

VENUS SERIES

VEN-302-56U3M-S



- Light and low power consumption
- 1/1.8" Global Shutter CMOS sensor
- Compatible with GenICam™ and USB3 Vision®
- USB3.0 Interface
- 3.0 Megapixels
- 2 GPIOs
- C-Mount、 No-Mount

The VENUS series (VEN-U3) camera is DAHENG IMAGING' s board level industrial digital camera. The VEN-U3 series camera is a good choice for users who have requirements for space, weight, consumption and heat.

The VEN-302-56U3M-S is a monochrome USB3 Vision camera with Sony IMX265 CMOS sensors. The VEN-302-56U3M-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-302-56U3M-S is more flexible in demanding space.

The VEN-302-56U3M-S is especially 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 output
- Programmable ROI, increased frame rate with partial scan
- Gain and exposure programmable
- Support auto gain and auto exposure
- Three acquisition controls: Continuous acquisition/ Software trigger acquisition/ External trigger acquisition
- Trigger mode: Frame Start
- Support Binning
- Storable user sets
- Support Reverse X/Y (horizontal and vertical mirroring)
- Support Timer and Counter
- Optimized software package for 32/64bit Windows, and support Linux, Android, ARMv7 and ARMv8
- Compatible with GenICam™ and USB3 Vision®, can be used in a wide range of 3rd-party software such as HALCON, MERLIC and LabVIEW
- Multiple samples and easy-to-integrate SDKs for various programming tools
- Regulations: RoHS, GenICam, USB3 Vision

Performance Specifications

Model	VEN-302-56U3M-S
Interface	USB3.0
Resolution	2048 (H) × 1536(V)
Frame rate	56 fps @2048 (H)×1536(V)
Sensor	1/1.8", Global Shutter Sony IMX265 CMOS
Pixel size	3.45 μm × 3.45 μm
Pixel Bit Depth	8bit, 10bit
Spectrum	Monochrome
Exposure time	20μs~1s

Electrical Specifications

Power requirement	5 VDC via USB cable
I/Os	2 GPIOs
Data interface	USB3.0
Power consumption	<2.7W @5V DC

Environmental Specifications

Operating temp.	0°C ~ +45°C
Storage temp.	-20°C ~ +70°C
Operating humidity	10% ~ 80%

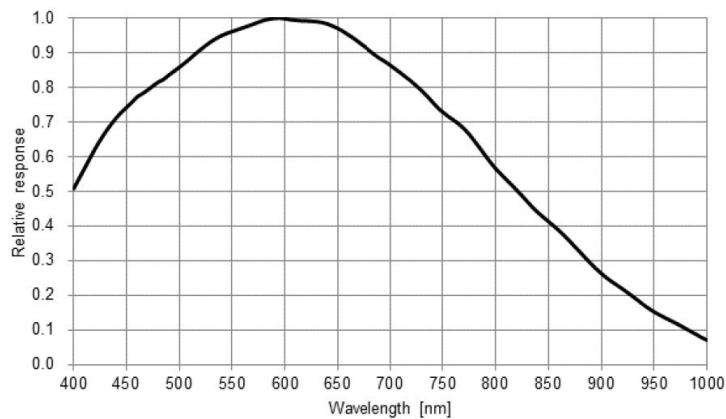
Mechanical Specifications

Weight	32g (C-Mount), 18g (No-Mount),
Dimensions	Camera with C-Mount: 29(W)×29(H)×20.2(L) mm Acquisition Board: 40(W) × 54(L) mm Imaging Board: 27(W) × 26.2(L) mm

Optical Specifications

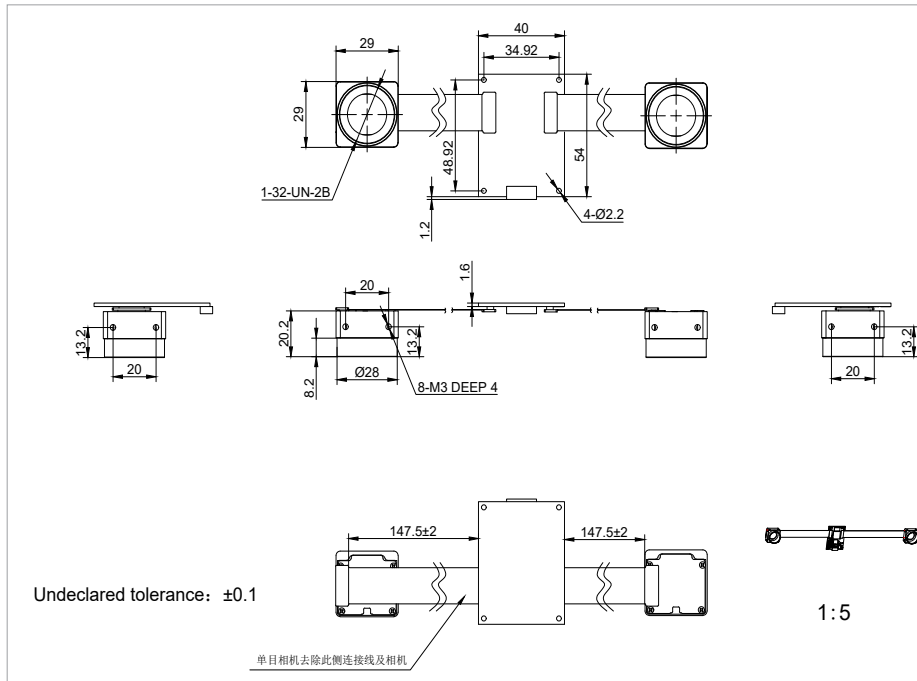
Lens mount	C-Mount, No-Mount
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Spectral Response

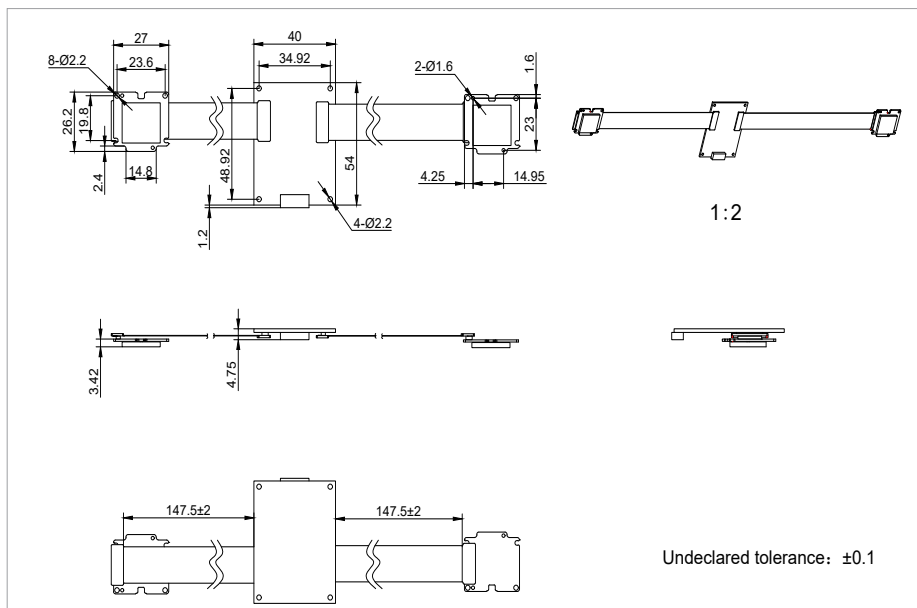


VEN-302-56U3M-S

Technical Drawing



VEN-302-56U3M-S (C-Mount)



VEN-302-56U3M-S (No-Mount)

Units: mm

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Specifications are subject to change without prior notice.

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