

- Versatile temperature range for extreme environments
- IEEE 1588 PTP
- Power over Ethernet
- P-Iris and DC-Iris lens control

## Description

### 4.1 Megapixel industrial camera for extreme environments - fast frame rates

Prosilica GT2300/GT2300C is a 4.1 Megapixel camera with a GigE Vision compliant Gigabit Ethernet interface. This camera incorporates the high-quality ON Semiconductor KAI-04050 TRUESENSE CCD sensor providing excellent monochrome and color image quality. It is a rugged camera designed to operate in extreme environments and fluctuating lighting conditions. This camera offers Precise iris lens control allowing users to fix the aperture size to optimize depth of field, exposure and gain without the need for additional control elements. By default monochrome models ship with no optical filter and color models ship with an IRC30 IR cut filter.

#### Options:

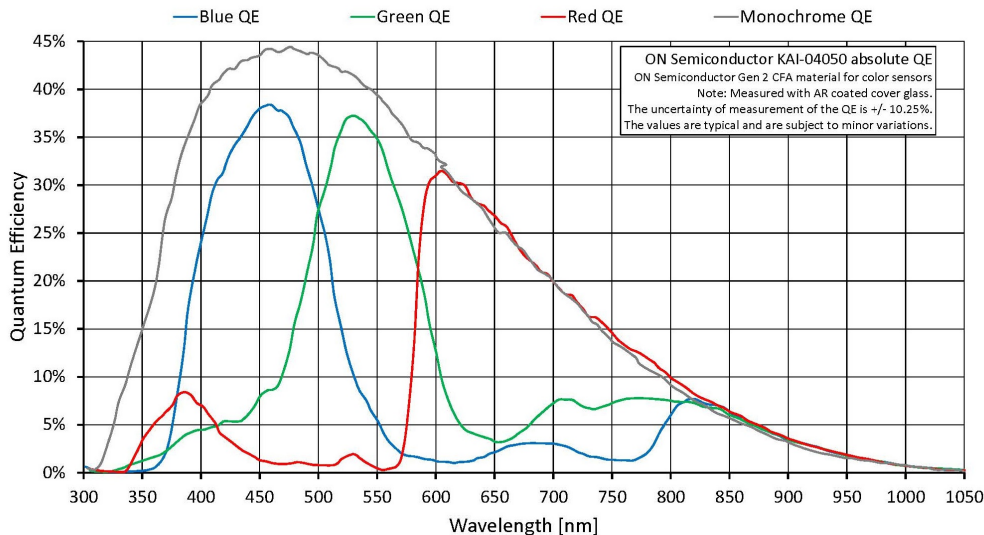
- Various IR cut/pass filters and lens mounts
- Various sensor options

See the Modular Concept for lens mount, optical filters, and sensor options.

## Specifications

Prosilica GT	2300
Interface	IEEE 802.3 1000BASE-T, IEEE 802.3af (PoE)
Resolution	2336 (H) × 1752 (V)
Sensor	ON Semi KAI-04050
Sensor type	CCD Progressive
Cell size	5.5 μm x 5.5 μm
Lens mount	C-Mount
Max frame rate at full resolution	29.3 fps
ADC	14 bit

<b>Prosilica GT</b>	<b>2300</b>
Image buffer (RAM)	128 MByte
<b>Output</b>	
Bit depth	14 (monochrome); 12 (color) bit
Mono modes	Mono8, Mono12, Mono12Packed, Mono14
Color modes YUV	YUV411Packed, YUV422Packed, YUV444Packed
Color modes RGB	RGB8Packed, BGR8Packed, RGBA8Packed, BGRA8Packed
Raw modes	BayerGR8, BayerGR12, BayerRG12Packed
<b>General purpose inputs/outputs (GPIOs)</b>	
TTL I/Os	1 input, 2 outputs
Opto-isolated I/Os	1 input, 2 outputs
RS-232	1
<b>Operating conditions/dimensions</b>	
Operating temperature	-20 °C to +60 °C ambient (without condensation)
Power requirements (DC)	7 to 25 VDC; PoE
Power consumption (@12 V)	4.9 W @ 12 VDC; 6.0 W PoE
Mass	229 g
Body dimensions (L × W × H in mm)	92 × 53.3 × 33 (including connectors)
Regulations	CE, RoHS, REACH, WEEE, FCC, ICES



## Features

**Image optimization features:**



- Auto gain (manual gain control: 0 to 32 dB)
- Auto exposure (manual exposure control: 10 #s to 26.8 s)
- Auto white balance
- Binning (horizontal and vertical)
- Color correction, hue, saturation#(color models only)
- Column defect masking
- Decimation X/Y
- Gamma correction
- Look-up tables (LUTs)
- Region of interest (ROI), separate ROI for auto features
- Reverse X/Y

#### **Camera control features:**

- P-Iris and DC-Iris lens control
- Event channel
- Image chunk data
- IEEE 1588 Precision Time Protocol (PTP)
- RS232
- Storable user sets
- StreamBytesPerSecond (easy bandwidth control)
- StreamHold
- Sync out modes: Trigger ready, input, exposing, readout, imaging, strobe, GPO#
- Tap mode switchable in Vimba Viewer 2.0 or later (four-tap, one-tap)
- Temperature monitoring (main board and sensor board)
- Trigger over Ethernet (ToE) Action Commands



## Applications

**Prosilica GT2300/GT2300C is ideal for a wide range of applications including:**

- Outdoor imaging
- Traffic imaging / Intelligent Traffic Systems (ITS)
- Public security and surveillance
- Industrial inspection
- Machine vision
- Military and space applications