MERCURY2 PRO SERIES

ME2P-1840-21U3M

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

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

ME2P-1840-21U3M is a monochrome USB3 Vision camera with the Gpixel GMAX2518 CMOS sensor. The ME2P-1840-21U3M 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 and exposure programmable
- Support auto gain and auto exposure
- Three acquisition controls: Continuous acquisition/Software trigger acquisition/External trigger acquisition
- Storable user sets
- Support Decimation, Reverse X/Y, Digital Shift, Black Level, Flat Field Correction and Defect Pixel Correction
- Adjustable Gamma for optimizing the brightness
- 16KB data storage area for saving algorithm coefficients, parameter configuration, and so on
- Support Remove Parameter Limit to expand the range of exposure, gain, and so on
- Provide mounting holes on four surfaces for flexible installation
- 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
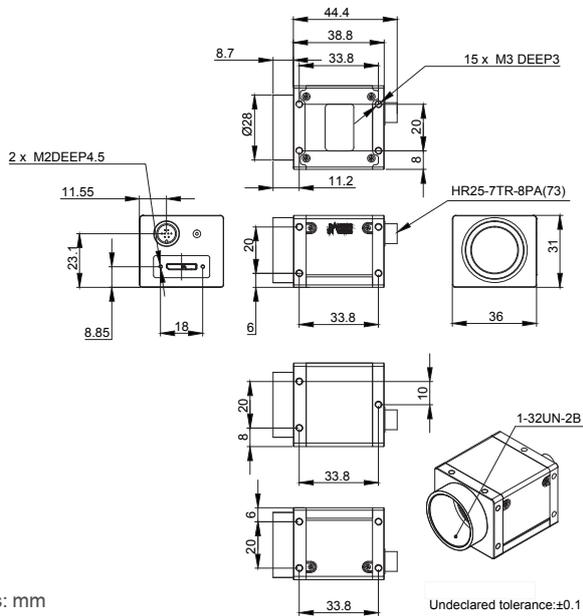- Regulations: CE, RoHS, GenICam, USB3 Vision

Performance Specifications

Model	ME2P-1840-21U3M
Interface	USB3.0
Resolution	4504(H) × 4096(V)
Frame rate	21.4fps
Sensor	1", Gpixel GMAX2518 Global Shutter CMOS
Pixel size	2.5 μm × 2.5 μm
Pixel Bit Depth	8bit, 12bit
Spectrum	Monochrome
Exposure time	14μs~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)

Spectral Response

ME2P-1840-21U3M

China Daheng Group, Inc. Beijing Image Vision Technology Branch
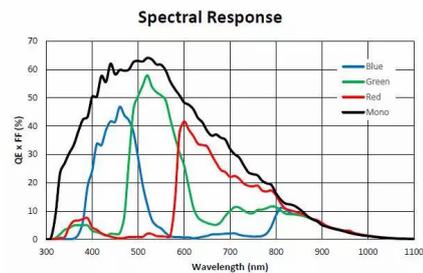
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