

# ME2L-042-121U3M/C(-L)

## MERCURY2 Lite Series 0.4MP CMOS USB3.0 Area Scan Camera



The ME2L-042-121U3M/C(-L) camera is a monochrome/color USB3.0 Vision camera with the Sony IMX297 CMOS sensor. Thanks to the extremely compact (29mm × 29mm), robust metal housings and locking screw connectors, the MERCURY2 Lite cameras can secure the reliability of cameras deployed in harsh environments. The ME2L-042-121U3M/C(-L) camera is powered over the USB3.0 interface. Compared to the ME2L-042-121U3M/C, the ME2L-042-121U3M/C-L has no I/O interfaces, so it is more light and handy. The camera has an outstanding price/performance ratio.

### Applications

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

### Features

- USB3.0 interface with 10-bit or 8-bit Mono/Bayer output
- Programmable ROI, increased frame rate with partial scan
- Support Gain, auto gain, exposure, auto exposure
- Color models support Light source preset, white balance, auto white balance
- Support Reverse X/Y (horizontal and vertical mirroring)
- Storable user sets
- 16KB data storage area for saving algorithm coefficients and parameter configuration

## Specifications

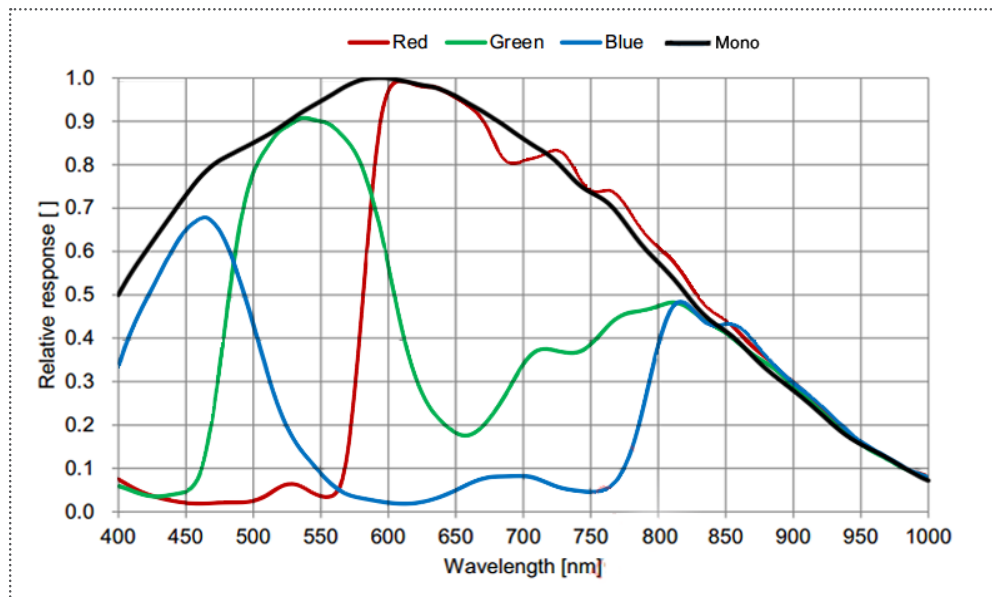
Model	ME2L-042-121U3C	ME2L-042-121U3C-L	ME2L-042-121U3M	ME2L-042-121U3M-L
Resolution	720(H) × 540(V)			
Sensor	Sony IMX297, Global shutter CMOS			
Sensor Format	1/2.9"			
Pixel Size	6.9μm × 6.9μm			
Frame Rate	121.8fps			
ADC	10bit			
Pixel Bit Depth	8bit, 10bit			
Mono/Color	Color		Mono	
Pixel Formats	Bayer RG8 / Bayer RG10		Mono8 / Mono10	
SNR	43.55dB		43.57dB	
Exposure Time	Standard: 20μs ~ 1s, Actual Steps: 1 row period			
Gain	0dB ~ 24dB; Default: 0dB, Steps: 0.1dB			
Binning	N/A			
Decimation	N/A			
Synchronization	Hardware trigger(ME2L-U3-L: N/A), software trigger			
Acquisition Mode	Continuous, Software trigger, Hardware trigger(ME2L-U3-L: N/A)			
Reverse X/Y	Reverse X/Y			
I/O Interface	1 input with opto-isolated, 1 programmable GPIO(ME2L-U3-L: N/A)			
Data Interface	USB3.0			
Power Supply	Power through USB3.0 interface			
Power Consumption	2.7W @ 5VDC			
Operating Temp.	0°C ~ +45°C			
Storage Temp.	-20°C ~ +70°C			
Operating Humidity	10% ~ 80%			
Lens Mount	C/CS			
Dimensions	29(W) × 29(H) × 28.1(L) mm (without lens adapter or connectors)			
Weight	ME2L-U3: 47g; ME2L-U3-L: 44g			
Software	3rd-party software such as HALCON, MERLIC and LabVIEW			
OS	32bit / 64bit Windows, Linux, Android, ARMv7, ARMv8			
Conformity	CE, RoHS, FCC, GenICam, USB3.0 Vision			

I/O Interface



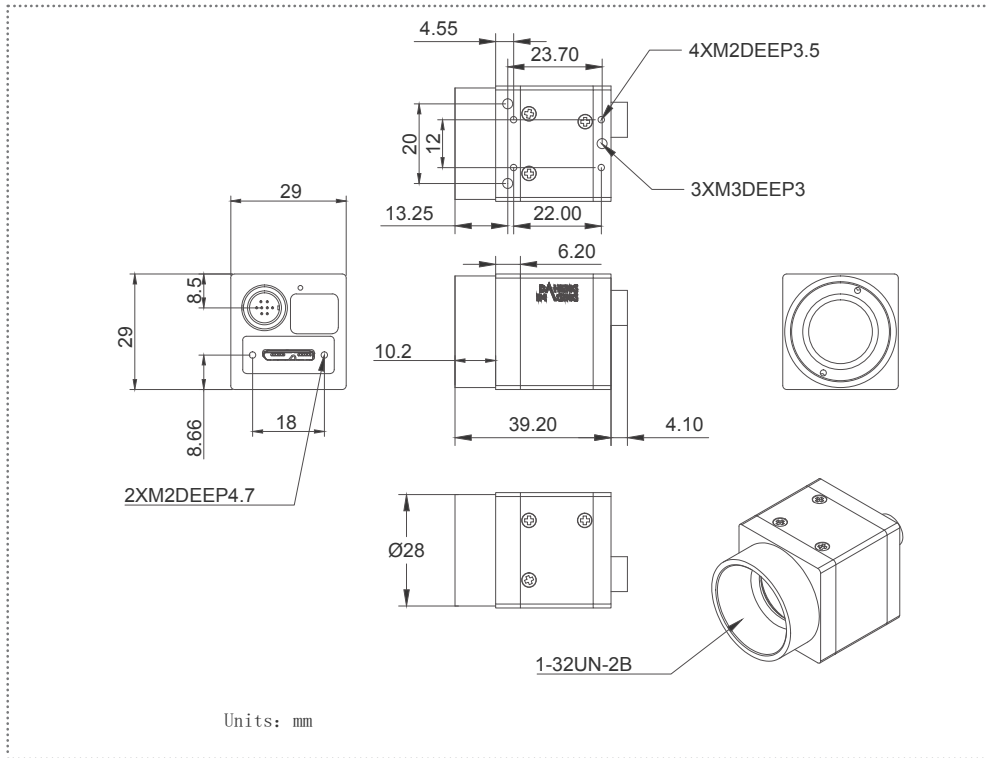
Pin	Definition	Description
1	Line0+	Opto-isolated input +
2	GND	GPIO GND
3	Line0-	Opto-isolated input -
4	NC	NC
5	Line2	GPIO input/output
6	NC	NC
7	NC	NC
8	NC	NC

Spectral Response

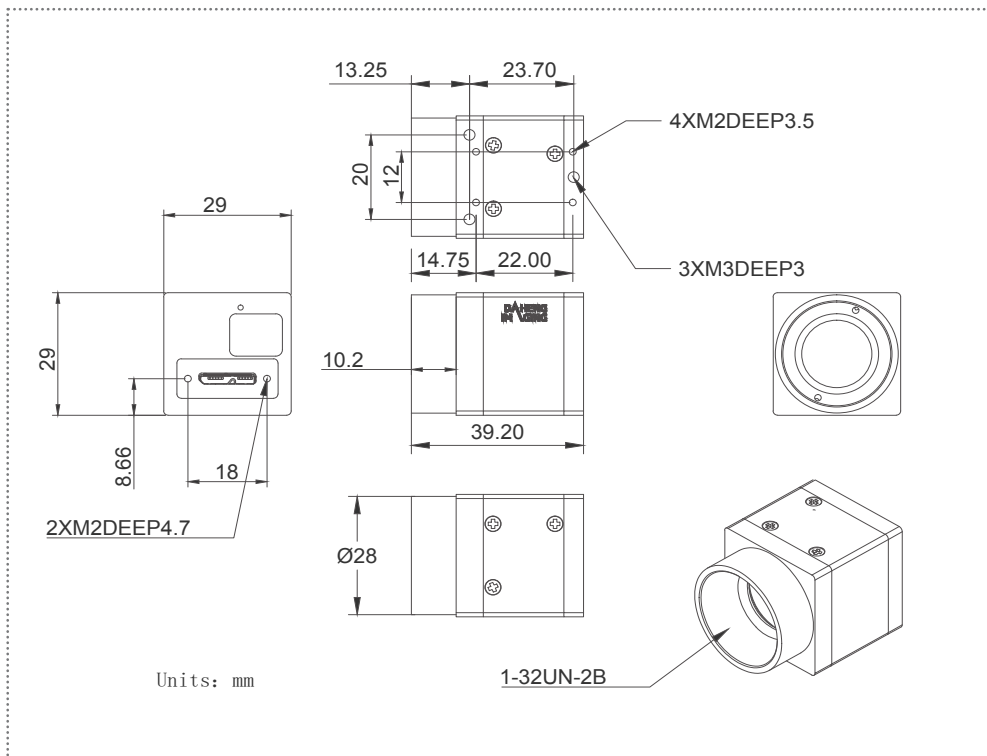


ME2L-042-121U3M/C  
ME2L-042-121U3M/C-L

Technical Drawing



ME2L-042-121U3M/C



ME2L-042-121U3M/C-L

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