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<\>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

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Output Interface</td>
<td>GigE Vision® with Power over Ethernet (PoE)</td>
</tr>
<tr>
<td>Resolution</td>
<td>2064 (H) x 1544 (V)</td>
</tr>
<tr>
<td>Sensor</td>
<td>Sony Pregius IMX265 CMOS Color/Mono</td>
</tr>
<tr>
<td>Sensor Format</td>
<td>7.1 mm (H) x 5.3 mm (V), 1/1.8&quot; optical format</td>
</tr>
<tr>
<td>Pixel Size</td>
<td>3.45 microns square</td>
</tr>
<tr>
<td>Shutter</td>
<td>Global shutter (GS)</td>
</tr>
<tr>
<td>Sensor Digitization</td>
<td>12-bit</td>
</tr>
<tr>
<td>Frame Rate</td>
<td>36 fps (8-bit), 18 fps (10-bit/12-bit unpacked), 24 fps (10-bit/12-bit packed)</td>
</tr>
<tr>
<td>Dynamic Range</td>
<td>71 dB</td>
</tr>
<tr>
<td>Output Bit Depth</td>
<td>8, 10, 12-bit</td>
</tr>
<tr>
<td>Analog/Digital Gain</td>
<td>Manual, 0 dB – 48 dB, 480 steps</td>
</tr>
<tr>
<td>Digital Gain</td>
<td>1x (0 dB) to 4x (12 dB) with a precision of 0.001x</td>
</tr>
<tr>
<td>Black Level Offset</td>
<td>Manual (0 – 255), Auto</td>
</tr>
<tr>
<td>White Balance</td>
<td>Manual, Auto, Once, Off</td>
</tr>
<tr>
<td>Shutter Speed</td>
<td>1 μs/step, 14 μs to 16.0 s</td>
</tr>
<tr>
<td>Exposure Control</td>
<td>Off, Manual, External</td>
</tr>
<tr>
<td>Regions of Interest (ROI)</td>
<td>1 ROI</td>
</tr>
<tr>
<td>Trigger Inputs</td>
<td>External, Pulse generator, Software</td>
</tr>
<tr>
<td>Trigger Options</td>
<td>Edge, Pulse width, Trigger filter, Trigger delay, Debounce</td>
</tr>
<tr>
<td>Trigger Modes</td>
<td>Free run, Standard, Fast</td>
</tr>
<tr>
<td>External Inputs/Outputs</td>
<td>1 IN (3.3 V to 24 V) / 1 OUT (both opto-isolated)</td>
</tr>
</tbody>
</table>

Strobe Output: 1 strobe, programmable position and duration
Pulse Generator: Yes, programmable
Data Corrections: 2 LUTs pre-programmed with Gamma 0.45;
                  2 LUTs pre-programmed with Negative LUT
Bad pixel correction (static, dynamic)
Lens Mount: C-Mount (default)
Supply Voltage Range: 12 V DC (6 V – 30 V), 1.5 A inrush @ 12 V
PoE (IEEE 802.3af / IEEE 802.3at)
Power Consumption: Typical: 3.72 W @ 12 V; PoE: 5W
Typical: 310 mA @ 12 V
Size - Width/Height/Length: 29.0 mm (W) x 29.00 mm (H) x 59.4 mm (L)
Weight: 77.6 g
Vibration, Shock: 30G (20-200) Hz XYZ, 500G
Environmental: -30 °C to +70 °C Operating
               -40 °C to +85 °C Storage
Humidity: 10% to 90% non-condensing
MTBF: TBD
Regulatory: FCC Part 15 Class A, CE, RoHS
**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

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**Absolute Quantum Efficiency**

![Color Spectral Response](image)

![Mono Spectral Response](image)

**Dimensions**

**FRONT**

C-MOUNT 1-32 UN 2A

**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 – I/O Input/Output, 6-pin (F) Hirose to unterminated cable, 2 m

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**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

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

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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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Industrial Cameras & Imaging Systems

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