

MER2-1070-10GM(-P)

10MP CMOS GigE Area Scan Camera



GEN*i*CAM



The MER2-1070-10GM(-P) camera is a monochrome GigE Vision camera with the MT9J003 CMOS sensor. Thanks to the extremely compact (29mm × 29mm), robust metal housings and locking screw connectors, the MERCURY2 cameras can secure the reliability of cameras deployed in harsh environments. The MER2-1070-10GM(-P) camera has opto-isolated I/Os. The GPIOs give MER2-G(-P) cameras maximum flexibility to adapt to specific needs.

Applications

Suitable for machine vision applications such as industrial inspection, medical, scientific research, education and so on.

Features

- Auto Gain, Auto Exposure, ROI
- Binning, Decimation
- Timer, Counter, LUTs and User Set Control
- Gamma, Black Level, Digital Shift, Sharpness, Noise Reduction
- Remove Parameter Limits
- 16KB User Data Area

Specifications

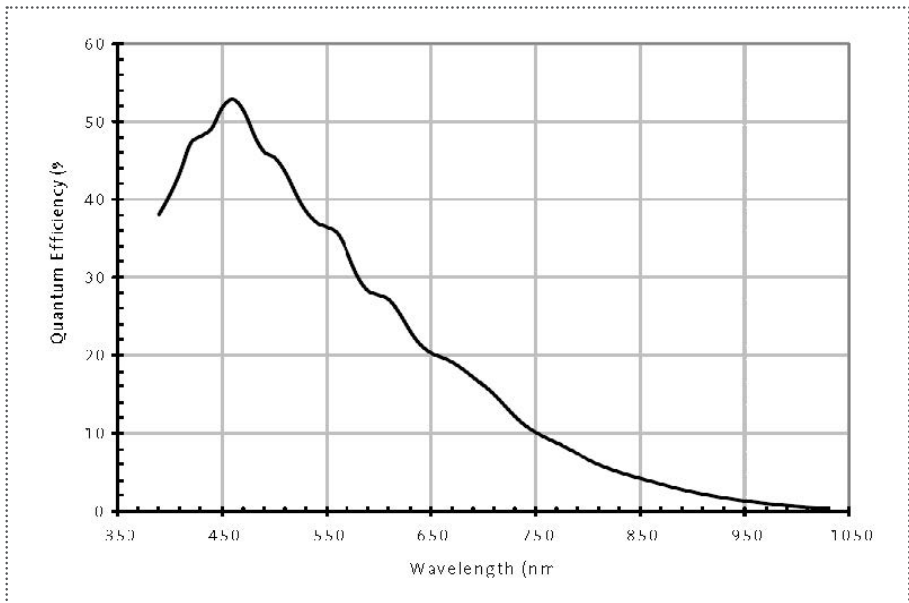
Model	MER2-1070-10GM	MER2-1070-10GM-P
Resolution	3840(H) × 2748(V)	
Sensor	MT9J003 electronic Rolling shutter CMOS	
Sensor Format	1/2.3"	
Pixel Size	1.67μm × 1.67μm	
Frame Rate	10 fps	
ADC	12 bit	
Pixel Bit Depth	8 bit, 12 bit	
Mono/Color	Mono	
Pixel Formats	Mono8 / Mono12	
SNR	36.12 dB	
Exposure Time	Standard: 42μs~1s, Actual Steps: 1 row period	
Gain	0dB~25.9dB, Default: 0dB, Steps: 0.1dB	
Binning	1×1, 1×2, 2×1, 2×2	
Decimation	FPGA: 1×1, 1×2, 2×1, 2×2	
Synchronization	Hardware trigger, software trigger	
Acquisition Control	Continuous, Software trigger, Hardware trigger	
Reverse X/Y	Reverse X/Y	
I/O Interface	1 input and 1 output with opto-isolated, 2 programmable GPIOs	
Data Interface	GigE	GigE PoE
Power Supply	12VDC-10% ~ 24VDC+10% supplied via the camera's Hirose connector MER2-G-P support PoE (Power over Ethernet, IEEE802.3af compliant)	
Typical Power	3.89W @ 12VDC	3.89W @ 12VDC, 4.25W @ PoE
Operating Temp.	0°C ~ +45°C	
Storage Temp.	-20°C ~ +70°C	
Operating Humidity	10% ~ 80%	
Lens Mount	C / CS	
Dimensions	MER2-G: 29(W) × 29(H) × 29(L) mm (without lens adapter or connectors) MER2-G-P: 29(W) × 29(H) × 40.3(L) mm (without lens adapter or connectors)	
Weight	MER2-G: 65 g; MER2-G-P: 75 g	
Software	3rd-party software such as HALCON, VisionPro and LabVIEW	
OS	32bit / 64bit Windows, Linux, Mac OS	
Conformity	CE, RoHS, FCC, ICES, UKCA, UL, GigE Vision®, GenICam®	

I/O Interface

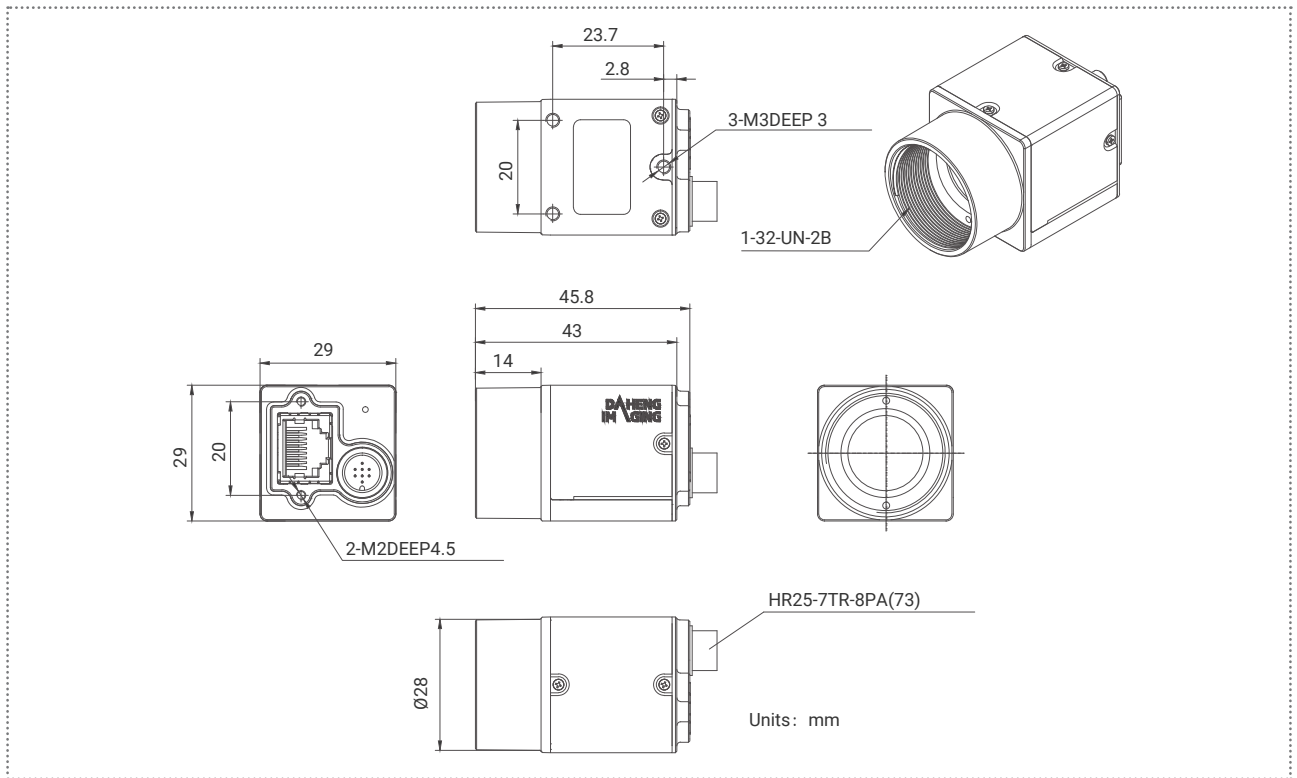


Pin	Definition	Description
1	Line 0+	Opto-isolated input +
2	GND	PWR GND & GPIO GND
3	Line 0-	Opto-isolated input -
4	POWER_IN	Camera external power, +12V DC ~ +24V DC
5	Line 2	GPIO input/output
6	Line 3	GPIO input/output
7	Line 1-	Opto-isolated output -
8	Line 1+	Opto-isolated output +

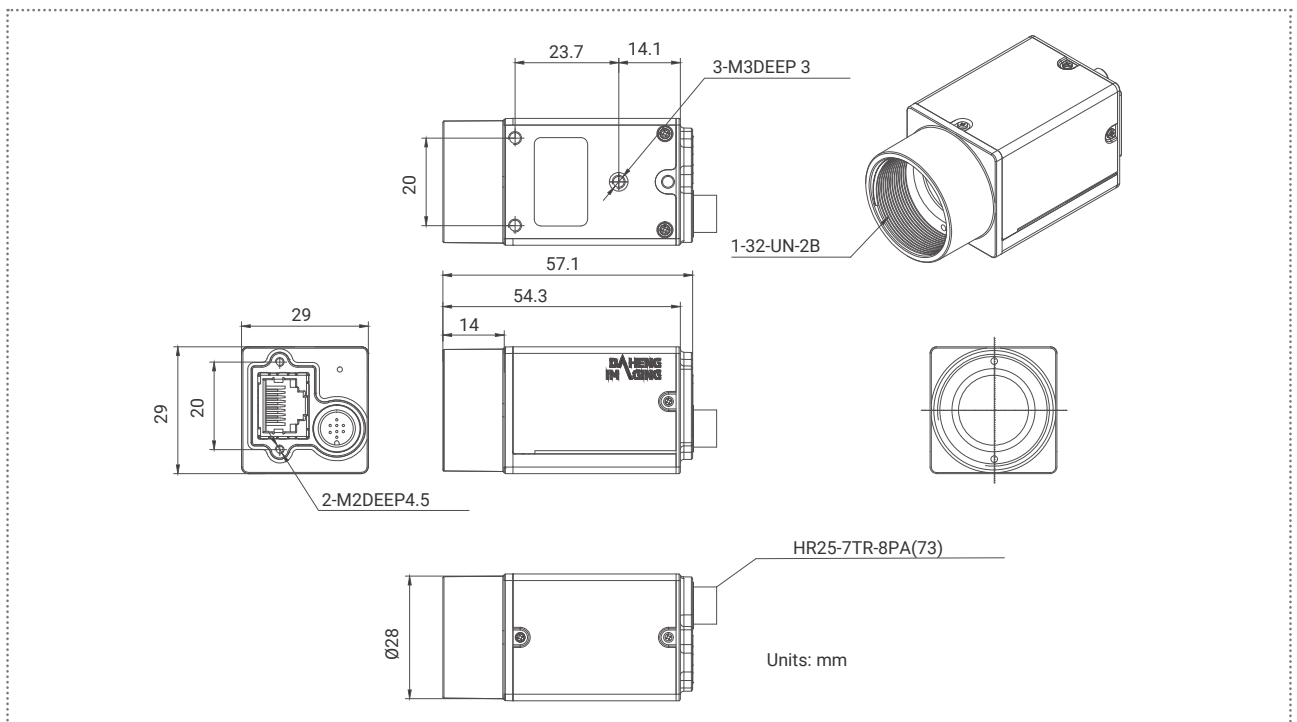
Spectral Response



Technical Drawing



MER2-1070-10GM



MER2-1070-10GM-P

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