

❖ **GO-5000M-PGE-UV**  
5-megapixel CMOS global shutter



- *Large format 5 MP CMOS imager (global shutter) with extended UV sensitivity*
- *Up to 22 fps at full resolution*
- *5.0  $\mu\text{m}$  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  $\mu\text{s}$  to 8 seconds in 1  $\mu\text{s}$  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*

# Specifications for GO-5000M-PGE-UV

# Go Series

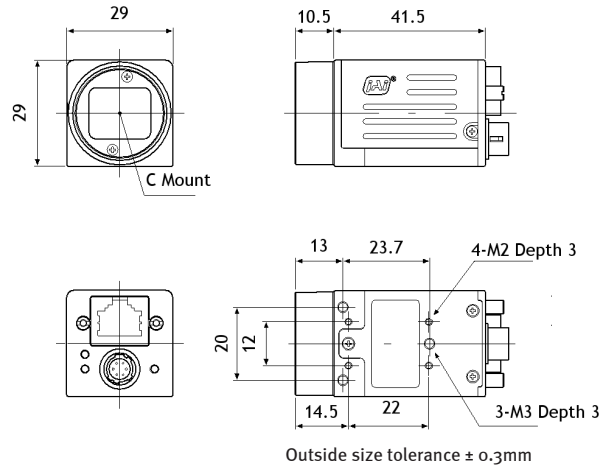
Specifications		GO-5000M-PGE-UV
Sensor		1" CMOS global shutter (Lince5M) with no microlenses
Sensor protective covering		Quartz glass with double AR coating
Pixel clock		48 MHz
Frame rate, full frame		22 frames/sec. @ 8-bit
Active area		12.8 mm (h) x 10.2 mm (v), 16.39 mm diagonal
Cell size		5.0 μm (h) 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
EMVA 1288 Parameters		10-bit output format
Absolute sensitivity		TBD p (λ = TBD nm)
Maximum SNR		TBD dB
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 (monochrome only).
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 (20Hz to 200Hz 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 ± 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

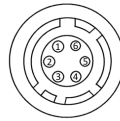
\*Traditional SNR is based on random noise in a single frame, where EMVA SNR measurements consider more comprehensive noise sources and variance over time. For a more complete description, see the manual.

## Dimensions



## Connector pin-out

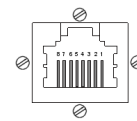
### DC In / Trigger



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

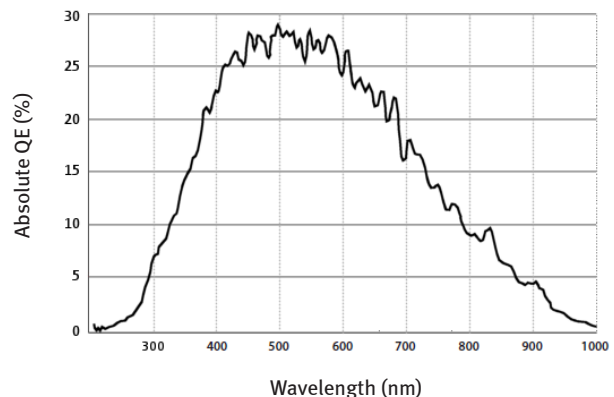
### GigE Vision Interface



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



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



See the possibilities

Visit our web site on [www.jai.com](http://www.jai.com)