

VZ-12MU-M/C23H00

Industrial Digital Cameras with USB3.0 Interface



USB[®]
VISION

GEN<i>i>CAM

VZ-12MU-M/C 23H00 is a monochrome/color USB3.0 Vision camera with the Sony IMX304 global shutter CMOS. Thanks to the extremely compact design (36mm x 31mm x 38.8mm), robust metal housings and locking screw connectors, VZ-12MU-M/C 23H10 has an outstanding price and performance ratio.

VZ-12MU-M/C 23H00 is ideal for machine vision applications such as industrial inspection, medical, scientific research, education, security and so on.

VIEWORKS

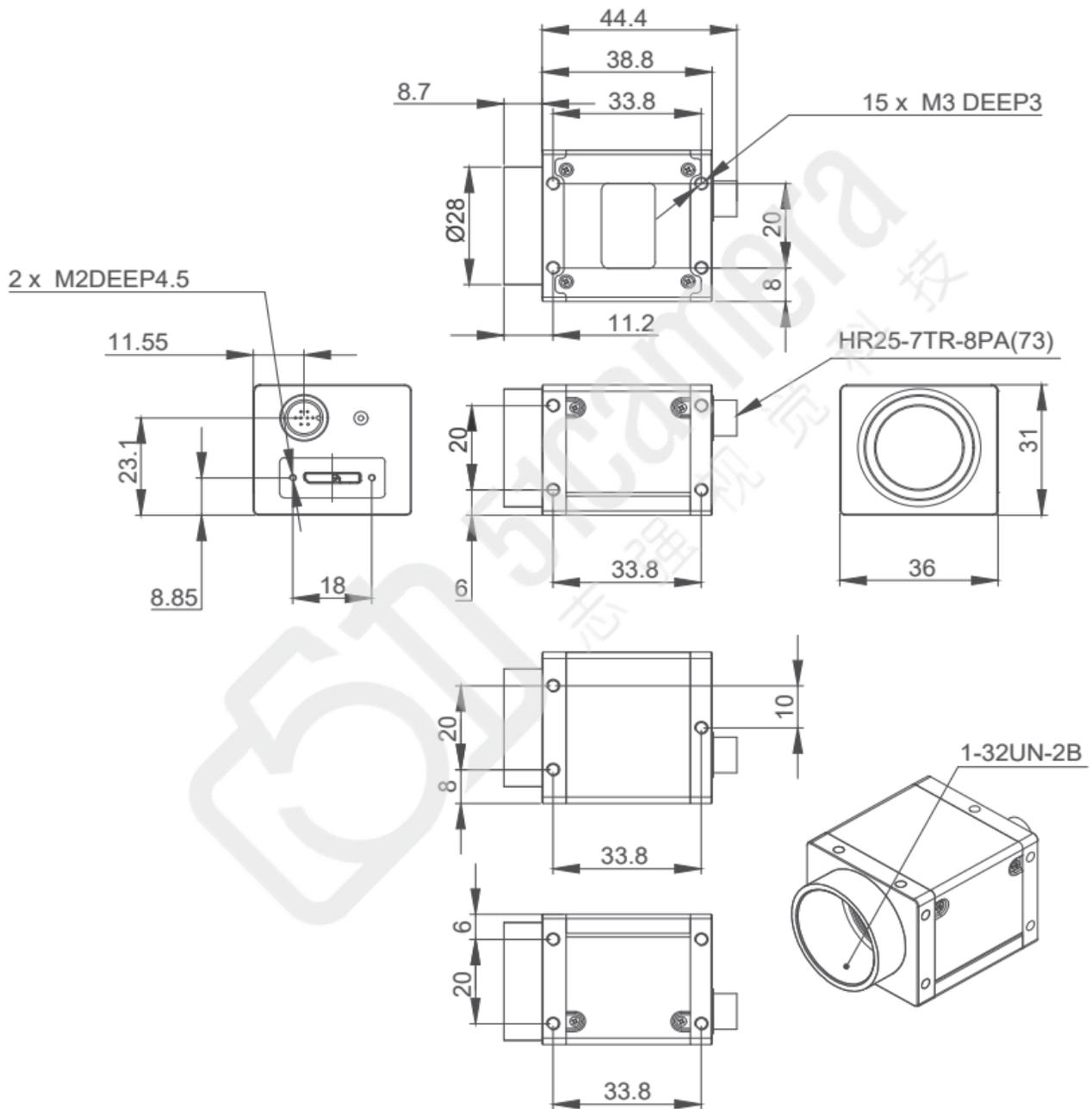
vision.vieworks.com

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Mechanical Dimensions

Unit: mm



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Main Features

- Trigger mode: Frame Start / Frame Burst Start
- Two exposure time modes: Standard exposure time mode / UltraShort exposure time mode
- Programmable LUTs and User Set Control
- 16KB data storage area for saving algorithm coefficients and parameter configuration
- Support Timer and Counter
- Support Remove Parameter Limit to expand the range of exposure, gain, white balance, etc.
- Color models support Light source preset, Color Transformation Control and Saturation
- Compatible with GenICam™ and USB3 Vision®

Applications

- Industrial Inspection
- Medical Research
- Scientific Research
- Education
- Security

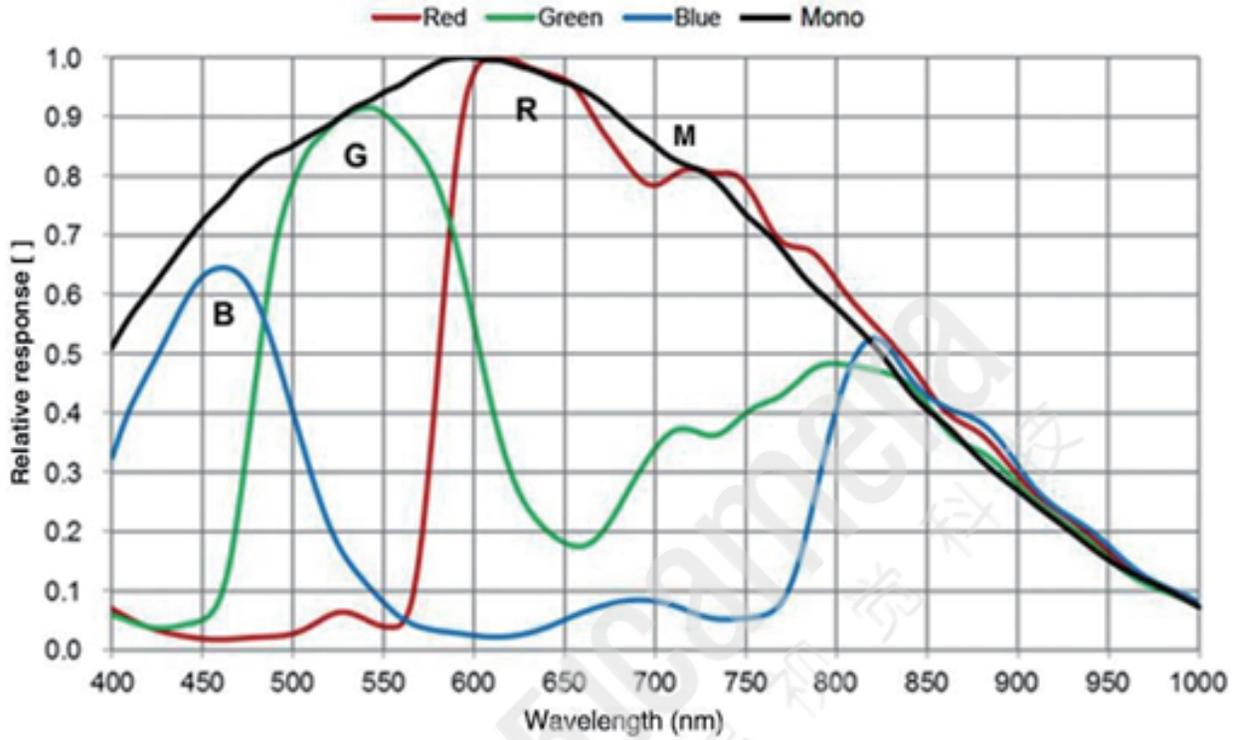
Specifications

Model	VZ-12MU-M/C 23H00	
Resolution (H x V)	4096 x 3000	
Sensor	Sony IMX304 LQR Global Shutter CMOS	
Pixel Size	3.45 μm \times 3.45 μm	
Data Interface	USB 3.0	
Frame Rate	23.5fps@4096 \times 3000	
ADC Bit Depth	12 bit	
Pixel Bit Depth	8 bit, 12 bit	
Exposure Time	UltraShort: 1 μs to 100 μs , Actual Steps: 1 μs Standard: 28 μs to 1s, Actual Steps: 1 row period	
Gain	0dB to 24dB, Default: 0dB, Steps: 0.1dB	
Mono / Color	Color	Mono
Pixel Formats	Bayer RG8, Bayer RG12	Mono8, Mono12
Signal Noise Ratio	40.59dB	40.47dB
Synchronization	Hardware trigger and Software trigger	
I/O	1 input and 1 output with opto-isolated, 2 programmable GPIOs	
Temperature	Operating: 0°C to 45°C, Storage: -20°C to 70°C	
Operating Humidity	10% to 80%	
Power Requirements	5 VDC via USB cable	
Power Consumption	< 3W@5V	
Lens Mount	C	
Dimensions and Weight	36mm x 31mm x 38.8mm (without lens adapter or connectors), 67g	
Programmable Control	Image size, Gain, Exposure time, Trigger polarity, Flash polarity	
Conformity	CE, RoHS, FCC, USB3 Vision, GenICam, KC	

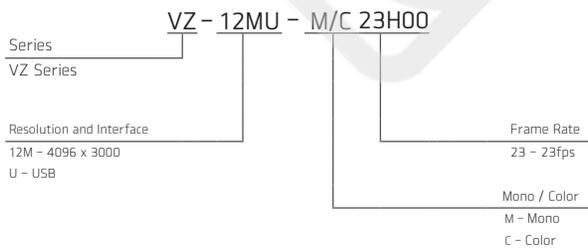
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Spectral Response



Ordering Scheme



Connector Specification

I/O Connector



- | | |
|-----------|----------------------|
| 1: Line0+ | Opto-isolated input+ |
| 2: Ground | GPIO GND |
| 3: Line0- | Opto-isolated input- |
| 4: NC | NC |
| 5: Line2 | GPIO input/output |
| 6: Line3 | GPIO input/output |
| 7: Line1- | Opto-isolated input- |
| 8: Line1+ | Opto-isolated input+ |

Connectors on camera body