

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



- *Large format 5 MP CMOS imager (global shutter) with extended UV sensitivity*
- *Up to 107 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  $\mu\text{s}$  (1/100,000) 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 Mini Camera Link connectors*
- *C-mount lens mount*

# Specifications for GO-5000M-PMCL-UV

# Go Series

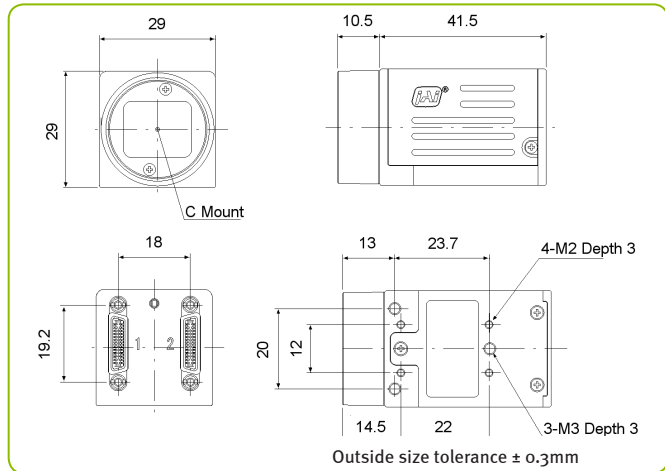
Specifications	GO-5000M-PMCL-UV
Sensor	1" CMOS global shutter (Lince 5M) with no microlenses
Sensor protective covering	Quartz glass with double AR coating
Pixel clock	36/28.8/24 MHz
Frame rate, full frame	107 frames/sec. (8-bit, 8-tap, full CL)
Active area	12.8 mm (h) x 10.24 mm (v), 16.39 mm diagonal
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 107 fps Any start line, any height in 1 line steps, with X offset and width in 8 pixel steps Binning: 1X2, 2X1, 2X2, 2X4, 4X2, 4X4
Traditional SNR*	>55 dB (0 dB gain, non-linear)
Video signal output	8/10/12-bit monochrome
Gain (digital)	Manual/automatic 0 dB to +24 dB
Gain (analog)	x1, x2, x4
Gamma	0.45, 0.6, 1.0 or 32-point LUT
Synchronization	Internal
Trigger input	TTL, CL, Pulse Generator, Software, NAND0, NAND1
Trigger modes	EPS, Trigger Width, Timed RCT (with ALC)
Electronic shutter	Timed exposure: 10 μs to 8 sec in 1 μs steps Auto shutter: 1/107 to 1/10,000 sec.
Auto Level Control (ALC)	Shutter range from 1/107 to 1/10,000, gain range from 0 dB to +24 dB Tracking speeds and max values adjustable.
Pre-processing functions	Flat field correction, blemish compensation (512 pixels)
High Dynamic Range mode (HDR)	4 user-selectable knee slopes – 70/80/90/100 dB
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, 20 mins.)
Shock	80 G
Regulations	CE (EN61000-6-2, EN61000-6-3), FCC Part 15 class B, RoHS/WEEE
Power	Power over Mini-CL. 3.0W typical (full frame @ 12V)
Lens mount	C-mount
Dimensions (H x W x L)	29 mm x 29 mm x 41.5 mm (excluding lens mount)
Weight	46 g

## Ordering Information

GO-5000M-PMCL-UV | Monochrome UV camera with Mini Camera Link

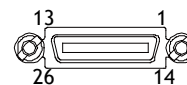
\*Traditional SNR is based on random noise in a single frame, where EMVA SNR measurements consider more comprehensive noise sources and variance over time. For a more complete description, see the manual.

## Dimensions



## Connector pin-out

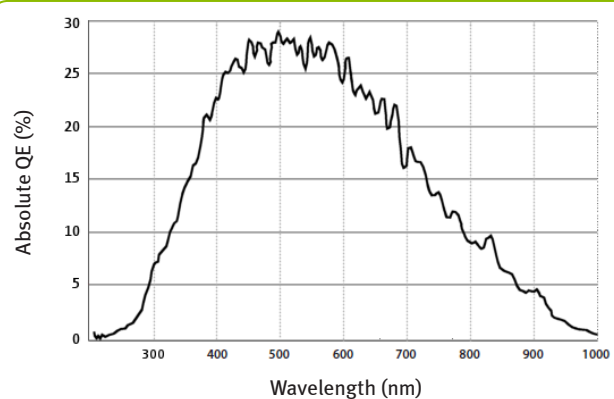
### Mini-CL interface Interface 1



Pin	Signal	Function
1	26	Power
13	14	GND
2	15	-/+ TxOUT 0
3	16	-/+ TxOUT 1
4	17	-/+ TxOUT 2
5	18	-/+ TxClk
6	19	-/+ TxOUT 3
7	20	+/- RXD
8	21	-/+ TXD
9	22	CC1-/CC1+
10	23	CC2-/CC2-
11	24	CC3-/CC3+
12	25	CC4-/CC4-

For Medium and Full implementations a second Mini-CL interface is provided. Video Channel 2 is on pin pairs (2,15), (3,16), (4,17), (5,18), and (6,19). Video Channel 3 is on pin pairs (8,21), (9,22), (10,23), (11,24), and (12,25). Consult manual for specific bit depths and pin assignments.

## Spectral Response



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