

➤ 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 ($\lambda = \text{xxx nm}$)
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)

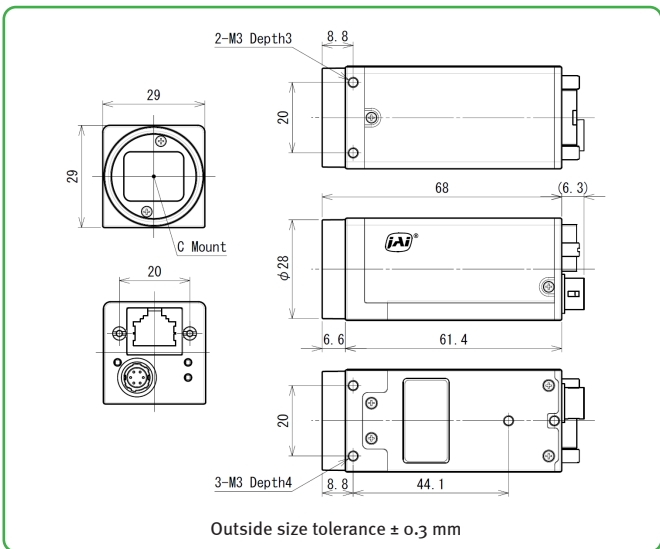
Ordering Information

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.

Dimensions



Connector pin-out

DC In / Trigger

HIROSE HR10A-7R-6PB(73)

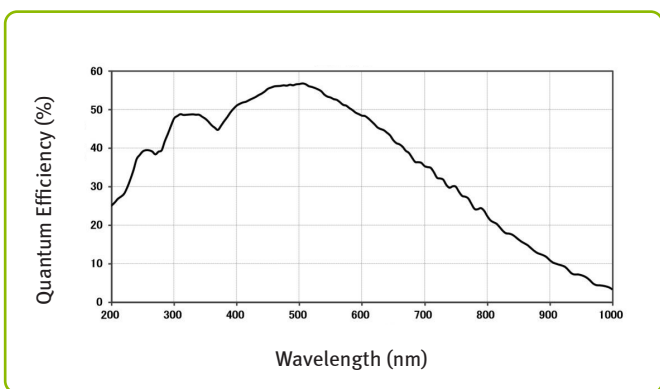
Pin	Signal
1	DC in +10V to +25V
2	Opto In+
3	Opto In-
4	Opto Out+
5	Opto Out-
6	Ground

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).

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