

# MARS SERIES MARS-3140-3GM/C-P



- 31.4 Megapixels
- 1.8" global shutter CMOS sensor
- Outstanding performance and robust housings
- Compatible with GenICam<sup>™</sup> and GigE Vision<sup>®</sup>
- Gigabit Ethernet interface
- Power over Ethernet (PoE)
- 2 programmable GPIOs

The MARS GigE PoE series (MARS-G-P) camera is DAHENG IMAGING's large sensor industrial digital camera, featuring high resolution, high definition and low noise.

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.

Featuring robust housings, outstanding performance, ease of installation and use, the MARS cameras are especially suitable for machine vision applications such as industrial inspection, medical, scientific research, education, security and so on.

#### Features

- Power over Ethernet (IEEE802.3af compliant)
- · Four acquisition controls: Single frame acquisition/Continuous acquisition/Software trigger acquisition/External trigger acquisition
- Trigger mode: Frame Start /Frame Burst Start
- Support LUTs and storable user sets
- Support Decimation, Binning, Reverse X/Y, Digital Shift and Black Level
- Support Color Transformation for improving image quality (only for color models)
- Adjustable Gamma and Sharpness for optimizing the brightness and sharpness of images
- Support Defect Pixel Correction and Flat Field Correction
- Support Timer and Counter
- Support Remove Parameter Limit to expand the range of exposure, gain, white balance, and so on
- 16KB data storage area for saving algorithm coefficients and parameter configuration
- Adjustable packet-size and packet-delay
- Compatible with GenlCam<sup>™</sup> and GigE Vision<sup>®</sup>, can be used in a wide range of 3rd-party software such as HALCON, MERLIC and LabVIEW directly
- Optimized software package for 32/64bit Windows, and support Linux, ARMv7, ARMv8 and Mac OS
- Multiple samples and easy-to-integrate SDKs for various programming tools
- Regulations: CE, RoHS, GenICam, GigE Vision, IEEE802.3af (PoE)



#### **Performance Specifications**

Model	MARS-3140-3GM/C-P
Interface	GigE
Resolution	6464(H) × 4852(V)
Frame rate	3.4 fps
Sensor	1.8" global shutter Sony IMX342 CMOS
Pixel size	3.45 μm × 3.45 μm
Pixel Bit Depth	8bit, 12bit
Spectrum	Monochrome / Color
Exposure time	63µs~1s

#### **Electrical Specifications**

Power requirement	12V~24V DC via 12-Pin or PoE	
I/Os	1 input / 1 output, 2 GPIOs	
Data interface	RJ45	
Power consumption <5.5W@12VDC, <6W@PoE		

## **Environmental Specifications**

Operating temp.	0°C ~ +45°C
Storage temp.	-20°C ~ +70°C
Operating humidity	10% ~ 80%

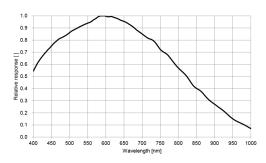
## **Optical Specifications**

Lens mount	Camera model
F mount	MARS-3140-3GM/C-P-M02
M42 × 1	MARS-3140-3GM/C-P-M03
(Flange Distance: 12mm)	
No mount	MARS-3140-3GM/C-P-M06

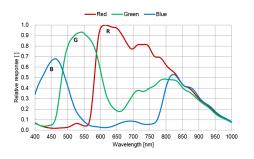
## **Mechanical Specifications**

Weight	292g
Dimensions	62(W)x62(H)x52.1(L) mm, w/o connectors

## **Spectral Response**



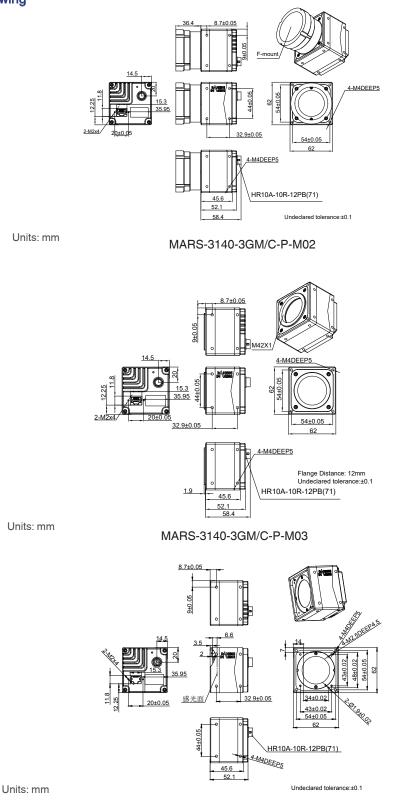
MARS-3140-3GM-P



MARS-3140-3GC-P



### **Technical Drawing**



#### MARS-3140-3GM/C-P-M06

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