

MERCURY2 SERIES

MER2-507-23GM/C



- 5.0 Megapixels
- 1/2.5" rolling 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 MER2-507-23GM/C camera is a monochrome/color GigE Vision camera with the Onsemi AR0521 CMOS sensor. Thanks to the extremely compact ($29 \text{mm} \times 29 \text{mm}$), robust metal housings and locking screw connectors, the MERCURY2 cameras can secure the reliability of cameras deployed in harsh environments. The MER2-507-23GM/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

- 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)
- Support Black Level and Reverse X/Y(horizontal and vertical mirroring)
- Support Binning, Decimation, Digital Shift and Dynamic Defect Pixel Correction
- Adjustable Gamma and Sharpness for optimizing the brightness and sharpness of images
- Color models support Light source preset, Color Transformation Control and Saturation
- Monochrome models support Noise Reduction
- Programmable LUTs and storable user sets
- Support Timer and Counter
- Adjustable packet-size and packet-delay, and reserved bandwidth
- Support Remove Parameter Limit to expand the range of exposure, gain, and so on
- 16KB data storage area for saving algorithm coefficients and parameter configuration
- Compatible with GenlCam[™] 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, GenlCam, GigE Vision



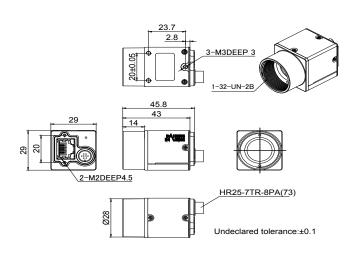
Performance Specifications

| Model | MER2-507-23GM/C |
|-----------------|--|
| Interface | GigE |
| Resolution | 2592(H) × 1944(V) |
| Frame rate | 23.3 fps @2592 × 1944 |
| Sensor | 1/2.5" Onsemi AR0521 Rolling shutter CMOS |
| Pixel size | $2.2~\mu m \times 2.2~\mu m$ |
| Pixel Bit Depth | 8bit, 12bit |
| Spectrum | Monochrome / Color |
| Exposure time | 20μs~1s |

Optical Specifications

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

Technical Drawing



Units: mm

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 | | |

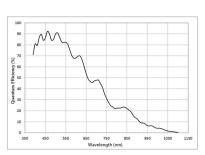
Environmental Specifications

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

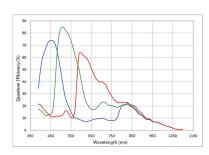
Mechanical Specifications

| Weight | 65g |
|------------|-------------------------------------|
| Dimensions | 29(W)x29(H)x29(L)mm, w/o connectors |

Spectral Response



MER2-507-23GM



MER2-507-23GC

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

For more information please visit: www.daheng-imaging.com/en