

# MER3-810-36G3M-P-UV(-AF) F02

## MERCURY3 Series 8MP CMOS 2.5GigE UV Camera



MER3-810-36G3M-P-UV(-AF) F02 camera is a UV GigE Vision camera with the Sony "Pregius S" CMOS sensor designed for the wavelength between 200nm to 1100nm. MER3-810-36G3M-P-UV(-AF) F02 is capable of 2.5Gbit/s maximum transfer data rate, and has opto-isolated I/Os that adapt to specific needs. Four-side mounting holes provide maximum installation flexibility for camera. Thanks to the extremely compact (29mm × 29mm), robust metal housings and locking screw connectors, the MERCURY3 cameras can secure the reliability of cameras deployed in harsh environments.

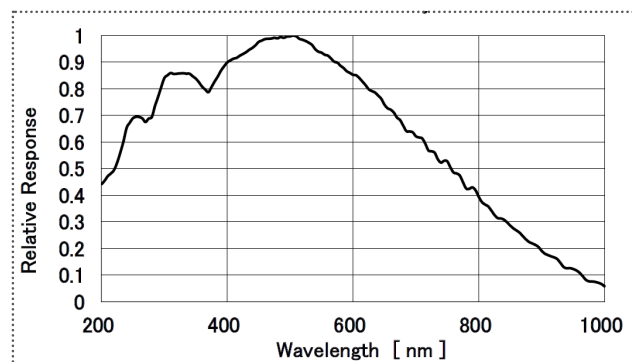
### Applications

Suitable for defect inspection, discharge inspection, recycle industry, printing industry, life science and so on.

### Features

- -AF model support autofocus
- The Sequencer Control supports multiple sets of parameters configuration
- Binning, Decimation, Gamma, Digital Shift, Black Level and Burst Acquisition
- Timer, Counter, LUTs and User Set Control
- Support Remove Parameter Limit to expand the range of exposure, gain and so on
- 512K data storage area for saving algorithm coefficients and parameter configuration

### Spectral Response\*



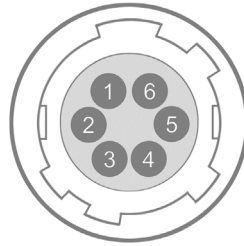
\*IMX487 is designed to have best performance at UV wavelength from 200nm~400nm. While the sensor is capable of sensing light beyond 400nm, visible light performance is not guaranteed.

\*UV-ray may cause damage to the image sensor device, so customer need to evaluate lifetime under each own light source conditions and confirm the lifetime design.

## Specifications

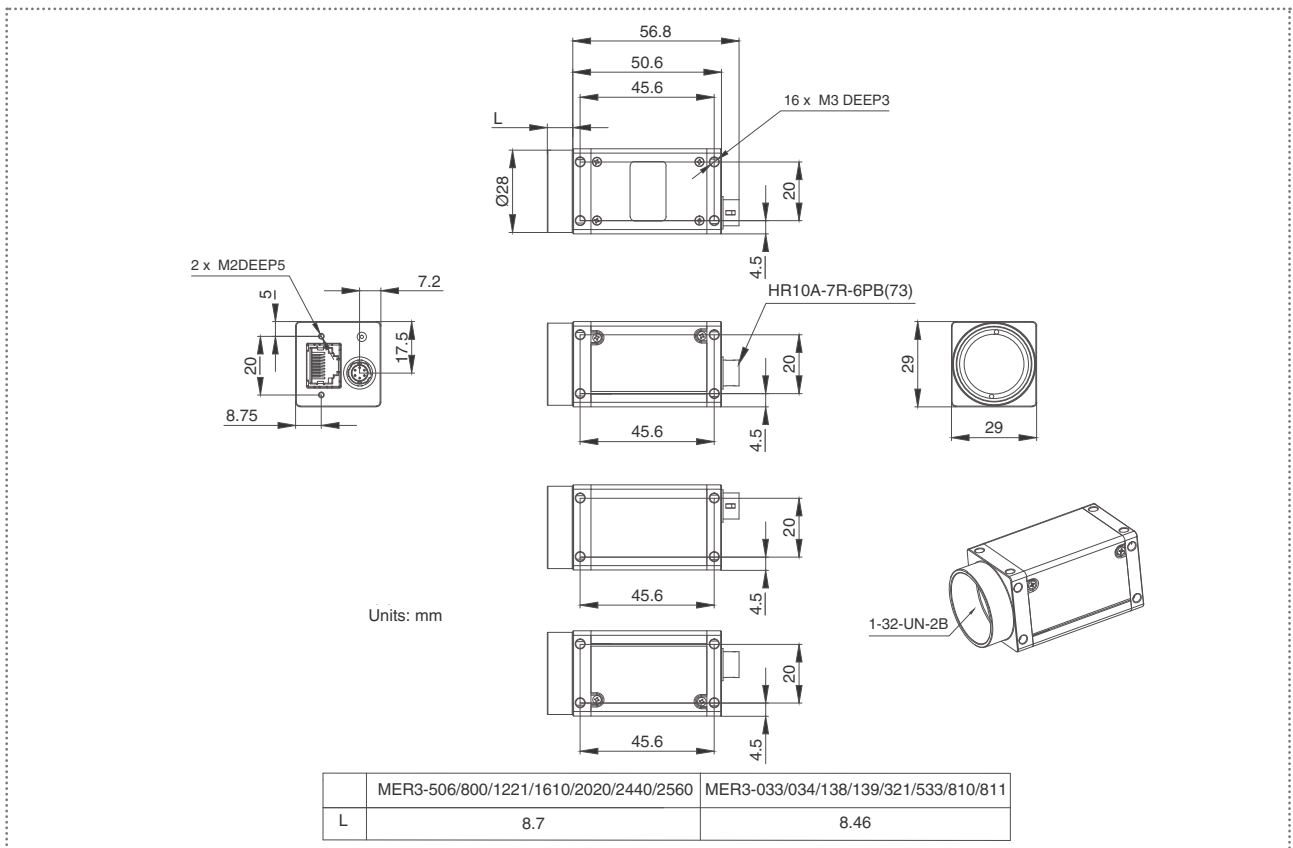
Model	MER3-810-36G3M-P-UV F02	MER3-810-36G3M-P-UV-AF F02
Resolution	2856(H) × 2848(V)	
Sensor	Sony IMX487 Global shutter CMOS	
Sensor Format	2/3"	
Pixel Size	2.74μm × 2.74μm	
Frame Rate	34.55fps @ 2856 × 2848 Adjust the packet size to 8164 and reserved bandwidth to 5, frame rate up to 36.13fps Under acquisition burst high speed mode, acquisition frame rate up to 55.62fps	
ADC	12 bit	
Pixel Bit Depth	8 bit, 12 bit	
Mono/Color	Mono, UV	
Pixel Formats	Mono8 / Mono12	
SNR	39.77 dB	
Exposure Time	UltraShort: 1μs~2.4μs, Actual Steps: 0.1μs Standard: 3μs~20μs, Actual Steps: 1μs; 21μs~1s, Actual Steps: 1 row period	
Gain	0dB ~ 16dB, Default: 0dB, Steps: 0.1dB	
Binning	Sensor: 1×1, 2×2	
Decimation	Sensor: 1×1, 2×2	
Synchronization	Hardware trigger, software trigger	
Acquisition Mode	Single frame, Continuous, Software trigger, Hardware trigger	
Reverse X/Y	Reverse X/Y	
I/O Interface	1 input with opto-isolated, 2 programmable GPIOs	
Data Interface	2.5GigE	
Power Supply	PoE (Power over Ethernet, IEEE802.3af compliant) or 12VDC-10% ~ 24VDC+10%	
Power Consumption	< 4.73 W @ 12V / PoE	
Operating Temp.	0°C ~ +50°C	
Storage Temp.	-20°C ~ +70°C	
Operating Humidity	10% ~ 80%	
Lens Mount	C	
Filters / Transparent Glass	-	
Dimensions	29(W) × 29(H) × 50.6(L) mm (without lens adapter or connectors)	
Weight	69 g	
Software	3rd-party software such as HALCON, VisionPro and LabVIEW	
OS	32bit / 64bit Windows, Linux, Mac OS	
Conformity	CE, RoHS, FCC, ICES, UKCA, GigE Vision®, GenICam®	

I/O Interface



Pin	Definition	Description
1	POWER_IN	Camera external power, +12V DC~+24V DC
2	Line0+	Opto-isolated input +
3	Line2	GPIO0 input/output
4	Line3	GPIO1 input/output
5	Line0-	Opto-isolated input -
6	GND	PWR GND & GPIO GND

Technical Drawing



China Daheng Group, Inc. Beijing Image Vision Technology Branch

12F Daheng Science & Technology Tower, No.3 Suzhou Street, Haidian District, Beijing China, 100080

Tel: +86 10 82828878

E-mail: isales@daheng-imaging.com