

VEN-503-36U3M/C-S

VENUS Series 5 MP CMOS USB3.0 Board Level Camera



The VEN-503-36U3M/C-S is a monochrome/color split board level camera with Sony IMX264 CMOS sensors. The VEN-503-36U3M/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-503-36U3M/C-S is more flexible in demanding space.

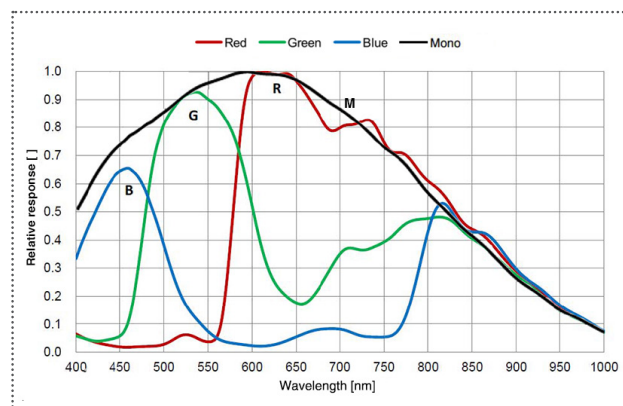
Applications

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

Features

- USB3.0(Micro-B) interface with 10-bit or 8-bit Mono/Bayer output
- ROI, Gain, auto gain, exposure and auto exposure
- Continuous acquisition/ Software trigger acquisition/ External trigger acquisition
- Support Digital Shift
- User Set Control
- Software reset function

Spectral Response



Specifications

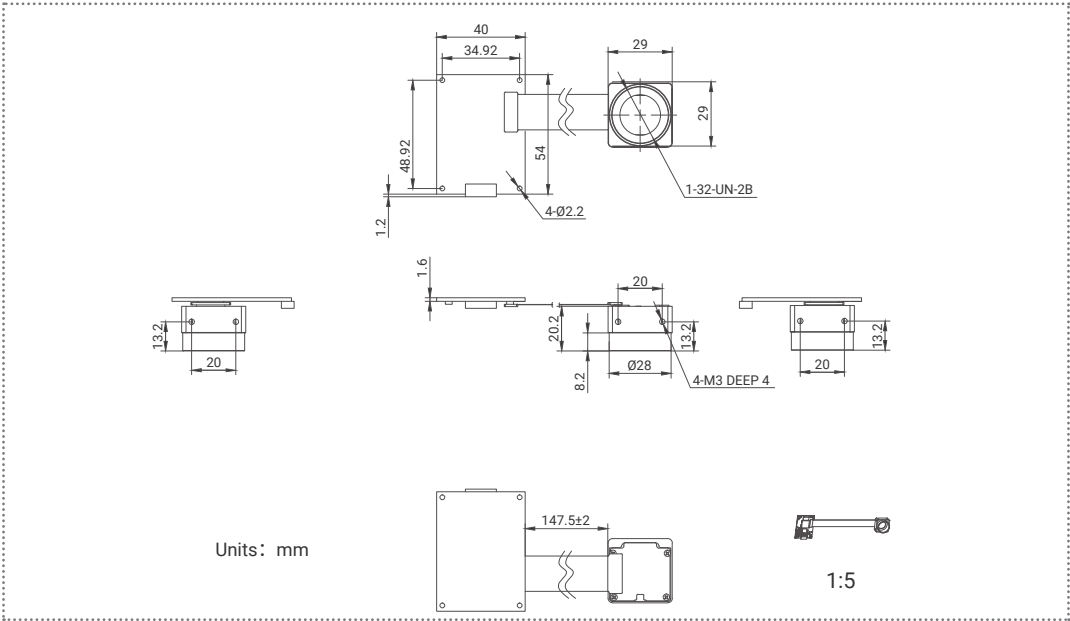
Model	VEN-503-36U3C-S	VEN-503-36U3M-S
Resolution	2448(H) × 2048(V)	
Sensor	Sony IMX264 Global shutter CMOS	
Sensor Format	2/3"	
Pixel Size	3.45μm × 3.45μm	
Frame Rate	36 fps	
ADC	12 bit	
Pixel Bit Depth	8 bit, 10 bit	
Mono/Color	Color	Mono
Pixel Formats	Bayer RG8 / Bayer RG10	Mono8 / Mono10
SNR	40.5 dB	40.4 dB
Exposure Time	Standard: 20μs~1s, Actual Steps: 1 row period	
Gain	0dB ~ 24dB; Default: 0dB, Steps: 0.1dB	
Binning	-	
Decimation	-	
Synchronization	Hardware trigger, software trigger	
Acquisition Mode	Continuous, Software trigger, Hardware trigger	
Reverse X/Y	-	
I/O Interface	2 GPIOs	
Data Interface	USB3.0 (Micro-B)	
Power Supply	Powered by USB3.0 bus	
Typical Power	1.75 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	RoHS, USB3.0 Vision®, GenICam®	

I/O Interface

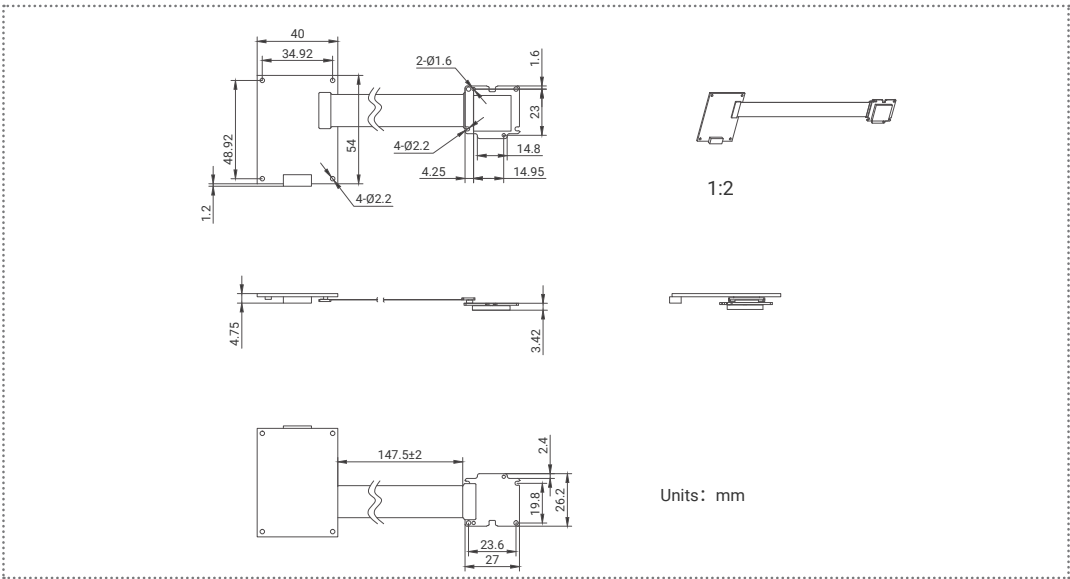


Pin	Definition	Description
1	GND	GPIO GND
2	Line2	GPIO input/output
3	Line3	GPIO input/output
4	NC	NC

Technical Drawing



VEN-503-36U3M/C-S, C-mount



VEN-503-36U3M/C-S, No-mount

China Daheng Group, Inc. Beijing Image Vision Technology Branch

12F Daheng Science & Technology Tower, No.3 Suzhou Street, Haidian District, Beijing China, 100080

Tel: +86 10 82828878

E-mail: isales@daheng-imaging.com