

VEN-304-56U3M/C-S

VENUS Series 3MP CMOS USB3.0 Board Level Camera



The VEN-304-56U3M/C-S is a monochrome/color split board level camera with Sony IMX265 CMOS sensors. The VEN-304-56U3M/C-S provides two mount options: C-mount and No-mount (bare board). Thanks to the extremely compact housing of 29(W) × 29(H) × 20.2(L)mm, the VEN-304-56U3M/C-S is more flexible in demanding space.

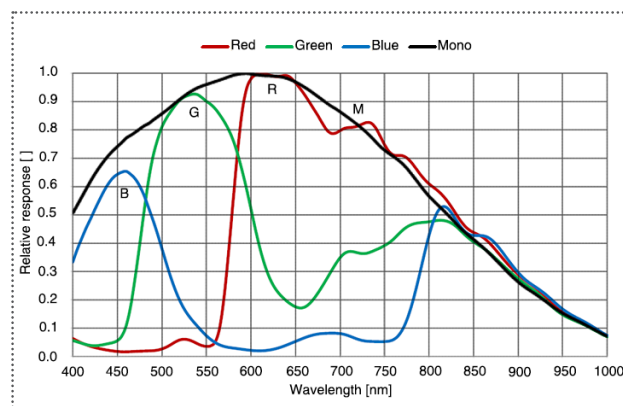
Applications

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

Features

- USB3.0(Micro-B) interface with 12-bit or 8-bit Mono/Bayer output
- ROI, Gain, auto gain, exposure and auto exposure
- Continuous acquisition/ Software trigger acquisition/ External trigger acquisition
- Support Binning, User Set Control, Timer and Counter
- Support Reverse X/Y
- Support 16KB data storage area for saving algorithm coefficients, parameter configuration, and so on

Spectral Response



Specifications

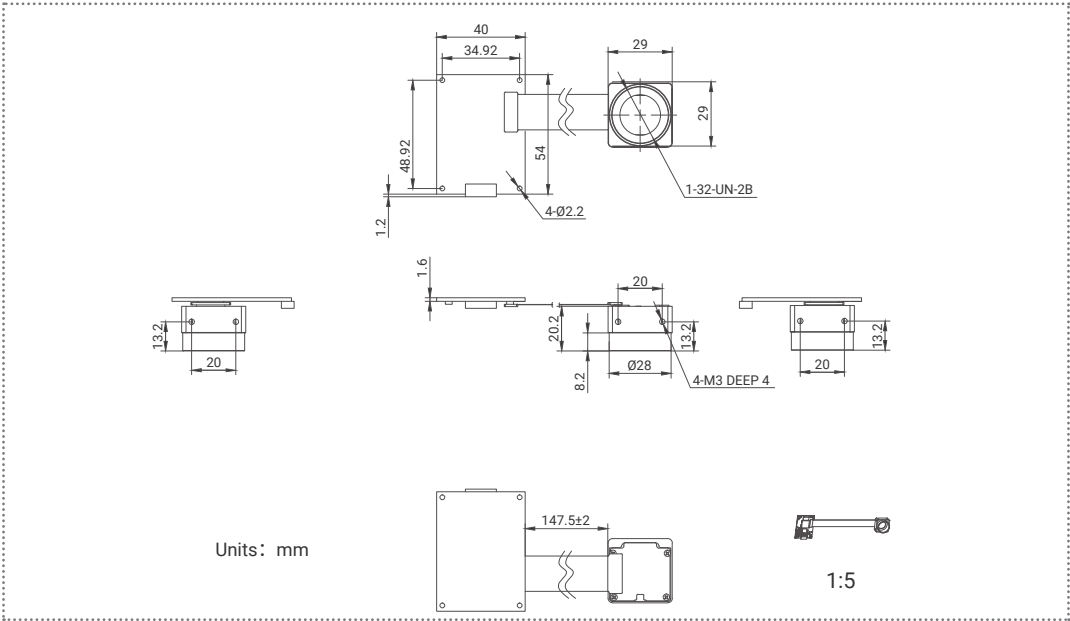
Model	VEN-304-56U3C-S	VEN-304-56U3M-S
Resolution	2048(H) × 1536(V)	
Sensor	Sony Global shutter CMOS	
Sensor Format	1/1.8"	
Pixel Size	3.45μm × 3.45μm	
Frame Rate	56 fps	
ADC	12 bit	
Pixel Bit Depth	8 bit, 12 bit	
Mono/Color	Color	Mono
Pixel Formats	Bayer RG8 / Bayer RG12	Mono8 / Mono12
SNR	40.09 dB	40.76 dB
Exposure Time	Standard: 20μs~1s, Actual Steps: 1 row period	
Gain	0dB ~ 24dB; Default: 0dB, Steps: 0.1dB	
Binning	1×1, 1×2, 1×4, 2×1, 2×2, 2×4, 4×1, 4×2, 4×4	
Decimation	-	
Synchronization	Hardware trigger, software trigger	
Acquisition Mode	Continuous, Software trigger, Hardware trigger	
Reverse X/Y	Reverse X/Y	
I/O Interface	2 GPIOs	
Data Interface	USB3.0 (Micro-B)	
Power Supply	Powered by USB3.0 bus	
Typical Power	2.59 W @ 5 VDC	
Operating Temp.	0° C ~ +45° C	
Storage Temp.	-20° C ~ +70° C	
Operating Humidity	10% ~ 80%	
Lens Mount	C / No-mount	
Dimensions	C-mount: 29(W) × 29(H) × 20.2(L) mm acquisition board: 40mm × 54mm; imaging board : 27mm × 26.2mm	
Weight	32 g (C); 18 g (No-mount)	
Software	3rd-party software such as HALCON, MERLIC and LabVIEW	
OS	32bit / 64bit Windows, Linux, Android, ARMv7, ARMv8	
Conformity	CE, RoHS, USB3.0 Vision®, GenICam®	

I/O Interface

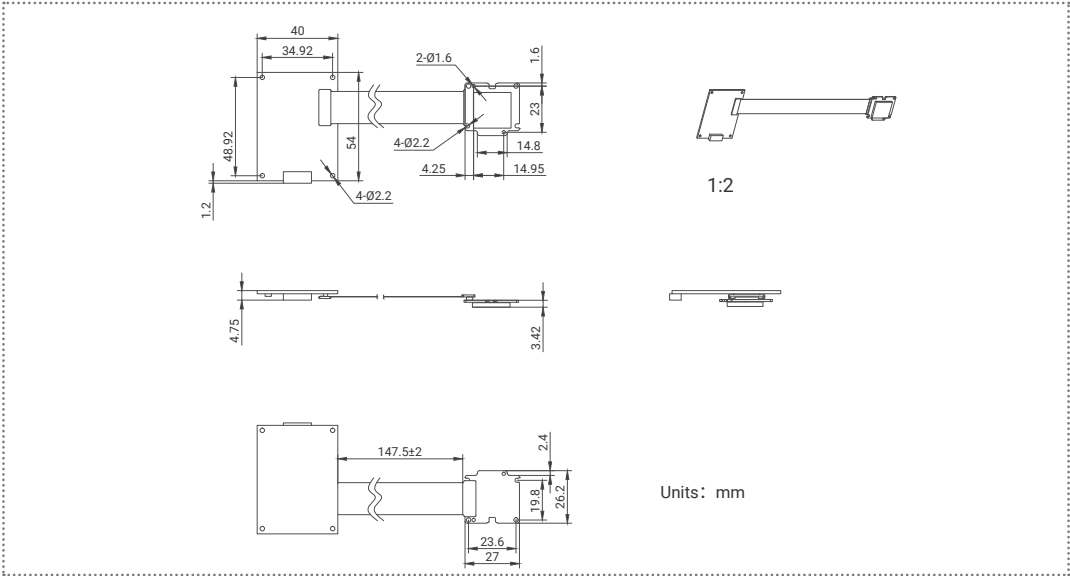


Pin	Definition	Description
1	GND	GPIO GND
2	Line2	GPIO input/output
3	Line3	GPIO input/output
4	NC	NC

Technical Drawing



VEN-304-56U3M/C-S, C-mount



VEN-304-56U3M/C-S, No-mount

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