

➤ **GO-8105M-5GE-UV** 8.1-megapixel CMOS global shutter



- **High performance camera with 8.1-megapixel resolution and UV sensitivity**
- **2/3" CMOS imager (global shutter) features backside illuminated pixel technology**
- **2856 x 2848 resolution with 2.74 μm square pixels**
- **Up to 66 fps over high performance 5GBASE-T interface (5 gigabits per second)**
- **Can auto-negotiate to 2.5GBASE-T and standard GigE (1000BASE-T)**
- **8/10/12-bit monochrome output**
- **Flexible ROI & rescaling function (Xscale) plus 1x2, 2x1, and 2x2 binning**
- **Horizontal/vertical image flip function, plus blemish compensation and shading correction**
- **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 via separate 6-pin connector**
- **Available with quartz glass cover on sensor or with user-removable protective glass**
- **C-mount lens mount**

Specifications for GO-8105M-5GE-UV

Go Series

Specifications	GO-8105M-5GE-UV
Sensor	2/3" CMOS global shutter (IMX487)
Active pixels	2856 (h) x 2848 (v)
Frame rate, full frame	66 frames/sec. @ 8-bit, 5GBASE-T
Active area	7.8 mm (h) x 7.8 mm (v) - 11.05 mm diagonal
Pixel size	2.74 μm x 2.74 μm
Read-out modes	Full ROI (single) 2856 (h) x 2848 (v) up to 66 fps H: 96 to 2856 pixels in 8 pixel steps V: 8 to 2848 lines in 2 line steps ROI (multi) Binning Up to 64 scanning areas - no overlap 1X2, 2X1, 2X2
Image scaling (Xscale)	Supports independent, sub-pixel rescaling of H and/or V resolution (1/16 max.)
EMVA 1288 Parameters	10-bit output format
Absolute sensitivity	Mono: TBD p (λ= xxx nm)
Maximum SNR	Mono: TBD dB
Traditional SNR*	>60 dB mono, >60 dB color (0 dB gain, 10-bit)
Video signal output	Monochrome: 8/10/12-bits
Gain	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
Time synchronization	Support for Precision Time Protocol (IEEE 1588)
Trigger input	Opto In, Pulse Generators (4), Software, NAND Out (2), User Output (4), Actions
Exposure modes	Timed/EPS, RCT, Trigger Width, Auto
Electronic shutter	Timed: 3.5 μs to 8 sec. in 1 μs steps Auto: 100 μs to 15.1 ms at full resolution
Auto Level Control (ALC)	Shutter range from 100 μs to 15.1 ms, gain range from 0 dB to +42 dB. Tracking speeds and min/max values adjustable.
Shading correction	Flat shading
Video processing functions	H & V flip (mirroring), blemish compensation, edge enhancement
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	80G
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. 5.1 W typical @ +12 V +36V to +57 V DC. 6.7 W typical @ +48 V
Lens mount	C-mount
Dimensions (H x W x L)	29 mm x 29 mm x 68 mm
Weight	95 g (85 g for GL model)

Ordering Information

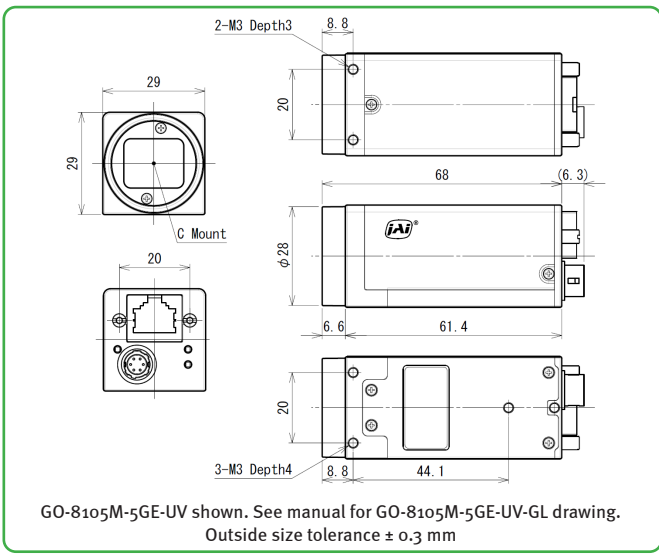
GO-8105M-5GE-UV	UV-sensitive camera with 5GigE Vision interface
GO-8105M-5GE-UV-GL	Glassless model with removable protective glass

*Traditional SNR is based on random noise in a single frame, where EMVA SNR measurements consider more comprehensive noise sources and variance over time.
 †PoE use limited to specific pre-defined conditions. Refer to product manual for details.

- Europe, Middle East & Africa**
Phone +45 4457 8888
Fax +45 4491 8880
- 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

Visit our website on www.jai.com

Dimensions



Connector pin-out

DC In / Trigger

HIROSE HR10A-7R-6PB(73)

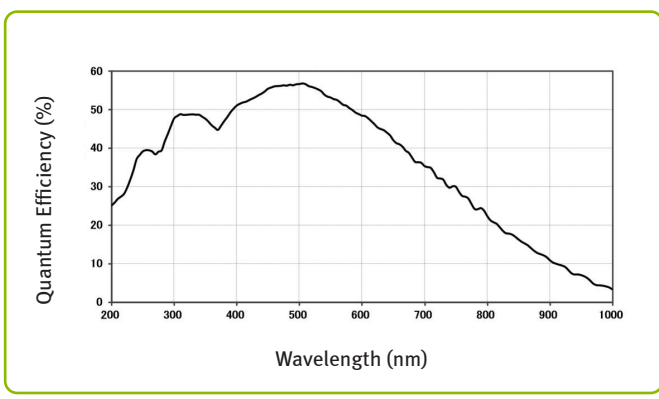
Pin	Signal
1	DC in +10V to +25V
2	Opto In+
3	Opto In-
4	Opto Out+
5	Opto Out-
6	Ground

5GigE Vision Interface

RJ45 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**



**Note: sensitivity extends below 200 nm but specific QE has not been measured. Images captured at wavelengths above 400 nm may exhibit lower quality due to parasitic light sensitivity (PLS).

Company and product names mentioned in this datasheet are trademarks or registered trademarks of their respective owners. JAI A-S cannot be held responsible for any technical or typographical errors and reserves the right to make changes to products and documentation without prior notice.



See the possibilities