

GO-5000M-PGE-UV

Technical Datasheet



See the possibilities

Lince5M



Apex Series



JAI's Go Series delivers an exceptional blend of small size, high versatility, and excellent performance, all at an entry-level price, making the cameras a perfect starting point for a wide range of machine vision applications.

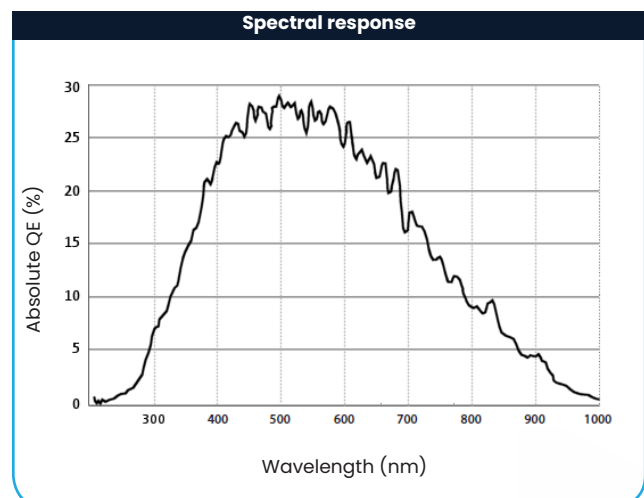
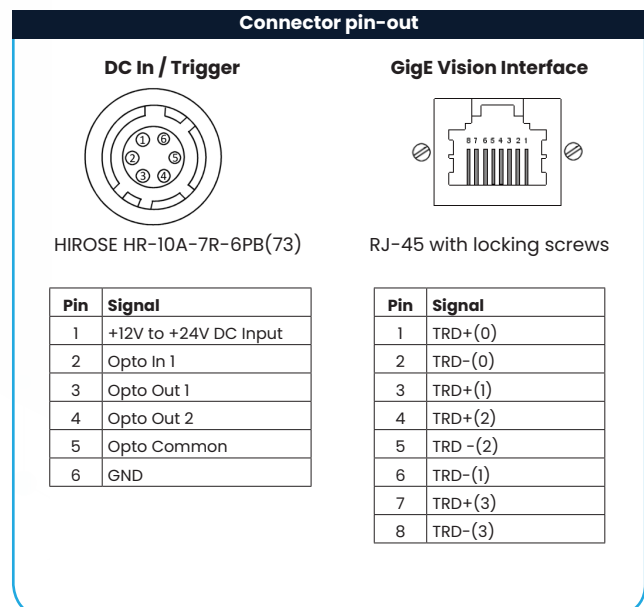
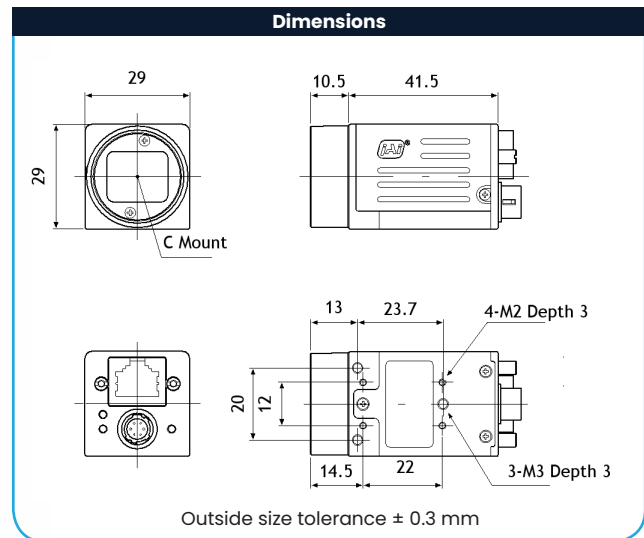
CMOS technology, low-noise pixels, global shutters, sequencer functions, and other advanced features help ensure image quality and operational flexibility beyond entry-level expectations.

Specification Highlights

SENSOR: Lince5M
FORMAT: 1"
PIXEL SIZE: 5.0 x 5.0 μ m
LENS MOUNT: C-Mount
SPECTRUM: Monochrome (Visible + UV)

SHUTTER: Global Shutter
FRAME RATE: 22 fps
INTERFACE: GigE Vision 1-Cable (PoE)
RESOLUTION MP: 5 MP
RESOLUTION WxH: 2560 x 2048 px

Specifications		GO-5000M-PGE-UV
Sensor		1" CMOS global shutter (Lince5M) with no microlenses
Sensor protective covering		Quartz glass with double AR coating
Pixel clock		48 MHz
Frame rate, full frame		22 frames/sec. @ 8-bit
Active area		12.8 mm (h) x 10.2 mm (v), 16.39 mm diagonal
Cell size		5.0 μm (h) x 5.0 μm (v)
Active pixels		2560 (h) x 2048 (v)
Read-out modes		
Full ROI		2560 (h) x 2048 (v) up to 22 fps Any start line, any height in 1-line steps, with X offset and width in 8-pixel steps
Binning		1x2, 2x1, 2x2, 4x4
Traditional SNR*		>55 dB (0 dB gain)
Video signal output		8/10/12-bit monochrome
Gain (digital)		Manual/automatic 0 dB to +24 dB
Gain (analog)		1x, 2x, 4x
Gamma		0.45, 0.6, 1.0 or 32-point LUT
Synchronization		Internal
Trigger input		Opto In, Pulse Generators, Software, User Output, Actions
Trigger modes		EPS, Trigger Width, Timed RCT (with ALC), Sequence
Electronic shutter		
Timed exposure		10 μs to 8 sec in 1 μs steps
Auto shutter		1/22 to 1/10,000 sec.
Auto Level Control (ALC)		Shutter range from 1/22 to 1/10,000, gain range from 0 dB to +24 dB Tracking speeds and max values adjustable.
High Dynamic Range function		4 built-in HDR slopes. Selectable up to ~100 dB.
Pre-processing functions		Blemish compensation (256 pixels)
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%. 2.5W typical @ 12V 35V to 57V DC. 3.19W typical @ 55V
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
Ordering Information		
GO-5000M-PGE-UV		Monochrome UV 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.

Product Highlights

- Large format 5 MP CMOS imager (global shutter) with extended UV sensitivity
- Up to 22 fps at full resolution
- 5.0 μm square pixels
- Small size (29 x 29 x 41.5 mm, excluding lens mount)
- 8/10/12-bit monochrome output
- 60 dB linear dynamic range with built-in HDR modes up to 100 dB
- Analog and digital gain control for less quantized noise in low-light situations
- Exposure control from 10 μs to 8 seconds in 1 μs steps
- 2X and 4X binning for increased sensitivity
- Single and multi-ROI modes for flexible windowing and use of 2/3" or 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

Additional Product Images



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