MARS-3140-3GM/C-P

30MP CMOS GigE Area Scan Camera

MARS-3140-3GM/C-P is a monochrome/color GigE Vision camera with the Sony IMX342 CMOS sensor. The MARS GigE PoE series camera can be powered over Ethernet and has opto-isolated I/Os. Thanks to locking screw connectors, the MARS cameras can secure the reliability of cameras deployed in harsh environments. The MARS cameras are industrial digital cameras with high reliability and high price/performance ratio.

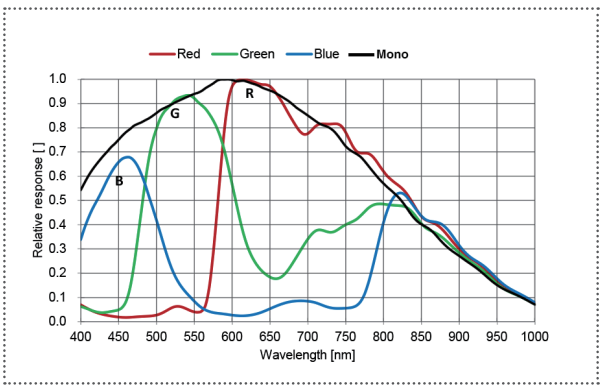
Applications

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

Features

- Decimation, Binning, Digital Shift, Black Level
- Color models support Light source preset, Color Transformation Control
- Adjustable Gamma and Sharpness for optimizing the brightness and sharpness of images
- Defect Pixel Correction, Flat Field Correction
- Timer, Counter, LUTs and User Set Control

Spectral Response



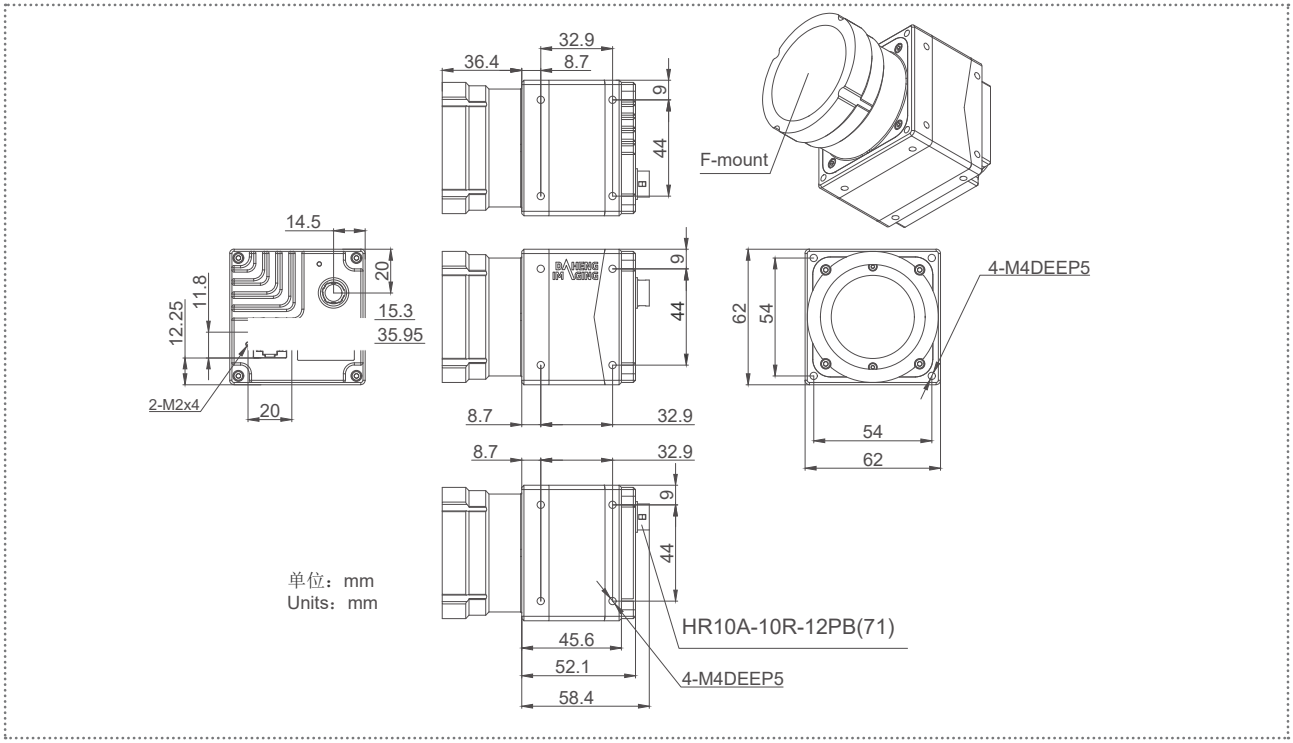
Specifications

Model	MARS-3140-3GC-P	MARS-3140-3GM-P
Resolution	6464(H) × 4852(V)	
Sensor	Sony IMX342 Global shutter CMOS	
Sensor Format	1.8"	
Pixel Size	3.45μm × 3.45μm	
Frame Rate	3.4 fps	
ADC	12 bit	
Pixel Bit Depth	8 bit, 12 bit	
Mono/Color	Color	Mono
Pixel Formats	Bayer RG8 / Bayer RG12	Mono8 / Mono12
SNR	39.83 dB	39.77 dB
Exposure Time	63μs ~ 1s, Actual Steps: 1 row period	
Gain	0dB~24dB, Default: 0dB, Step: 0.1dB	
Binning	FPGA: 1×1, 1×2, 1×4, 2×1, 2×2, 2×4, 4×1, 4×2, 4×4	
Decimation	FPGA: 1×1, 1×2, 1×4, 2×1, 2×2, 2×4, 4×1, 4×2, 4×4	
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 PoE	
Power Supply	12VDC-10% ~ 24VDC+10% supplied via the camera's Hirose connector or PoE (Power over Ethernet, IEEE802.3af compliant)	
Power Consumption	< 5.5 W @ 12 VDC; < 6 W @ PoE	
Operating Temp.	0°C ~ +45°C	
Storage Temp.	-20°C ~ +70°C	
Operating Humidity	10% ~ 80%	
Lens Mount	F-mount (-M02) / M42-mount (-M03) / No-mount (-M06)	
Dimensions	62(W) × 62(H) × 52.1(L) mm (without F-mount length)	
Weight	292 g	
Software	3rd-party software such as HALCON, VisionPro and LabVIEW	
OS	32bit / 64bit Windows, Linux, Mac OS	
Conformity	CE, RoHS, GenICam®, GigE Vision®	

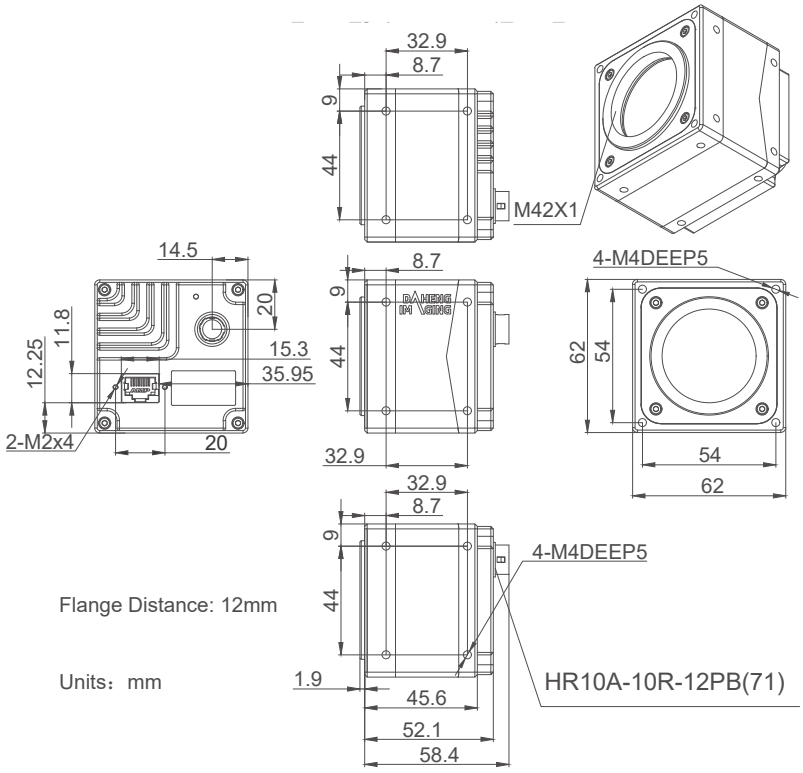
I/O Interface

Pin	Definition	Core Color	Description
1	Line0+	Green	Opto-isolated input +
2	GND	Blue	PWR GND & GPIO GND
3	Line0-	Grey	Opto-isolated input -
4	POWER_IN	Purple	Camera external power, +12V DC~+24V DC
5	Line2	Orange	GPIO input/output
6	Line3	Pink	GPIO input/output
7	Line1-	White Green	Opto-isolated output -
8	Line1+	White Blue	Opto-isolated output +
9	NC1	White Grey	Not Connected, reserved
10	GND	White Purple	PWR GND & GPIO GND
11	NC2	White Orange	Not Connected, reserved
12	NC3	White Pink	Not Connected, reserved

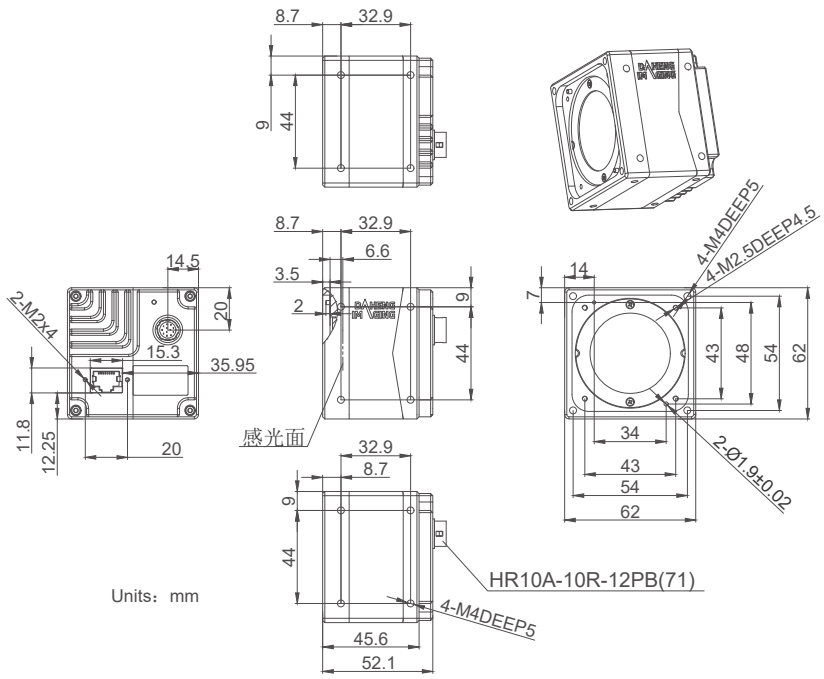
Technical Drawing



MARS-3140-3GM/C-P-M02 (F-mount)



MARS-3140-3GM/C-P-M03 (M42-mount)



MARS-3140-3GM/C-P-M06 (No-mount)

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