

MERCURY2 SERIES

MER2-630-60U3M/C-W90



- Ultra small, light and robust
- 90 degree angle lens mount
- 1/1.8" rolling shutter CMOS sensor
- Compatible with GenICam[™] and USB3 Vision[®]
- USB3.0 interface
- 6.3 Megapixels
- 1 input/1 output with opto-isolated
- 2 programmable GPIOs

The MERCURY2 USB3.0 series (MER2-U3) camera with 90 degree angle lens mount is DAHENG IMAGING's new generation area scan industrial digital camera. Compared to MER-U3 and MER2-U3 with standard lens mount, MER2-U3 camera with 90 degree lens angle mount has more installation flexibility.

The MER2-630-60U3M/C-W90 camera is a monochrome/color USB3 Vision camera with the Sony IMX178 CMOS sensor. Thanks to the compact design ($29 \text{mm} \times 29 \text{mm} \times 58.8 \text{mm}$, including lens mount), robust metal housings and locking screw connectors, the MER2-630-60U3M/C-W90 camera can secure the reliability of cameras deployed in harsh environments. The MER2-U3 cameras have opto-isolated I/Os, and 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

- 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: Continuous acquisition/ Software trigger acquisition/ External trigger acquisition
- · Flash sync for firing external lights at precisely the moment when exposure is performed
- Adjustable URB
- Software reset function
- Programmable LUTs and storable user sets
- Adjustable Sharpness for optimizing the sharpness of images
- 90 degree angle lens mount enables the camera to be angle installed in harsh environment
- · Robust full metal housing and optional lockable devices
- 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



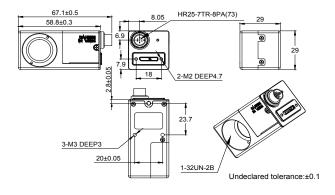
Performance Specifications

Model	MER2-630-60U3M/C-W90
Interface	USB3.0
Resolution	3088(H) × 2064(V)
Frame rate	60 fps @3088 × 2064
Sensor	1/1.8", Sony IMX178 Rolling shutter CMOS
Pixel size	$2.4~\mu m \times 2.4~\mu m$
Pixel Bit Depth	8bit, 10bit
Spectrum	Monochrome / Color
Exposure time	8µs∼1s

Mechanical Specifications

Weight	78g
Dimensions	29(W)×29(H)×58.8(L)mm
	(with lens mount, without I/O connector)

Technical Drawing



Units: mm

Electrical Specifications

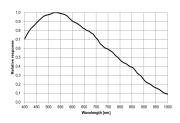
Power requirement	5 VDC via USB cable	
I/Os	Shielded industrial interface, 1 input / 1 output, 2 GPIOs	
Data interface	Micro B with locked	
Power consumption <2.7W @5V DC		

Environmental Specifications

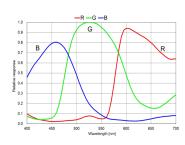
Operating temp.	0°C ~ +45°C
Storage temp.	-20°C ~ +70°C
Operating humidity	10% ~ 80%

Optical Specifications

Spectral Response



MER2-630-60U3M-W90



MER2-630-60U3C-W90

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