

GOX-2402C-PGE

Technical Datasheet

IMX392



See the possibilities



Apex Series



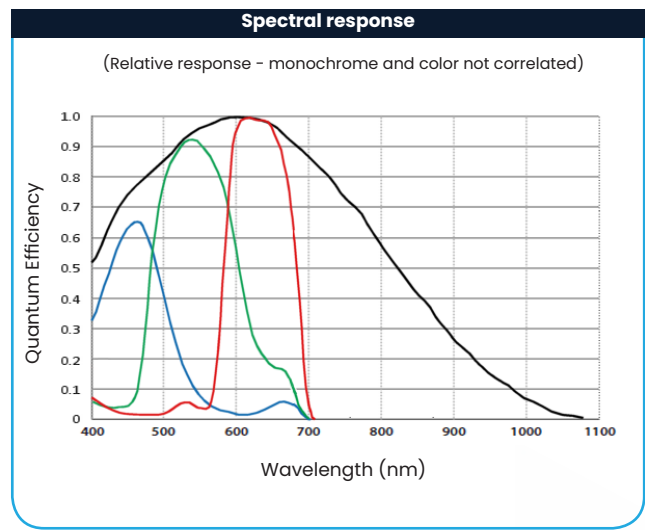
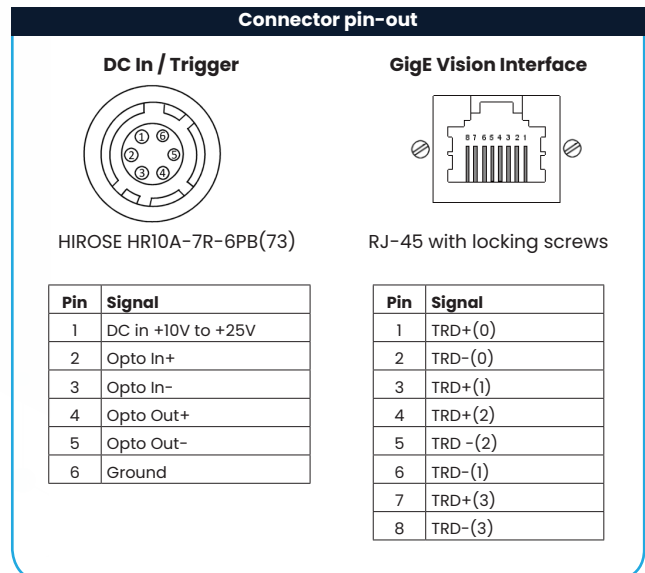
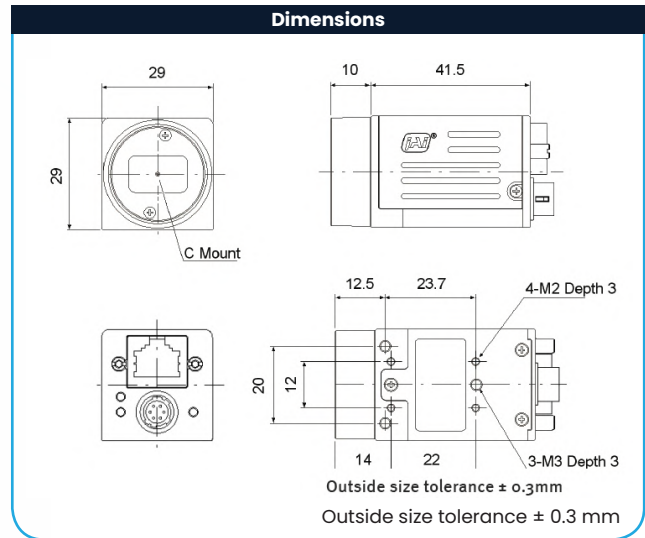
The Go-X Series offers compact, attractively-priced area scan cameras with a blend of features, image quality and industrial grade reliability that is in high demand for the next generation of machine vision systems.

The Go-X Series incorporates the most popular Sony Pregius and Pregius S global shutter CMOS sensors, and several Starvis CMOS sensors with rolling shutter technology. Resolutions range from 2.3 to 24.5 megapixels with a choice of USB3 Vision, GigE Vision (1000BASE-T or 5GBASE-T), or CoaXPress interfaces.

Specification Highlights

SENSOR:	IMX392	SHUTTER:	Global Shutter
FORMAT:	1/2.3"	FRAME RATE:	50 fps
PIXEL SIZE:	3.45 x 3.45 μ m	INTERFACE:	GigE Vision 1-Cable (PoE)
LENS MOUNT:	C-Mount	RESOLUTION MP:	2.3 MP
SPECTRUM:	Color (Visible)	RESOLUTION WxH:	1920 x 1200 px

Specifications		GOX-2402-PGE
Sensor	1/2.3" CMOS global shutter (IMX392)	
Active pixels	1920 (h) x 1200 (v)	
Frame rate	49.9 frames/sec. @ 8-bit mono/Bayer	
Active area	6.62 mm (h) x 4.14 mm (v) - 7.81 mm diagonal	
Pixel size	3.45 μm x 3.45 μm	
System clock	74.25 MHz (for pulse generator)	
Read-out modes		
Full ROI (single)	1920 (h) x 1200 (v) up to 49.9 fps H: 96 - 1904 pixels in 16-pixel steps V: 8 to 1198 lines in 2-line steps	
Binning	1x2, 2x1, 2x2 (mono only)	
EMVA 1288 Parameters	10-bit output format	
Absolute sensitivity	Mono: 3.71 p Color: 4.86 p ($\lambda = 527 \text{ nm}$)	
Maximum SNR	Mono: 39.7 dB Color: 39.7 dB	
Traditional SNR*	>60 dB mono, >60 dB color (0 dB gain, 10-bit)	
Video signal output	Monochrome: 8/10/12-bits [†] Color: 8/10/12-bit Bayer [†]	
Gain control	Manual/auto 0 dB to +42 dB	
White balance	Off, presets, or one-push/continuous AWB	
Gamma/LUT	0.45 to 1.0 (9 steps) or 257-point programmable LUT	
Synchronization	Internal	
Video modes	0.45 to 1.0 (9 steps) or 257-point programmable LUT	
Trigger input	Opto In, Pulse Generators (4), Software, NAND Out (2), User Output (4)	
Exposure modes	Timed/EPS, RCT, Trigger Width, Auto	
Electronic shutter	Timed: 14.73 μs to 8 s in 1 μs steps Auto: 100 μs to 20 ms at full resolution	
Auto Level Control (ALC)	Shutter range from 100 μs to 20 ms, gain range from 0 dB to +42 dB. Tracking speeds and max. values adjustable.	
Shading correction	Flat shading, color shading (color model)	
Pre-processing functions	H & V flip (mirroring), blemish compensation, H & V decimation	
Operating temp. (ambient)	-5°C to +45°C (20 to 80% non-condensing)	
Storage temp. (ambient)	-25°C to +60°C (20 to 80% non condensing)	
Vibration	10G (20 Hz to 200 Hz, XYZ directions)	
Shock	80 G	
Regulations	CE(EN 55032:2015(CISPR32:2015), EN 55035:2017(CISPR35:2016)), FCC Part 15 Class A, RoHS/WEEE, KC	
Power	6-pin PoE	+10V to +25V DC. 2.7 W typical @ +12 V +36V to +57 V DC. 3.7 W typical @ +48 V
Lens mount	C-mount	
Dimensions (H x W x L)	29 mm x 29 mm x 51.5 mm	
Weight	65 g	
Ordering Information		
GOX-2402M-PGE	Monochrome camera with GigE Vision interface	
GOX-2402C-PGE	Color camera with GigE Vision interface	



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

[†]12-bit output only available in video processing bypass mode. See manual for details.

Product Highlights

- Go-X Series delivers exceptional combination of price and performance
- 2.3-megapixel, 1/2.3" CMOS imager (global shutter)
- Up to 49.9 fps at full resolution (1920 x 1200)
- 3.45 μm square pixels
- 8/10/12-bit* output in choice of monochrome or raw Bayer color models
- ROI settings for added flexibility
- Horizontal/vertical image flip function, plus blemish correction and shading compensation
- Includes Sequencer function and Automatic Level Control (ALC) for dynamic lighting conditions
- Compact size with excellent shock and vibration resistance
- Accepts power over GigE Vision interface or separate 6-pin connector
- C-mount lens mount

* Not all processing functions supported with 12-bit output.

Additional Product Images



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