

VZ-1600U-M/C 227H00

Industrial Digital Cameras with USB3.0 Interface



USB[®]
VISION
GEN<i>i</i>CAM

VZ-1600U-M/C 227H00 is a monochrome/color USB3.0 Vision camera with Sony IMX273 CMOS sensor. Thanks to the extremely compact design (29mm x 29mm x 29mm), robust metal housings and locking screw connectors, the VZ-1600U-M/C 227H00 camera has an outstanding price and performance ratio. VZ-1600U-M/C 227H00 is ideal for machine vision applications such as industrial inspection, medical, scientific research, education, security and so on.

VIEWWORKS

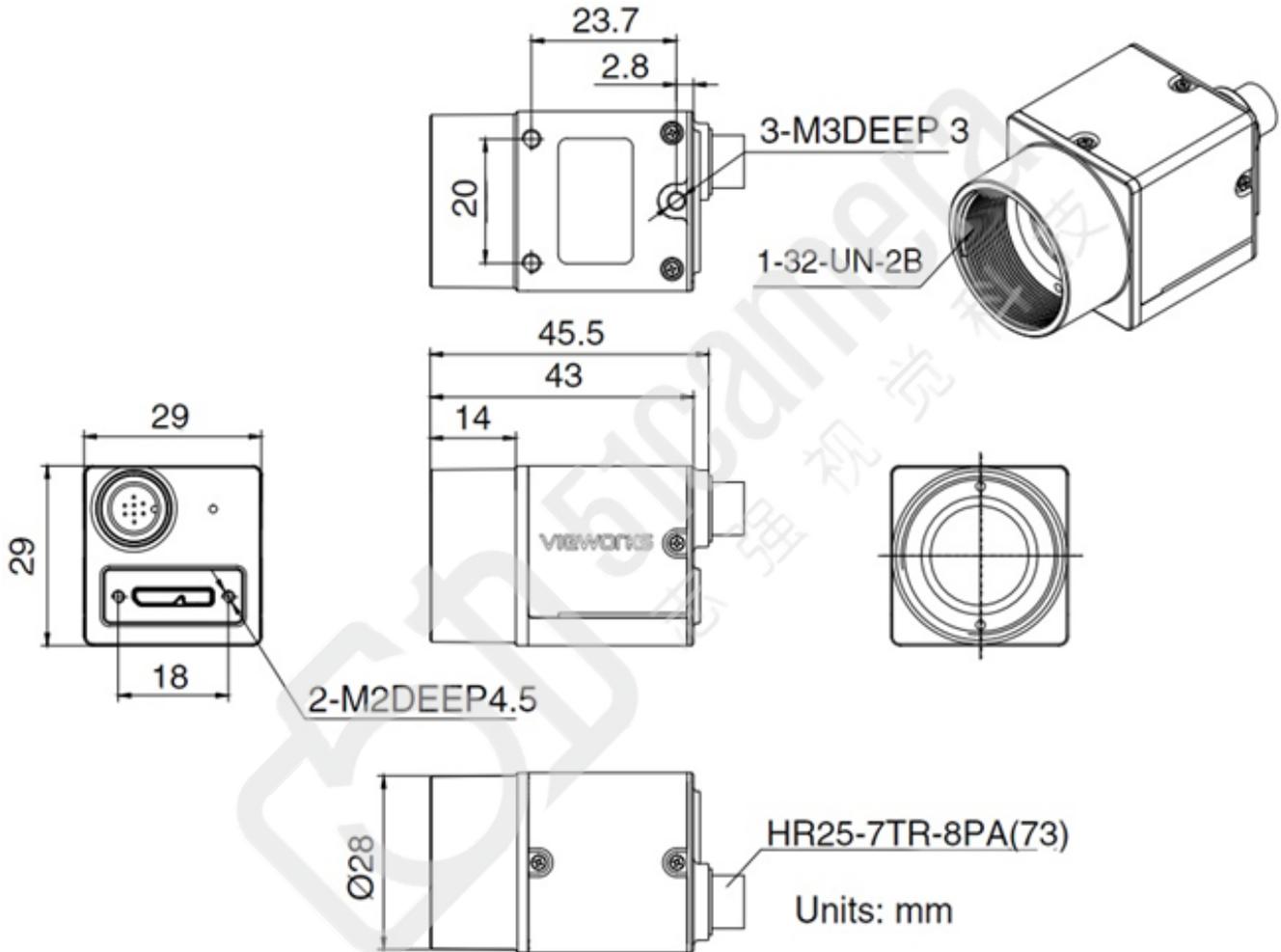
vision.viewworks.com

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Mechanical Dimensions

Unit: mm



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Main Features

- Trigger mode: Frame Start / Frame Burst Start
- Programmable LUTs and User Set Control
- Two exposure time modes: Standard exposure time / Ultrashort exposure time
- Color model supports Light Source Preset, Color transformation control and Saturation
- Mono model supports Noise Reduction and Sharpness
- Support Time and Counter
- Support Remove Parameter Limit to expand the range of exposure, gain, etc.
- Sequence Control

Applications

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

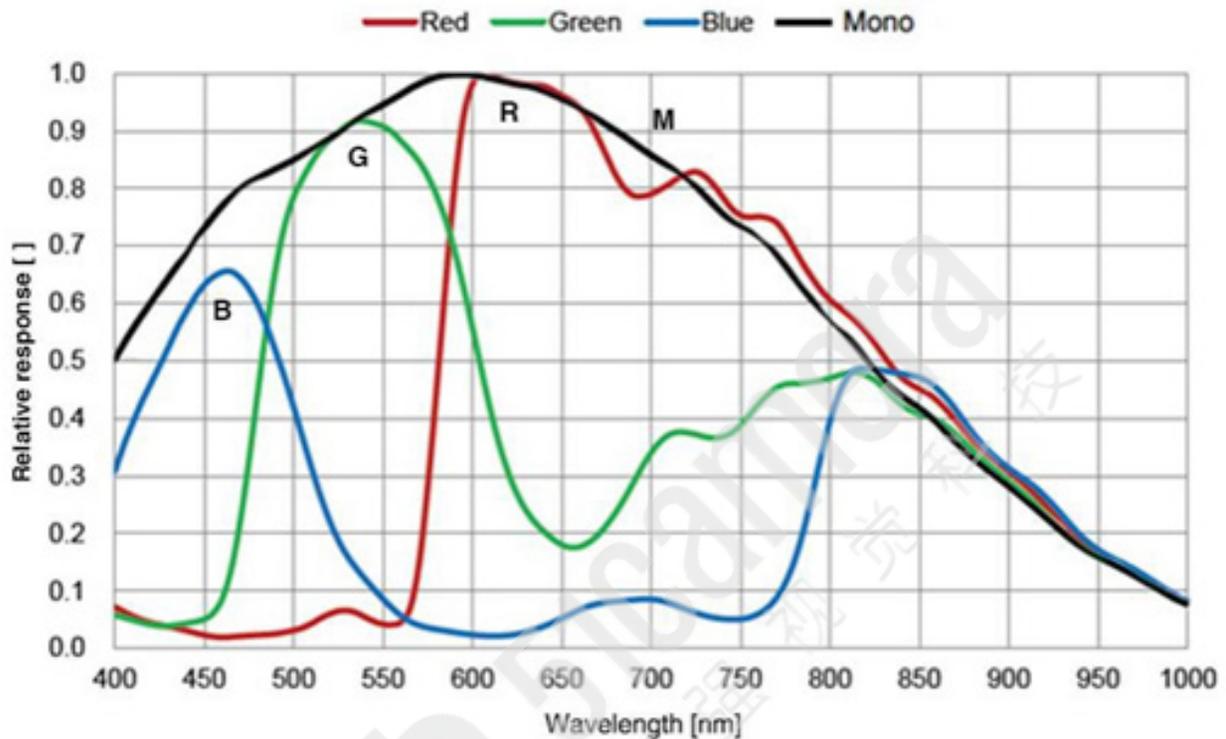
Specifications

Model	VZ-1600U-M/C 227H00	
Resolution (H x V)	1440 x 1080	
Sensor	Sony IMX273 Rolling Shutter CMOS	
Pixel Size	3.45 μm \times 3.45 μm	
Data Interface	USB 3.0	
Frame Rate	227fps@1440 \times 1080	
ADC Bit Depth	10 bit	
Pixel Bit Depth	8 bit, 10 bit	
Exposure Time	Ultrashort: 1 μs to 100 μs , Actual Steps: 1 μs Standard: 8 μs to 1 s, Actual Steps: 1 row period	
Gain	0dB ~ 24dB, Default: 0dB, Steps: 0.1dB	
Mono / Color	Color	Mono
Pixel Formats	Bayer RG8, Bayer RG10	Mono8, Mono10
Signal Noise Ratio	41dB	41dB
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	< 2.7W@5 VDC	
Lens Mount	C	
Dimensions and Weight	29mm x 29mm x 29mm (without lens adapter or connectors), 68g	
Programmable Control	Image size, Gain, Exposure time, Trigger polarity, Flash polarity	
Conformity	CE, RoHS, FCC, USB3 Vision, GenICam, KC	

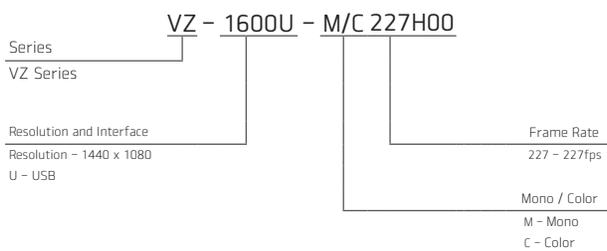
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Spectral Response



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