

MERCURY2 FAMILY

MER2-302-37GM/C



- 3.0 Megapixels
- 1/1.8" global shutter CMOS sensor
- Ultra small, light and robust
- Compatible with GenICam™ and GigE Vision®
- Gigabit Ethernet interface
- 2 programmable GPIOs

The MERCURY2 GigE series (MER2-G) camera is DAHENG IMAGING's new generation industrial digital camera. With improved built-in ISP algorithms, MER2-G series camera supports more features. Providing multiple acquisition controls, the camera can adapt to various vision applications.

The MER2-302-37GM/C camera is a monochrome/color GigE Vision camera with the Sony IMX265 CMOS sensor. Thanks to the extremely compact (29mm × 29mm × 29mm), robust metal housings and locking screw connectors, the MERCURY2 cameras can secure the reliability of cameras deployed in harsh environments. The MER2-302-37GM/C camera has opto-isolated I/Os. The GPIOs give MER2-G cameras maximum flexibility to adapt to specific needs.

The MERCURY2 family cameras are especially suitable for machine vision applications such as industrial inspection, medical, scientific research, education, security and so on.

Features

- GigE interface with 12-bit or 8-bit Mono/Bayer output
- 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)
- Two exposure time modes: standard exposure time mode / minimal exposure time mode
- Four acquisition controls: Single frame acquisition / Continuous acquisition / Software trigger acquisition / External trigger acquisition
- Acquisition Burst Mode
- Trigger mode: Frame Start /Frame Burst Start
- Support Decimation, Binning, Black Level, Digital Shift and Reverse X/Y(horizontal and vertical mirroring)
- Adjustable Gamma and Sharpness for optimizing the brightness and sharpness of images
- Support Timer and Counter
- Programmable LUTs and storable user sets
- Color models support Light source preset, Color Transformation Control and Saturation
- Monochrome models support Noise Reduction
- Adjustable packet-size and packet-delay, and reserved bandwidth
- 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
- 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, FCC, RoHS, GenICam, GigE Vision

Performance Specifications

| | |
|-----------------------|---|
| Model | MER2-302-37GM/C |
| Interface | GigE |
| Resolution | 2048(H) × 1536(V) |
| Frame rate | 37.4 fps @ 2048 × 1536 |
| Sensor | 1/1.8" Sony IMX265 Global shutter CMOS |
| Pixel size | 3.45 μm × 3.45 μm |
| Pixel Bit Depth | 8bit, 12bit |
| Spectrum | Monochrome / Color |
| Exposure time | 20μs~1s |
| Minimal exposure time | 1μs~100μs |

Optical Specifications

| | |
|------------|---|
| Lens mount | C-Mount (standard), CS-Mount (optional) |
|------------|---|

Electrical Specifications

| | |
|-------------------|-------------------------------|
| Power requirement | 12~24 VDC via 8-Pin connector |
| I/Os | 1 input / 1 output, 2 GPIOs |
| Data interface | RJ45 |
| Power consumption | <3W@24VDC |

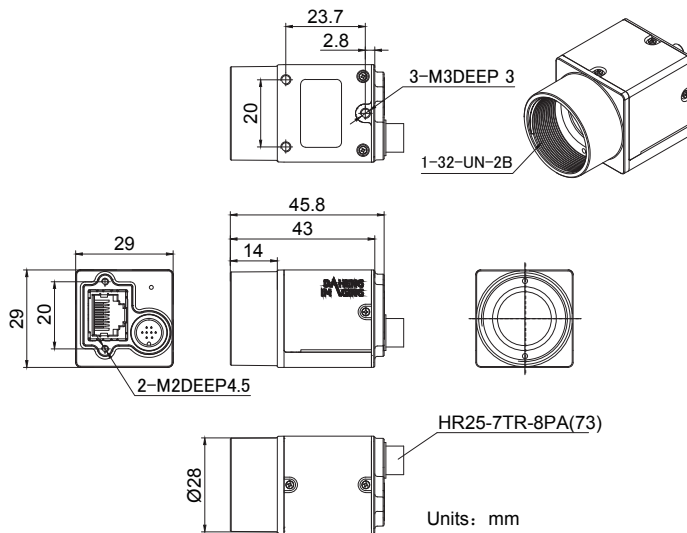
Environmental Specifications

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

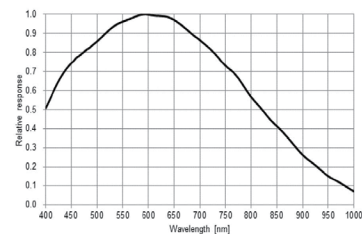
Mechanical Specifications

| | |
|------------|-------------------------------------|
| Weight | 62g |
| Dimensions | 29(W)x29(H)x29(L)mm, w/o connectors |

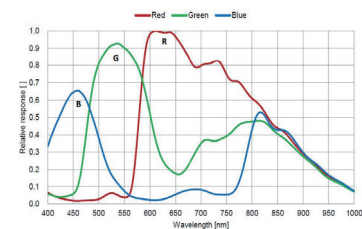
Technical Drawing



Spectral Response



MER2-302-37GM



MER2-302-37GC

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Specifications are subject to change without prior notice.

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