

# MER2-630-18GM/C-W90-S90

## 6MP CMOS GigE Area Scan Camera



The MER2-630-18GM/C-W90-S90 camera is a monochrome/color GigE Vision camera with the Sony IMX178 CMOS sensor. The sensor surface is at a 90 degree angle to the Data interface surface. 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.

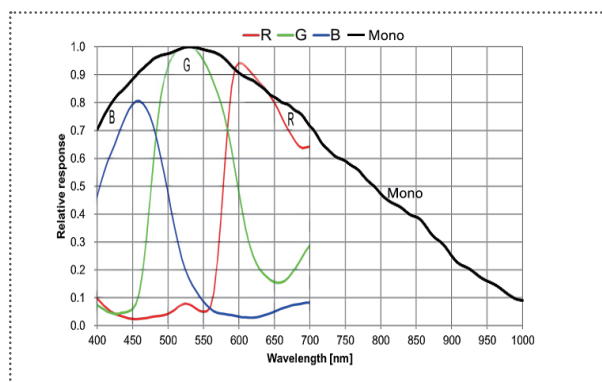
### Applications

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

### Features

- Auto Gain, Auto Exposure, ROI
- Global Reset Release Shutter exposure (GRR)
- Binning, Decimation
- Timer, Counter, LUTs and User Set Control
- Gamma, Black Level, Digital Shift, Sharpness
- Color models support Light Source Preset, Color Transformation Control, Saturation and White Balance
- Monochrome models support Noise Reduction
- Remove Parameter Limits
- 16KB User Data Area

### Spectral Response



## Specifications

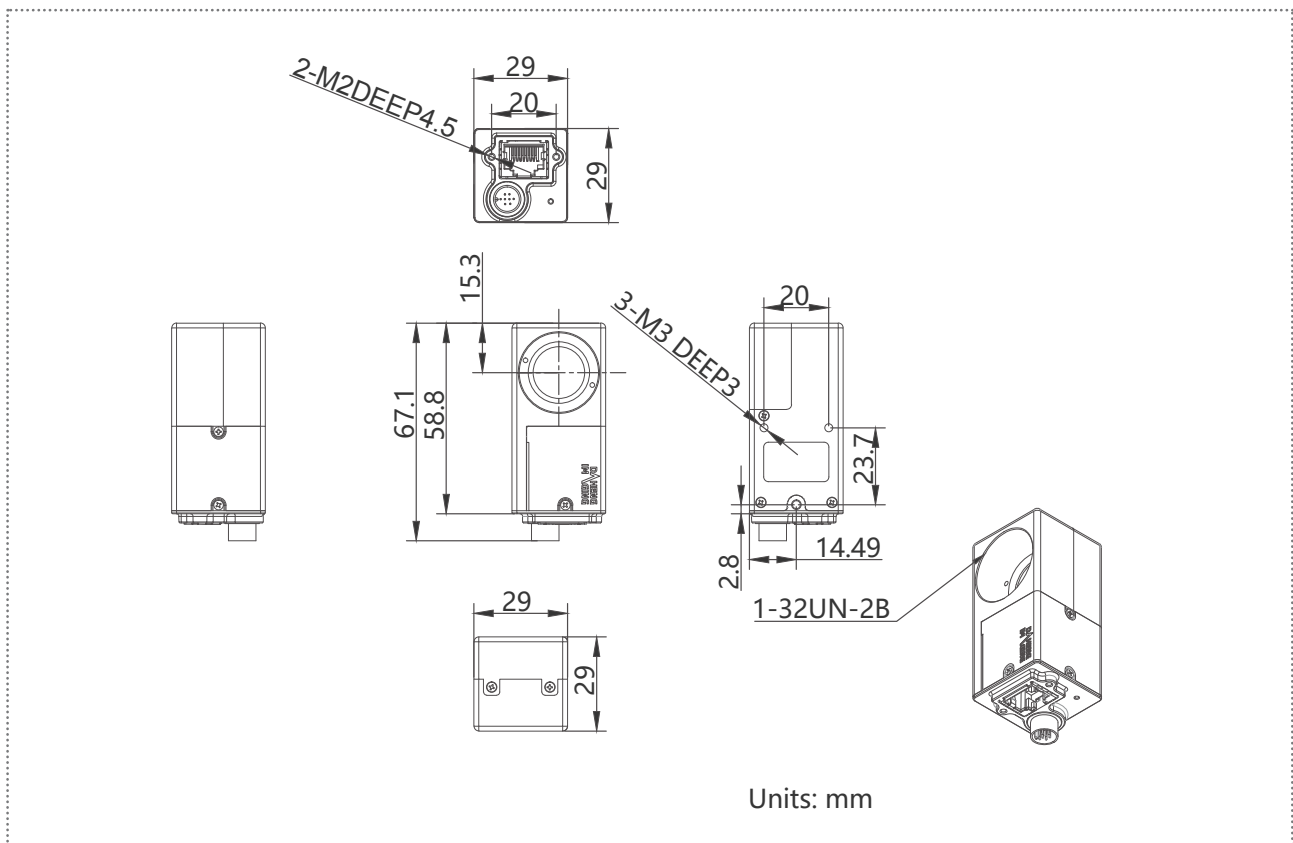
Model	MER2-630-18GC-W90-S90	MER2-630-18GM-W90-S90
Resolution	3088(H) × 2064(V)	
Sensor	Sony IMX178 Rolling shutter CMOS	
Sensor Format	1/1.8"	
Pixel Size	2.4μm × 2.4μm	
Frame Rate	18.45 fps	
ADC	12 bit	
Pixel Bit Depth	8 bit, 12 bit	
Mono/Color	Color	Mono
Pixel Formats	Bayer RG8 / Bayer RG12	Mono8 / Mono12
SNR	39.65 dB	39.97 dB
Exposure Time	Standard: 19μs~1s, GRR: 38μs~0.2s, Actual Steps: 1 row period	
Gain	0dB~24dB, 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	Single frame, 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	
Power Supply	12VDC-10% ~ 24VDC+10% supplied via the camera's Hirose connector	
Power Consumption	< 3 W @ 24 VDC	
Operating Temp.	0° C ~ +45° C	
Storage Temp.	-20° C ~ +70° C	
Operating Humidity	10% ~ 80%	
Lens Mount	C / CS	
Dimensions	29(W) × 29(H) × 58.8(L) mm (without lens adapter or connectors)	
Weight	80 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	Core Color	Description
1	Line 0+	Green	Opto-isolated input +
2	GND	Blue	PWR GND & GPIO GND
3	Line 0-	Grey	Opto-isolated input -
4	POWER_IN	Purple	Camera external power, +12V DC~+24V DC
5	Line 2	Orange	GPIO input/output
6	Line 3	Pink	GPIO input/output
7	Line 1-	White Green	Opto-isolated output -
8	Line 1+	White Blue	Opto-isolated output +

Technical Drawing



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