

## MERCURY2 FAMILY

### MER2-302-56U3M/C-L



- Ultra small, light and robust
- 1/1.8" global shutter CMOS sensor
- Compatible with GenICam™ and USB3 Vision®
- USB3.0 interface
- 3.0 Megapixels
- Very attractive price

The MERCURY2 USB3.0 series (MER2-U3-L) camera is DAHENG IMAGING's new generation area scan industrial digital camera, featuring outstanding performance, compact design and extremely low noise.

The MER2-302-56U3M/C-L camera is a monochrome/color USB3 Vision camera with the Sony IMX265 CMOS sensor. Thanks to the compact design (29mm × 29mm × 29mm), robust metal housings and locking screw connectors, the MERCURY2 cameras can secure the reliability of cameras deployed in harsh environments.

The MER2-302-56U3M/C-L camera is powered over the USB interface. Compared to the MER2-302-56U3M/C, the MER2-302-56U3M/C-L has no I/O interfaces, so it is more light and handy. The camera has an outstanding price/performance ratio.

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)
- Three acquisition controls: Single frame acquisition / Continuous acquisition / Software trigger acquisition
- Trigger mode: Frame Start /Frame Burst Start
- Two exposure time modes: standard exposure time mode / minimal exposure time mode
- Support LUTs, storable user sets, Timer and Counter
- Support Decimation, Binning, Reverse X/Y, Digital Shift and Black Level
- Adjustable Gamma for optimizing the brightness of images
- Color models support Light source preset, Color Transformation Control and Saturation
- Monochrome models support Noise Reduction and Sharpness
- 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 USB3 Vision®, support 3rd-party software such as HALCON, MERLIC and LabVIEW
- Optimized software package for 32/64bit Windows, and support Linux, Android, ARMv7 and ARMv8
- Multiple samples and easy-to-integrate SDKs for various programming tools
- Regulations: CE, FCC, RoHS, GenICam, USB3 Vision

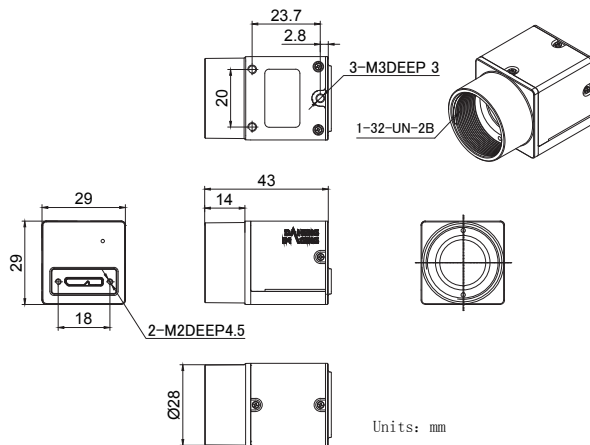
## Performance Specifications

|                       |  |
|-----------------------|--|
| Model                 | MER2-302-56U3M/C-L                         |
| Interface             | USB3.0                                     |
| Resolution            | 2048(H) × 1536(V)                          |
| Frame rate            | 56 fps @2048 × 1536                        |
| Sensor                | 1/1.8", Sony IMX265<br>Global shutter CMOS |
| Pixel size            | 3.45 μm × 3.45 μm                          |
| Pixel Bit Depth       | 8bit, 10bit                                |
| Spectrum              | Monochrome / Color                         |
| Exposure time         | 20μs~1s                                    |
| Minimal exposure time | 1μs~100μs                                  |

## Optical Specifications

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

## Technical Drawing



## Electrical Specifications

|                   |                     |
|-------------------|---------------------|
| Power requirement | 5 VDC via USB cable |
| I/Os              | -                   |
| Data interface    | Micro B with locked |
| Power consumption | <2.7W @5VDC         |

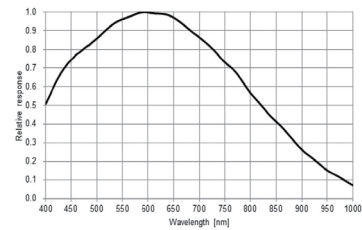
## Environmental Specifications

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

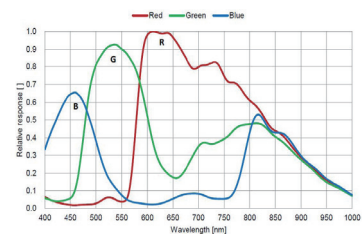
## Mechanical Specifications

|            |                                     |
|------------|-------------------------------------|
| Weight     | 61g                                 |
| Dimensions | 29(W)×29(H)×29(L)mm, w/o connectors |

## Spectral Response



MER2-302-56U3M-L



MER2-302-56U3C-L

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Specifications are subject to change without prior notice.

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