Mense 大恒图像

MERCURY2 FAMILY MER2-160-227U3M/C-L



- Ultra small, light and robust
- 1/2.9" global shutter CMOS sensor
- Compatible with GenICam[™] and USB3 Vision[®]
- USB3.0 interface
- 1.6 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 MER2-160-227U3M/C-L camera is a monochrome/color USB3 Vision camera with the Sony IMX273 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 MER2-160-227U3M/C-L camera is powered over the USB interface. Compared to the MER2-160-227U3M/C, the MER2-160-227U3M/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
- 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
- Software reset function
- 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 a variety of 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, RoHS, FCC, GenICam, USB3 Vision



Performance Specifications

| Model | MER2-160-227U3M/C-L |
|-----------------|---|
| Interface | USB3.0 |
| Resolution | 1440(H) × 1080(V) |
| Frame rate | 227 fps @1440 × 1080 |
| Sensor | 1/2.9", Sony IMX273 Global shutter CMOS |
| Pixel size | $3.45\ \mu\text{m} 	imes 3.45\ \mu\text{m}$ |
| Pixel Bit Depth | 8bit, 10bit |
| Spectrum | Monochrome / Color |
| Exposure time | 20µs~1s |

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% |

Optical Specifications

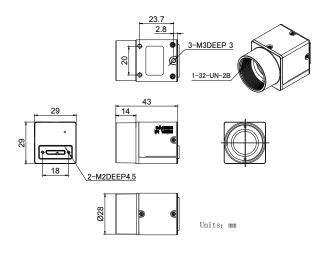
Lens mount C-Mount (standard), CS-Mount (optional)

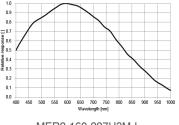
Mechanical Specifications

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

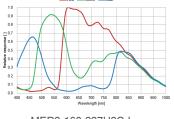
Technical Drawing

Spectral Response





MER2-160-227U3M-L



MER2-160-227U3C-L

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