MERCURY2 SERIES

MER2-2000-19U3M/C

- 20.0 Megapixels
- 1" rolling shutter CMOS sensor
- Ultra small, light and robust
- Compatible with GenICam™ and USB3 Vision®
- USB3.0 interface
- 2 programmable GPIOs

The MERCURY2 USB3.0 series (MER2-U3) 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 camera is a monochrome/color USB3 Vision camera with the Sony IMX183 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 MER2-2000-19U3M/C camera has opto-isolated I/Os. The GPIOs give MER2-U3 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)
- Four acquisition controls: Single frame acquisition / Continuous acquisition / Software trigger acquisition / External trigger acquisition
- Support Global Reset Release shutter mode
- 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
- 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	MER2-2000-19U3M/C
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 μm × 2.4 μm
Pixel Bit Depth	8bit, 12bit
Spectrum	Monochrome / Color
Exposure time	12μs~1s

Optical Specifications

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

Electrical Specifications

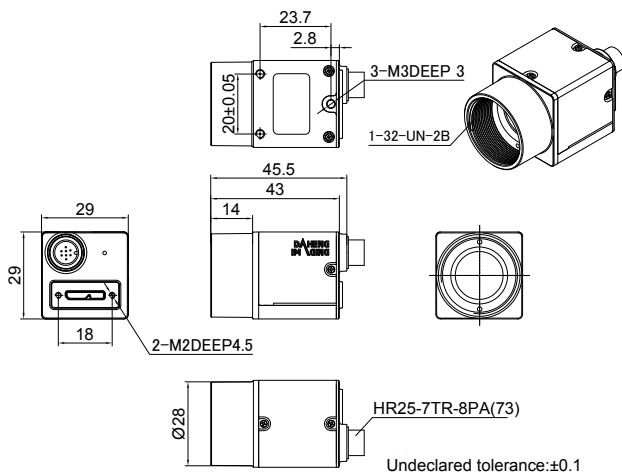|	
Power requirement	5 VDC via USB cable
I/Os	1 input / 1 output , 2 GPIOs
Data interface	Micro B with locked
Power consumption	<2.7W @5VDC

Environmental Specifications

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

Mechanical Specifications

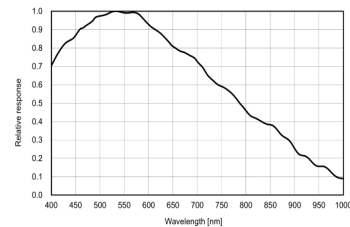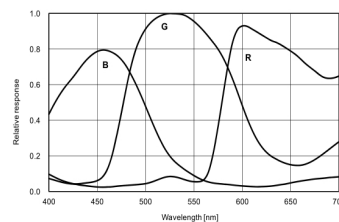|	
Weight	65g
Dimensions	29(W)×29(H)×29(L)mm, w/o connectors

Technical Drawing

Units: mm

Spectral Response

MER2-2000-19U3M

MER2-2000-19U3C

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

July 01, 2022