

MERCURY2 SERIES

MER2-2000-19U3M/C-L



- Ultra small, light and robust
- 1" Rolling shutter CMOS sensor
- Compatible with GenICam[™] and USB3 Vision[®]
- USB3 0 interface
- 20.0 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 MER2-2000-19U3M/C-L camera is a monochrome/color USB3 Vision camera with the Sony IMX183 CMOS sensor. Thanks to the compact design ($29 \text{mm} \times 29 \text{mm} \times 29 \text{mm}$), robust metal housings and locking screw connectors, the MERCURY2 cameras can secure the reliability of cameras deployed in harsh environments.

The MER2-2000-19U3M/C-L camera is powered over the USB interface. Compared to the MER2-2000-19U3M/C, the MER2-2000-19U3M/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 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 acquisition controls: Continuous acquisition/ Software trigger acquisition
- · Flash sync for firing external lights at precisely the moment when exposure is performed
- Support Global Reset Release Shutter exposure
- · Support Decimation, Gamma and Binning
- Support Reverse X/Y(horizontal and vertical mirroring)
- Storable user sets
- Robust full metal housing and optional lockable devices
- Support Remove Parameter Limit to expand the range of exposure, gain, white balance, and so on
- Compatible with GenlCam[™] 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, GenlCam, USB3 Vision



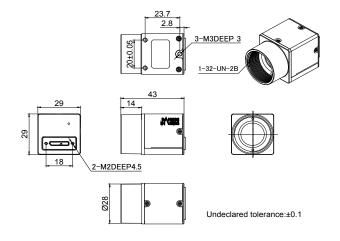
Performance Specifications

Model	MER2-2000-19U3M/C-L
Interface	USB3.0
Resolution	5496(H) × 3672(V)
Frame rate	19.6 fps @5496 × 3672
Sensor	1", Sony IMX183 Rolling shutter CMOS
Pixel size	$2.4~\mu m \times 2.4~\mu m$
Pixel Bit Depth	8bit, 12bit
Spectrum	Monochrome / Color
Exposure time	12μs~1s

Optical Specifications

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



Electrical Specifications

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

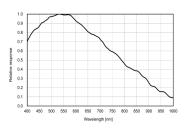
Environmental Specifications

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

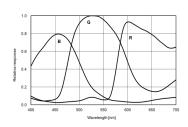
Mechanical Specifications

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

Spectral Response



MER2-2000-19U3M-L



MER2-2000-19U3C-L

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