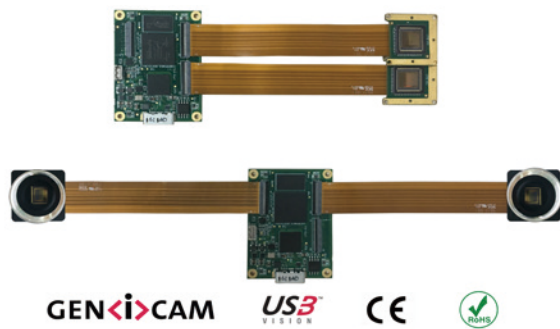# VENUS SERIES

VEN-134-90U3M/C-D

- Ultra small and flexible
- 1/2" Global Shutter CMOS sensor
- Compatible with GenICam™ and USB3 Vision®
- USB3.0 Interface
- 1.3 Megapixels
- 2 sensor boards
- FPC cable up to 460mm

The VENUS series (VEN-U3) camera is DAHENG IMAGING's mature board level industrial digital camera. And the VEN-134-90U3M/C-D is a monochrome/color USB3 Vision camera with two Onsemi PYTHON 1300 CMOS sensors. It is a good choice for users who have requirements for space, weight, consumption and heat.

VEN-134-90U3M/C-D is more flexible for installment and suitable for more applications. There are three connection ports in the main board and each sensor board can be freely connected to one of three ports by FPC cable. The length of FPC cable can be extended up to 460mm. They can be put in both sides or the same side to meet users' application requirements for different structure products.

The VEN-134-90U3M/C-D board level camera is easy for use and installation, especially designed for binocular vision applications such as handheld 3D scanner, desktop 3D scanner and so on.

Features

- USB3.0 interface with 10-bit or 8-bit Mono/Bayer output
- Programmable ROI, increased frame rate with partial scan
- Gain, exposure and white balance programmable (white balance only for color models)
- Adjustable URB
- Software reset function
- Support Windows, Linux, Android, ARMv7 and ARMv8
- Support hardware trigger and software trigger
- Compatible with GenICam™ and USB3 Vision®, can be used in a wide range of 3rd-party software such as HALCON, MERLIC and LabVIEW
- PC with Intel Core 2 Duo, 2.4GHz above and 2GB above memory is recommended
- Multiple samples and easy-to-integrate SDK for various programming tools
- Regulations: CE, RoHS, GenICam, USB3 Vision

Model Configuration

Model	FPC length	FPC installation	Lens mount	Part number
VEN-134-90U3M/C-D	J01 (460mm) J02 (210mm)	S00 (same side) /S01 (both sides)	M00 (C-Mount) /M06 (No-Mount)	Model - FPC length - FPC installation - Lens mount

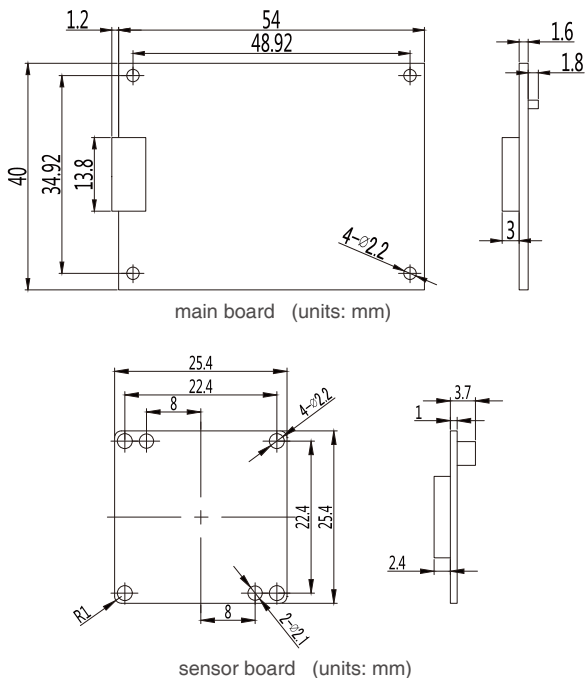For instance, VEN-134-90U3M-D-J01J01S01M00 indicates that VEN-134-90U3M-D with 460mm FPC in the both sides and C-Mount.

Performance Specifications

Model	VEN-134-90U3M/C-D
Interface	USB3.0
Resolution	1280 × 1024 × 2
Frame rate	90 fps
Sensor	1/2", Global Shutter Onsemi PYTHON 1300 CMOS
Pixel size	4.8 µm × 4.8 µm
Spectrum	Monochrome / Color

Mechanical Specifications

Dimensions (mm)	main board	54.0 × 40.0 × 6.4
	sensor board	25.4 × 25.4 × 6.1
FPC cable extension	up to 460mm	

Electrical Specifications

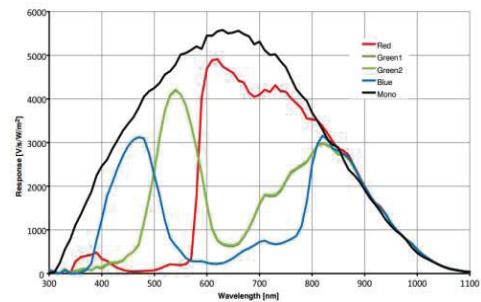|	
Power requirement	5 VDC via USB cable
I/Os	1 trigger input, 1 input /1 output
Data interface	USB3.0 Micro B
Power consumption	<3.5W @5VDC

Environmental Specifications

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

Optical Specifications

Lens mount	No-mount / C-mount (optional)

Technical Drawing

main board   (units: mm)

sensor board   (units: mm)

Spectral Response

VEN-134-90U3M/C-D

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