

MARS SERIES

MARS-1231-46G5M/C-P



- High speed and low power consumption
- 1.1" global shutter CMOS sensor
- Compatible with GenICam™ and GigE Vision®
- 5GigE interface
- Power over Ethernet (PoE)
- 2 programmable GPIOs
- 12.3 megapixels

The MARS 5GigE series (MARS-G5-P) camera is DAHENG IMAGING's high bandwidth industrial digital camera, featuring high resolution, high definition and low noise.

MARS-1231-46G5M/C-P is a monochrome/color GigE Vision camera with the Sony IMX253 CMOS sensor. The MARS-G5-P camera is capable of 5Gbit/s maximum transfer data rate, 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.

Compact, robust, outstanding performance, attractive price, easy installation and use 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)
- Programmable ROI, increased frame rate with partial scan
- Gain, exposure and white balance programmable (white balance only for color models)
- Support auto gain, auto exposure and auto white balance (auto white balance only for color models)
- Three acquisition controls: Continuous acquisition / Software trigger acquisition / External trigger acquisition
- Support storable user sets
- Support Decimation
- Support Black Level to adjust the brightness of images
- Support Defect Pixel Correction
- Adjustable packet-size and packet-delay, and reserved bandwidth
- The maximum transfer rate is up to 5Gbit/s and can be switched to 1Gbit/s and 2.5Gbit/s
- Compatible with GenICam™ and GigE Vision®, 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)

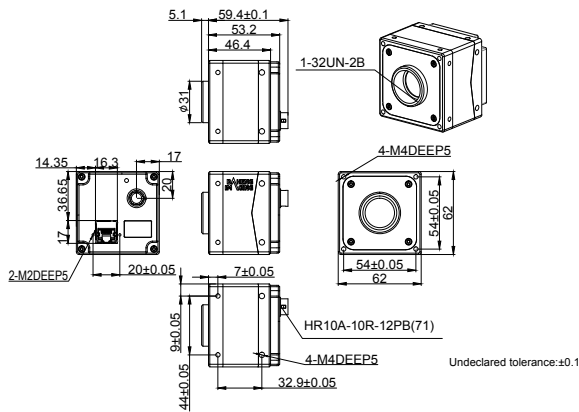
Performance Specifications

| | |
|-----------------|---|
| Model | MARS-1231-46G5M/C-P |
| Interface | 5GigE |
| Resolution | 4096(H) × 3000(V) |
| Frame rate | 47 fps |
| Sensor | 1.1" global shutter Sony IMX253 CMOS |
| Pixel size | 3.45 μm × 3.45 μm |
| Pixel Bit Depth | 8bit, 10bit |
| Spectrum | Monochrome / Color |
| Exposure time | 21μs~1s |

Mechanical Specifications

| | |
|------------|--|
| Weight | 305g |
| Dimensions | 53.2(W)×62(H)×62(L) mm, w/o connectors |

Technical Drawing



Units: mm

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 | <9W @ 12VDC, <10.5W @ PoE |

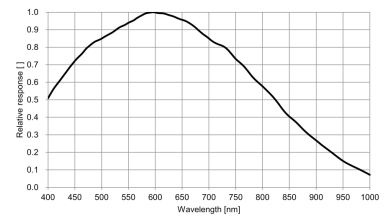
Environmental Specifications

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

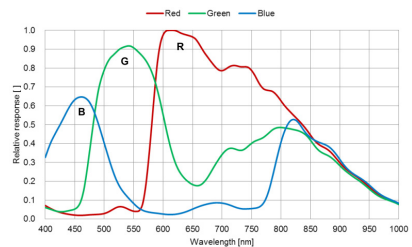
Optical Specifications

| | |
|------------|---------|
| Lens mount | C-Mount |
|------------|---------|

Spectral Response



MARS-1231-46G5M-P



MARS-1231-46G5C-P

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Specifications are subject to change without prior notice.

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