ME2P-1231-32U3M/C POL

MERCURY2 Plus Series 12.3MP CMOS USB3.0 Area Scan Camera



The ME2P-1231-32U3M/C POL camera is a monochrome/color polarization USB3.0 Vision camera with the Sony IMX253 CMOS sensor. The ME2P-1231-32U3M/C POL 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.

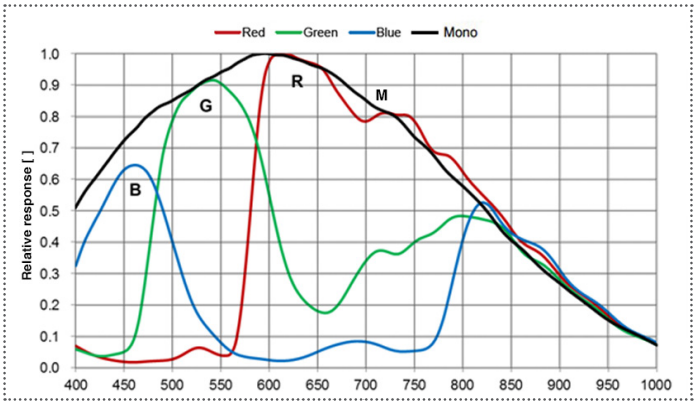
Applications

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

Features

- Trigger mode: Frame Start / Frame Burst Start
- Support timed exposure mode and triggerWidth exposure mode.
- Two exposure time modes: Standard / UltraShort
- Support Gamma, Digital Shift and Black Level
- Support Sequencer Control, Sensor Bit Depth, Timer and Counter
- Programmable LUTs and User Set Control
- Support Support Remove Parameter Limit to expand the range of exposure, gain, and so on
- 16KB data storage area for saving algorithm coefficients and parameter configuration

Spectral Response



Specifications

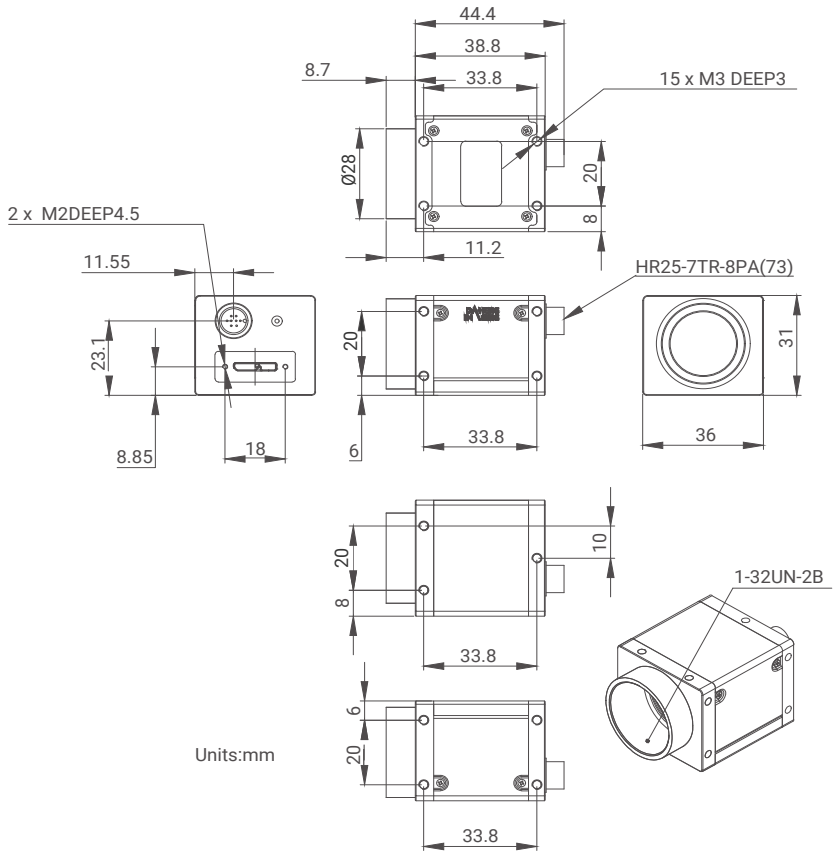
Model	ME2P-1231-32U3C POL	ME2P-1231-32U3M POL
Resolution	4096(H) × 3000(V)	
Sensor	Sony IMX253MYR Global shutter CMOS	Sony IMX253MZR Global shutter CMOS
Sensor Format	1.1"	
Pixel Size	3.45μm × 3.45μm	
Frame Rate	32.1 fps	
ADC	8 bit, 10 bit, 12 bit	
Pixel Bit Depth	8 bit, 10 bit, 12 bit	
Mono/Color	Color polarization	Mono polarization
Pixel Formats	Bayer RG8 / Bayer RG10 / Bayer RG12	Mono8 / Mono10 / Mono12
SNR	40.91 dB	40.76 dB
Exposure Time	UltraShort: 1μs~100μs, Actual Steps: 1μs; Standard: 24μs ~ 1s, Actual Steps: 1 row period	
Gain	0dB ~ 24dB; Default: 0dB, Steps: 0.1dB	
Binning	-	
Decimation	-	
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	Power over USB3.0	
Typical Power	3.05 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	NC	NC
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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