6 V – 30 V), 1.5 A inrush @ 12 V PoE (IEEE 802.3af / IEEE 802.3at)
Shutter	Global shutter (GS)	Power Consumption	Typical: 3.72 W @ 12 V; PoE: 5W
Sensor Digitization	12-bit	Camera Current	Typical: 310 mA @ 12 V
Frame Rate	36 fps (8-bit), 18 fps (10-bit/12-bit unpacked), 24 fps (10-bit/12-bit packed)	Size - Width/Height/Length	29.0 mm (W) x 29.00 mm (H) x 59.4 mm (L)
Dynamic Range	71 dB	Weight	77.6 g
Output Bit Depth	8, 10, 12-bit	Vibration, Shock	30G (20-200) Hz XYZ, 500G
Analog/Digital Gain	Manual, 0 dB – 48 dB, 480 steps	Environmental	-30 °C to +70 °C Operating -40 °C to +85 °C Storage
Digital Gain	1x (0 dB) to 4x (12 dB) with a precision of 0.001x	Humidity	10% to 90% non-condensing
Black Level Offset	Manual (0 – 255), Auto	MTBF	TBD
White Balance	Manual, Auto, Once, Off	Regulatory	FCC Part 15 Class A, CE, RoHS
Shutter Speed	1 µs/step, 14 µs to 16.0 s		
Exposure Control	Off, Manual, External		
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: C2000 Applications

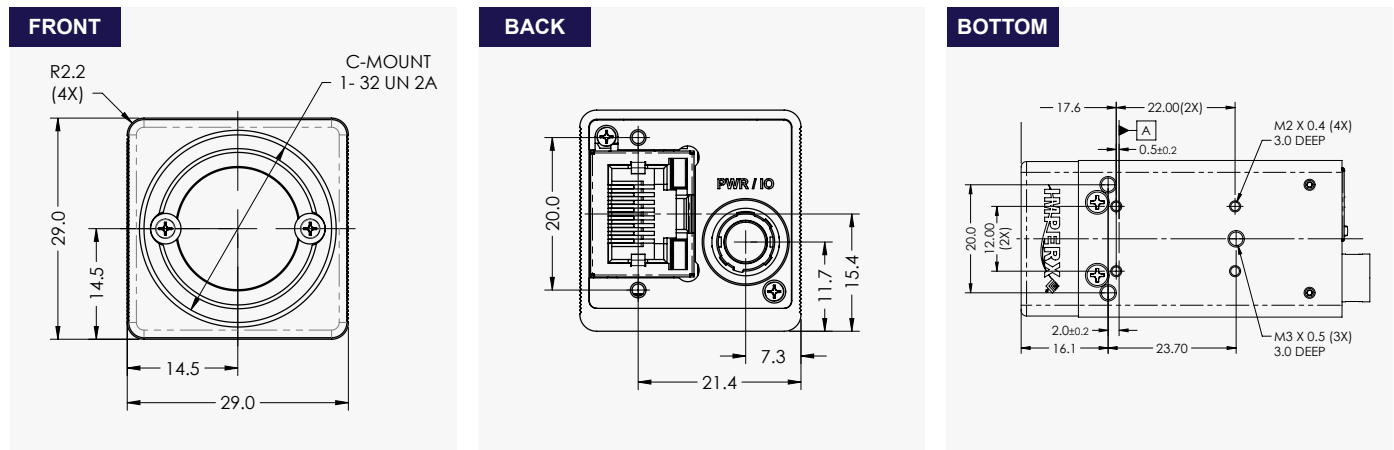
The POE-C2000 incorporates a number of unique features tailored to reduce system complexity, maximize interface bandwidth, and expand the usable operational range.

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



Dimensions

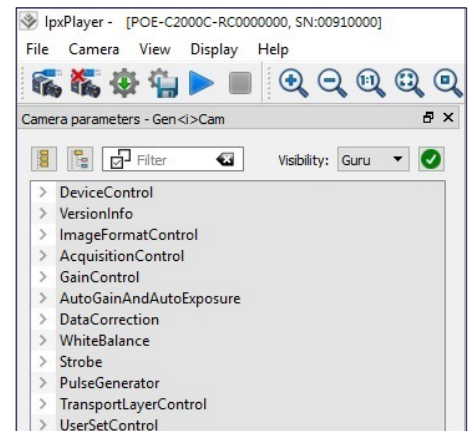


Ordering Information

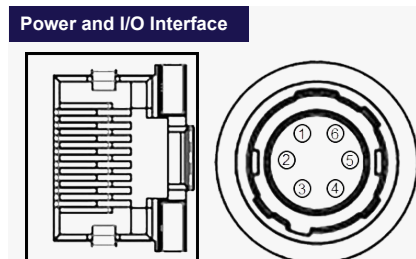
Output Interface
GigE Vision® w/PoE® (PoE)
Sensor Types available
Monochrome
Bayer Color

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



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_c2000_r5_2019

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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