

GOX-3201M-PGE

Technical Datasheet

IMX265



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.

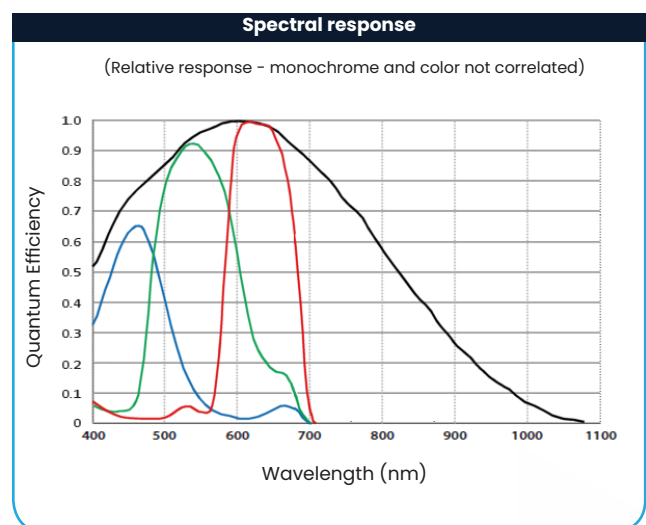
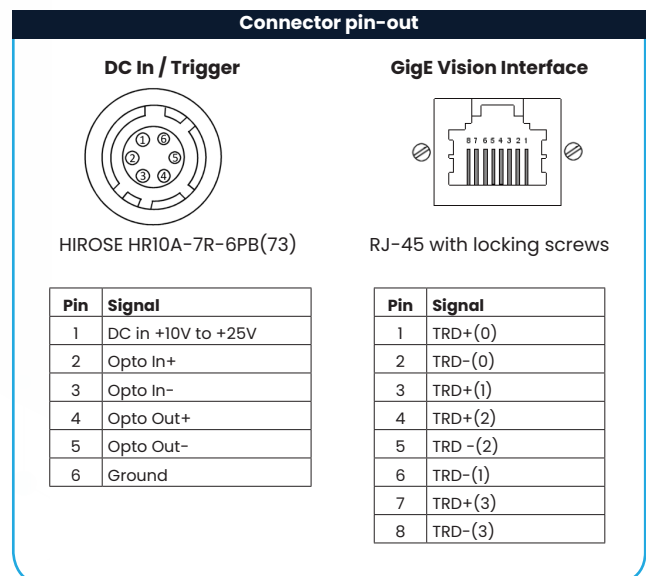
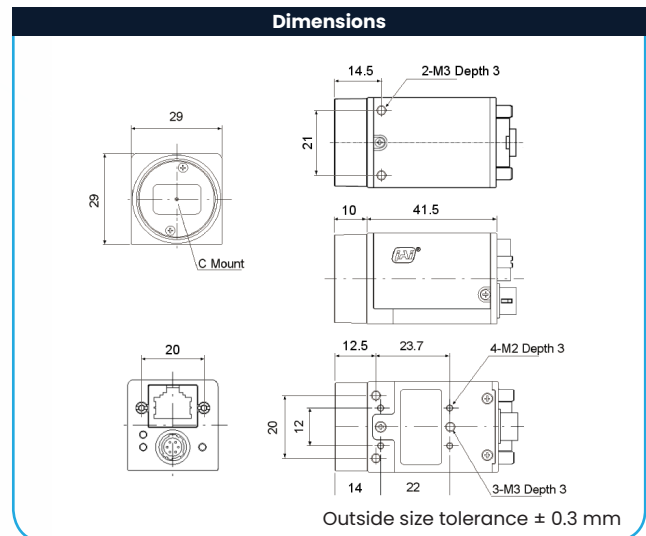
The Go-X Series incorporates the most popular Sony Pregius and Pregius S global shutter CMOS sensors, and several Starvis CMOS sensors with rolling shutter technology. Resolutions range from 2.3 to 24.5 megapixels with a choice of USB3 Vision, GigE Vision (1000BASE-T or 5GBASE-T), or CoaXPress interfaces.

Specification Highlights

SENSOR: IMX265
FORMAT: 1/1.8"
PIXEL SIZE: 3.45 x 3.45 μm
LENS MOUNT: C-Mount
SPECTRUM: Monochrome (Visible + NIR)

SHUTTER: Global Shutter
FRAME RATE: 36 fps
INTERFACE: GigE Vision 1-Cable (PoE)
RESOLUTION MP: 3.2 MP
RESOLUTION WxH: 2048 x 1536 px

Specifications		GOX-3201-PGE
Sensor		1/1.8" CMOS global shutter (IMX265)
Active pixels		2048 (h) x 1536 (v)
Frame rate		36.5 frames/sec. @ 8-bit mono/Bayer
Active area		7.07 mm (h) x 5.3 mm (v) - 8.83 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)		2048 (h) x 1536 (v) up to 36.5 fps H: 96 - 2032 pixels in 16-pixel steps V: 8 to 1534 lines in 2-line steps
Binning		1x2, 2x1, 2x2 (mono only)
EMVA 1288 Parameters		10-bit output format
Absolute sensitivity		Mono: 3.29 p Color: 3.58 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		Normal/Single ROI, Sequencer (Trigger & Command)
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 27.3 ms at full resolution
Auto Level Control (ALC)		Shutter range from 100 μs to 27.3 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-3201M-PGE		Monochrome camera with GigE Vision interface
GOX-3201C-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
- 3.2-megapixel, 1/1.8" CMOS imager (global shutter)
- Up to 55 fps at full resolution (2048 x 1536)
- 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 USB3 Vision interface or via separate 6-pin connector
- C-mount lens mount

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

Additional Product Images



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