

ME2P-170-210U3M/C

MERCURY2 Plus Series 1.7MP CMOS USB3.0 Area Scan Camera



The ME2P-170-210U3M/C camera is a monochrome/color USB3.0 Vision camera with the Sony IMX425 CMOS sensor. The ME2P-170-210U3M/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 (36mm × 31mm × 38.8mm), robust metal housings and locking screw connectors, the MERCURY2 Plus cameras can secure the reliability of cameras deployed in harsh environments.

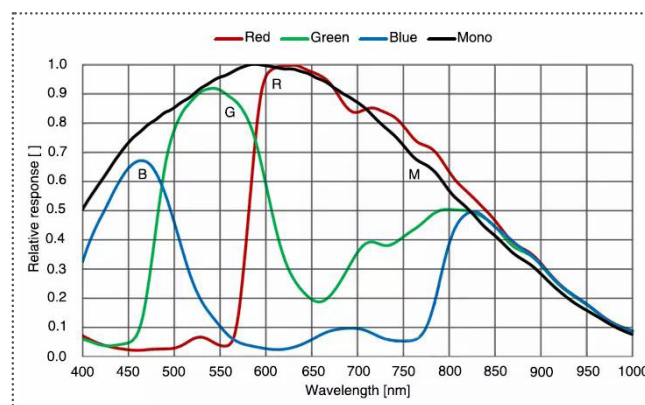
Applications

Suitable for machine vision applications such as industrial inspection, medical, scientific research, education and so on.

Features

- Support Gamma, Binning, Decimation, Digital Shift, Black Level
- Color models support Light source preset, Color Transformation Control and Saturation
- Monochrome models support Noise Reduction and Sharpness
- The Sequencer Control supports multiple sets of parameters configuration
- LUTs, User Set Control, Timer and Counter
- Support Remove Parameter Limit to expand the range of exposure, gain, and so on
- 512KB data storage area

Spectral Response



Specifications

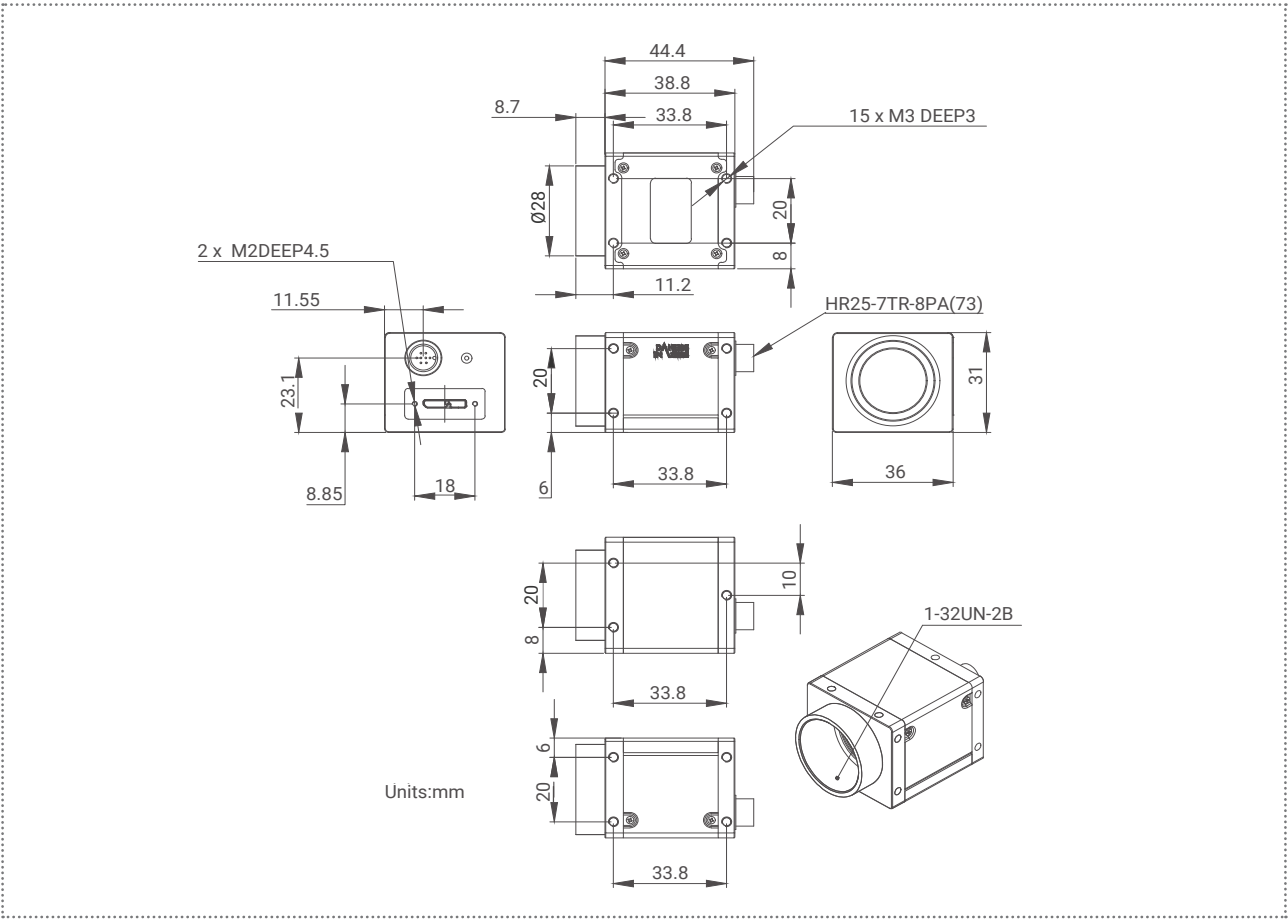
Model	ME2P-170-210U3C	ME2P-170-210U3M
Resolution	1608(H) × 1104(V)	
Sensor	Sony IMX425 global shutter CMOS	
Sensor Format	1.1"	
Pixel Size	9μm × 9μm	
Frame Rate	210.8 fps	
ADC	10 bit, 12 bit	
Pixel Bit Depth	8 bit, 10 bit, 12 bit	
Mono/Color	Color	Mono
Pixel Formats	Bayer RG8 / Bayer RG10 / Bayer RG12	Mono8 / Mono10 / Mono12
SNR	49.9 dB	50 dB
Exposure Time	UltraShort: 1μs~5μs, Actual Steps: 0.1μs; Standard: 9μs ~ 1s, Actual Steps: 1 row period	
Gain	0dB ~ 24dB; Default: 0dB, Steps: 0.1dB	
Binning	FPGA: 1×1, 1×2, 1×4, 2×1, 2×2, 2×4, 4×1, 4×2, 4×4	
Decimation	FPGA: 1×1, 1×2, 2×1, 2×2	
Synchronization	Hardware trigger, software trigger	
Acquisition Mode	Single frame, Continuous, Software trigger, Hardware trigger	
Reverse X/Y	Reverse X/Y	
I/O Interface	1 input and 1 output with opto-isolated, 2 programmable GPIOs	
Data Interface	USB3.0	
Power Supply	12VDC-10% ~ 24VDC+10% supplied via the camera's I/O connector or Power over USB3.0	
Typical Power	3.12 W @ 5 VDC	
Operating Temp.	0°C ~ +45°C	
Storage Temp.	-20°C ~ +70°C	
Operating Humidity	10% ~ 80%	
Lens Mount	C / CS	
Dimensions	36(W) × 31(H) × 38.8(L) mm (without lens adapter or connectors)	
Weight	66 g	
Software	3rd-party software such as HALCON, MERLIC and LabVIEW	
OS	32bit / 64bit Windows, Linux, Android, ARMv7, ARMv8	
Conformity	CE, RoHS, FCC, ICES, UKCA, USB3.0 Vision®, GenICam®	

I/O Interface



Pin	Definition	Description
1	Line 0+	Opto-isolated input +
2	GND	GPIO GND
3	Line 0-	Opto-isolated input -
4	POWER_IN	Camera external power, +12V DC~+24V DC
5	Line 2	GPIO input/output
6	Line 3	GPIO input/output
7	Line 1-	Opto-isolated output -
8	Line 1+	Opto-isolated output +

Technical Drawing



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