

# MERCURY2 PRO SERIES

## ME2P-1231-32U3M/C



- Ultra small, light and robust
- 1.1" global shutter CMOS sensor
- Compatible with GenICam™ and USB3 Vision®
- USB3.0 interface
- 12.31 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-1231-32U3M/C is a monochrome/color USB3 Vision camera with the Sony IMX253 CMOS sensor. The ME2P-1231-32U3M/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 Reverse X/Y, Black Level and Flat Field Correction
- Support Gamma, Binning, Decimation, Digital Shift
- Support LUTs, storable user sets, Timer and Counter
- Color models support Light source preset, Color Transformation Control and Saturation
- Monochrome models support Sharpness and Noise Reduction
- 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
- Compatible with GenICam™ and USB3 Vision®, 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

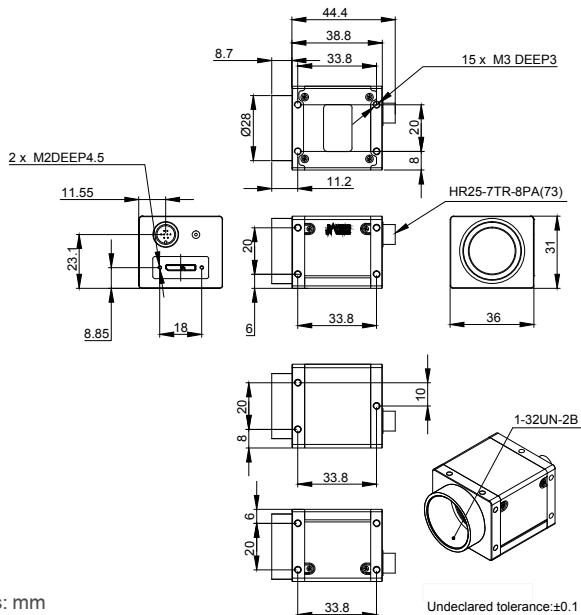
## Performance Specifications

Model	ME2P-1231-32U3M/C
Interface	USB3.0
Resolution	4096(H) × 3000(V)
Frame rate	32.1fps @ 4096 × 3000
Sensor	1.1", global shutter Sony IMX253 CMOS
Pixel size	3.45 μm × 3.45 μm
Pixel Bit Depth	8bit, 10bit
Spectrum	Monochrome / Color
Exposure time	24μs ~ 1s

## Mechanical Specifications

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

## Technical Drawing



Units: mm

## 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

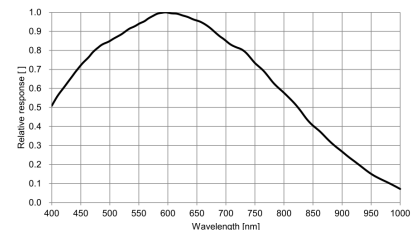
## Environmental Specifications

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

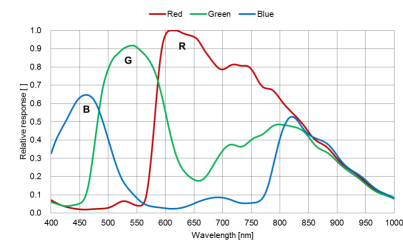
## Optical Specifications

Lens mount	C-Mount (standard), CS-Mount (optional)
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## Spectral Response



ME2P-1231-32U3M



ME2P-1231-32U3C

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Specifications are subject to change without prior notice.

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