

MER3-810-36G3M-P-UV F02

MERCURY3 Series 8MP CMOS 2.5GigE UV Camera



MER3-810-36G3M-P-UV 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 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.

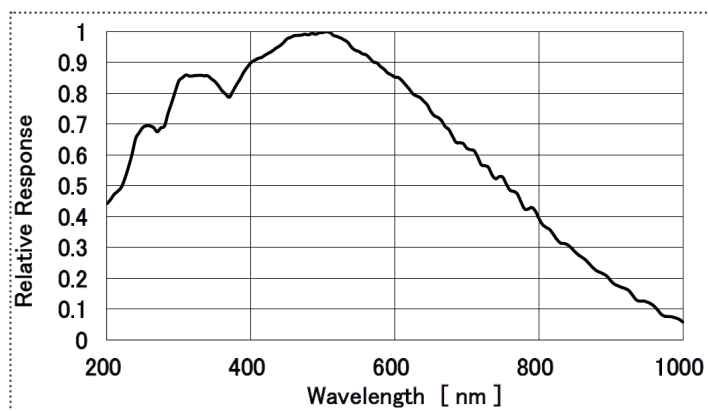
Applications

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

Features

- 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*



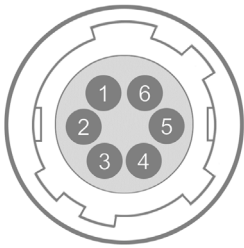
*IMX487 is designed to have best performance at UV wavelength from 200nm~400nm. While the sensor is capable of sensing light beyond 400nm, visible light performance is not guaranteed.

*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

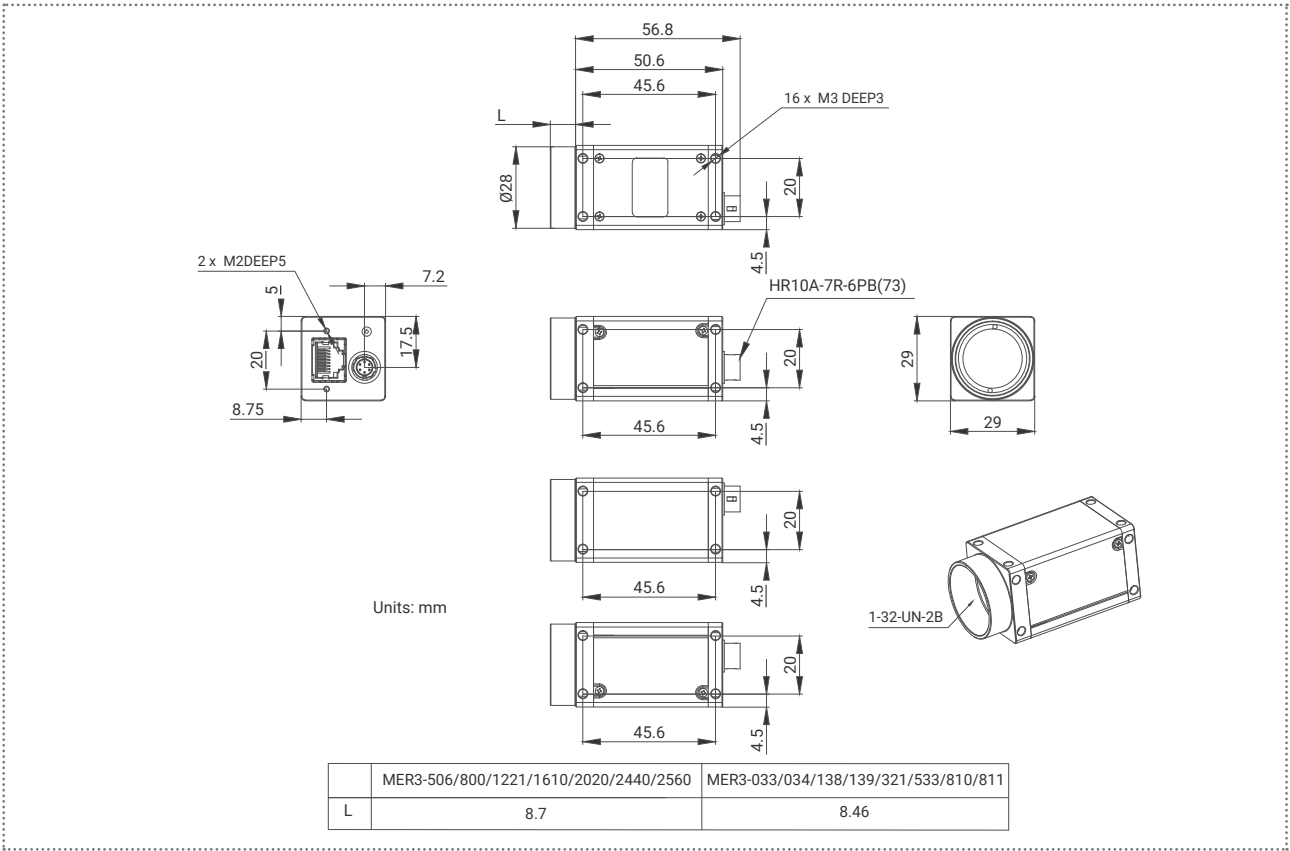
Model	MER3-810-36G3M-P-UV F02
Resolution	2856(H) × 2848(V)
Sensor	Sony IMX487 Global shutter CMOS
Sensor Format	2/3"
Pixel Size	2.74μm × 2.74μm
Frame Rate	34.55fps (Under acquisition burst high speed mode, acquisition frame rate up to 55.62fps)
ADC	12 bit
Pixel Bit Depth	8 bit, 12 bit
Mono/Color	Mono, 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



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