

# MERCURY2 PRO SERIES ME2P-1230-23U3M/C



- Ultra small, light and robust
- 1.1" global shutter CMOS sensor
- Compatible with GenICam<sup>™</sup> and USB3 Vision<sup>®</sup>
- USB3.0 interface
- 12.3 Megapixels
- 2 programmable GPIOs

The MERCURY2 PRO USB3.0 series (ME2P-U3) camera is DAHENG IMAGING's large sensor industrial digital camera, supporting Decimation, Binning, Gamma, Reverse, Digital Shift, Black Level and more features. Providing multiple acquisition controls, the camera can adapt to various vision applications.

ME2P-1230-23U3M/C is a monochrome/color USB3 Vision camera with the Sony IMX304 CMOS sensor. The ME2P-1230-23U3M/C camera has opto-isolated I/Os that adapt to specific needs. Four-side mounting holes provide maximum installation flexibility for ME2P-U3. Thanks to the extremely compact design (36mm × 31mm × 38.8mm), locking screw connectors, the MERCURY2 PRO series cameras can secure the reliability of cameras deployed in harsh environments. Featuring compact design, outstanding performance, ease of installation and use, the MERCURY2 PRO 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
- Trigger mode: Frame Start /Frame Burst Start
- Support LUTs and storable user sets
- Support Decimation, Binning, Reverse X/Y, Digital Shift, Black Level and Defect Pixel Correction
- Adjustable Gamma and Sharpness for optimizing the brightness and sharpness of images
- Support Timer and Counter
- 16KB data storage area for saving algorithm coefficients, parameter configuration, and so on
- Support Remove Parameter Limit to expand the range of exposure, gain, white balance, and so on
- Provide mounting holes on four surfaces for flexible installation
- Compatible with GenICam<sup>™</sup> and USB3 Vision<sup>®</sup>, can be used in a wide range of 3rd-party software such as HALCON, MERLIC and LabVIEW directly
- 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	ME2P-1230-23U3M/C
Interface	USB3.0
Resolution	4096(H) × 3000(V)
Frame rate	23.5 fps @4096 × 3000
Sensor	1.1", global shutter Sony IMX304 CMOS
Pixel size	3.45 μm × 3.45 μm
Pixel Bit Depth	8bit, 12bit
Spectrum	Monochrome / Color
Exposure time	28µs ~ 1s

# **Electrical Specifications**

Power requirement	5 VDC via USB cable
I/Os	1 input / 1 output, 2 GPIOs
Data interface	Micro B
Power consumption	<3.5W @5V DC

### **Environmental Specifications**

**Optical Specifications** 

**Spectral Response** 

450 500 550 600

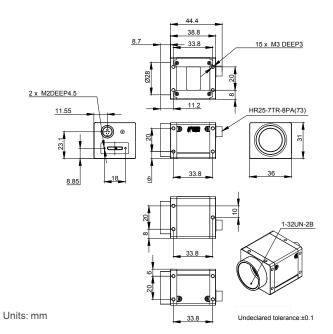
Lens mount

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

#### **Mechanical Specifications**

Weight	66g
Dimensions	36(W)×31(H)×38.8(L) mm, w/o connectors

### **Technical Drawing**

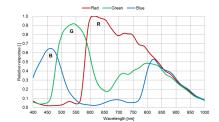




C-Mount (standard), CS-Mount (optional)

#### ME2P-1230-23U3M

650 700 750 Wavelength [nm] 800 850 900 950



ME2P-1230-23U3C

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