

❖ GO-2400-PGE

2.35-megapixel CMOS global shutter

GiGE[®]
VISION



PRELIMINARY

- 2.35-megapixel 1/1.2" CMOS imager (global shutter)
- Up to 48.8 fps at full resolution
- 5.86 μm square pixels
- Small size (29 x 29 x 41.5 mm, excluding lens mount)
- 8/10/12-bit output in choice of monochrome or raw Bayer color models
- Exposure control from 38 μs to 8 seconds in 1 μs steps
- 2X binning for increased sensitivity (monochrome only)
- Single and multi-ROI modes for flexible windowing and use of smaller optics
- Automatic Level Control (ALC) for dynamic lighting conditions
- Accepts power over GigE Vision interface or separate 6-pin connector
- C-mount lens mount

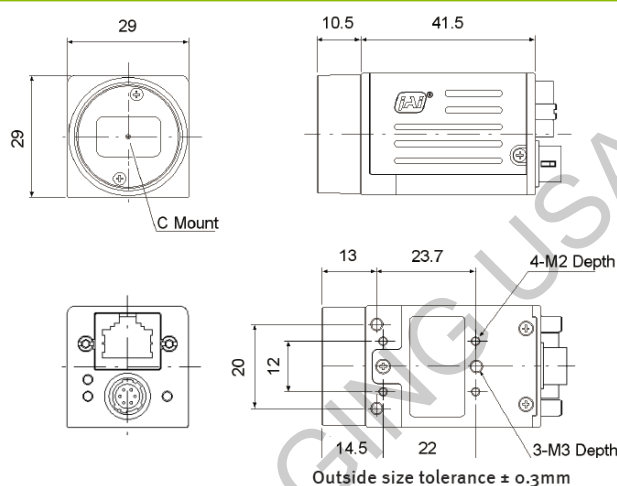


Specifications for GO-2400-PGE

Go Series

Specifications	GO-2400-PGE
Sensor	1/1.2" CMOS global shutter (IMX174)
Frame rate, full frame	48.8 frames/sec. @ 8-bit
Active area	11.3 mm (h) x 7.13 mm (v), 13.4 mm diagonal
Cell size	5.86 μ m (h) x 5.86 μ m (v)
Active pixels	1936 (h) x 1216 (v)
Read-out modes	Full ROI (mono) ROI (color) Binning
	1936 (h) x 1216 (v) up to 48.8 fps H: 16 to 1920 pixels in 16 pixel steps V: 1 to 1215 lines in 1 line steps H: 16 to 1920 pixels in 16 pixel steps V: 2 to 1214 lines in 2 line steps 1x2, 2x1, 2x2 (monochrome only)
EMVA 1288 Parameters	At 10-bit output
Absolute sensitivity (mono)	TBD p ($\lambda = 525$ nm)
Absolute sensitivity (color)	TBD p ($\lambda = 525$ nm)
Maximum SNR (mono)	TBD dB
Maximum SNR (color)	TBD dB
Traditional SNR*	mono color
	>60 dB (0 dB gain) >60 dB (0 dB gain, green,)
Video signal output	mono color
	8/10/12-bit monochrome 8/10/12-bit raw Bayer
Gain control	Manual/auto 0 dB to +24 dB
White balance (GO-2400C)	Manual, one-push auto, or continuous (3000K to 9000K)
Gamma	0.45, 0.6, 1.0 or 256-point LUT
Synchronization	Internal
Video modes	Normal, Single ROI, Multi ROI, Sequence (Trigger & Command), Delayed Readout
Trigger input	Opto In, Pulse Generator, Software, NAND Out (2), User Output (2), Action Commands (2)
Trigger modes	EPS, Trigger Width, Sequence
Electronic shutter	Timed exposure Auto shutter
	38 μ s to 8 sec in 1 μ s steps 1/48 to 1/26315 sec.
Auto Level Control (ALC)	Shutter range from 1/48 to 1/26315, gain range from 0 dB to +24 dB Tracking speeds and max values adjustable.
Pre-processing functions	Blemish compensation (256 pixels), shading
Operating temperature	-5°C to +45°C
Storage temperature	-25°C to +60°C
Humidity	20 - 80% non-condensing
Vibration	10 G (20 Hz to 200 Hz XYZ)
Shock	80 G
Regulations	CE (EN61000-6-2, EN61000-6-3), FCC Part 15 class B, RoHS, WEEE
Power	6-pin connector PoE
	12V to 24V DC $\pm$ 10%, 2.64W typical @ 12V 36V to 57V DC, 3.02W typical @ 48V
Lens mount	C-mount
Dimensions (H x W x L)	29 mm x 29 mm x 41.5 mm (excl. lens mount)
Weight	46 g

Dimensions



Connector pin-out

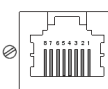
DC In / Trigger



HIROSE HR-10A-7R-6PB(73)

Pin	Signal
1	+12V to +24V DC Input
2	Opto In 1
3	Opto Out 1
4	Opto Out 2
5	Opto Common
6	GND

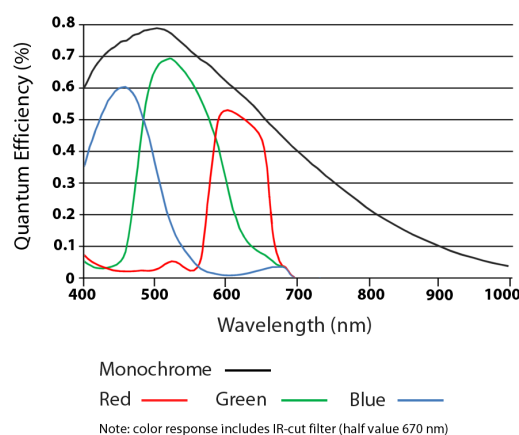
GigE Vision Interface



RJ-45 with locking screws

Pin	Signal
1	TRD+ (0)
2	TRD- (0)
3	TRD+ (1)
4	TRD+ (2)
5	TRD- (2)
6	TRD- (1)
7	TRD+ (3)
8	TRD- (3)

Spectral Response



Ordering Information

GO-2400M-PGE	Monochrome camera with GigE Vision
GO-2400C-PGE	Color camera with GigE Vision

*Traditional SNR is based on random noise in a single frame, where EMVA SNR measurements consider more comprehensive noise sources and variance over time. For a more complete description, see the manual.

Europe, Middle East & Africa
Phone +45 4457 8888
Fax +45 4491 3252

Asia Pacific
Phone +81 45 440 0154
Fax +81 45 440 0166

Americas
Phone (Toll-Free) 1 800 445 5444
Phone +1 408 383 0300