MERCURY2 SERIES

MER2-502-79U3M/C-L

- Ultra small, light and robust
- 2/3" global shutter CMOS sensor
- Compatible with GenICam™ and USB3 Vision®
- USB3.0 interface
- 5.0 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 MER2-502-79U3M/C-L camera is a monochrome/color USB3 Vision camera with the Sony IMX250 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 MER2-502-79U3M/C-L camera is powered over the USB interface. Compared to the MER2-502-79U3M/C, the MER2-502-79U3M/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

- USB3.0 interface with 10-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)
- Three acquisition controls: Single frame acquisition / Continuous acquisition / Software trigger acquisition
- Trigger mode: Frame Start /Frame Burst Start
- Support Timed exposure mode and TriggerWidth exposure mode.
- Programmable LUTs and storable user sets
- Support Decimation, Binning, Reverse X/Y, Digital Shift and Black Level
- Support Timer and Counter
- Adjustable Gamma for optimizing the brightness of images
- 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, RoHS, GenICam, USB3 Vision

Performance Specifications

Model	MER2-502-79U3M/C-L
Interface	USB3.0
Resolution	2448(H) × 2048(V)
Frame rate	79.1 fps @2448 × 2048
Sensor	2/3", Sony IMX250 Global shutter CMOS
Pixel size	3.45 μm × 3.45 μm
Pixel Bit Depth	8bit, 10bit
Spectrum	Monochrome / Color
Exposure time	20μs ~ 1s

Optical Specifications

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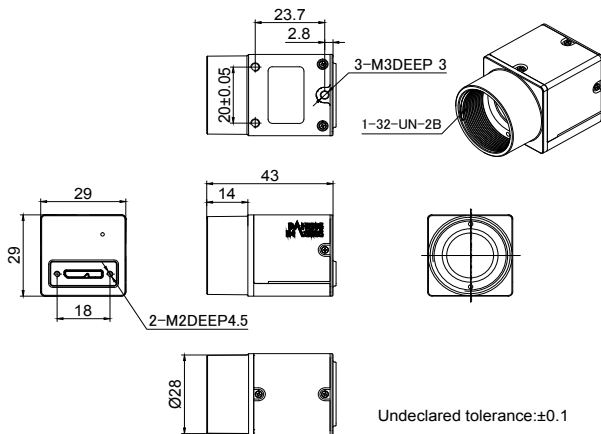
Electrical Specifications

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

Technical Drawing

23.7
2.8
3-M3DEEP 3
20±0.05
1-32-UN-2B

29
29
14
43
18
2-M2DEEP4.5
Ø28

Undeclared tolerance:±0.1

Units: mm

Spectral Response

MER2-502-79U3M-L

MER2-502-79U3C-L
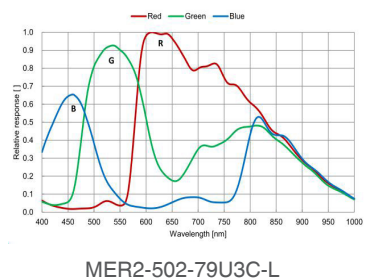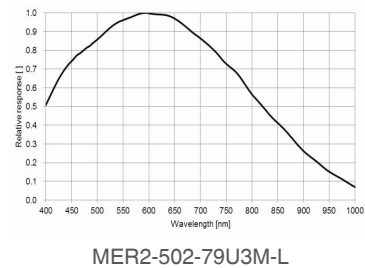
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