

VZ-1600U-M/C 227H

Industrial Digital Cameras with USB3.0 Interface



USB[®]
VISION
GEN<i>i</i>CAM

VZ-1600U-M/C 227H 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 227H camera has an outstanding price and performance ratio. VZ-1600U-M/C 227H is ideal for machine vision applications such as industrial inspection, medical, scientific research, education, security and so on.

VIEWORKS

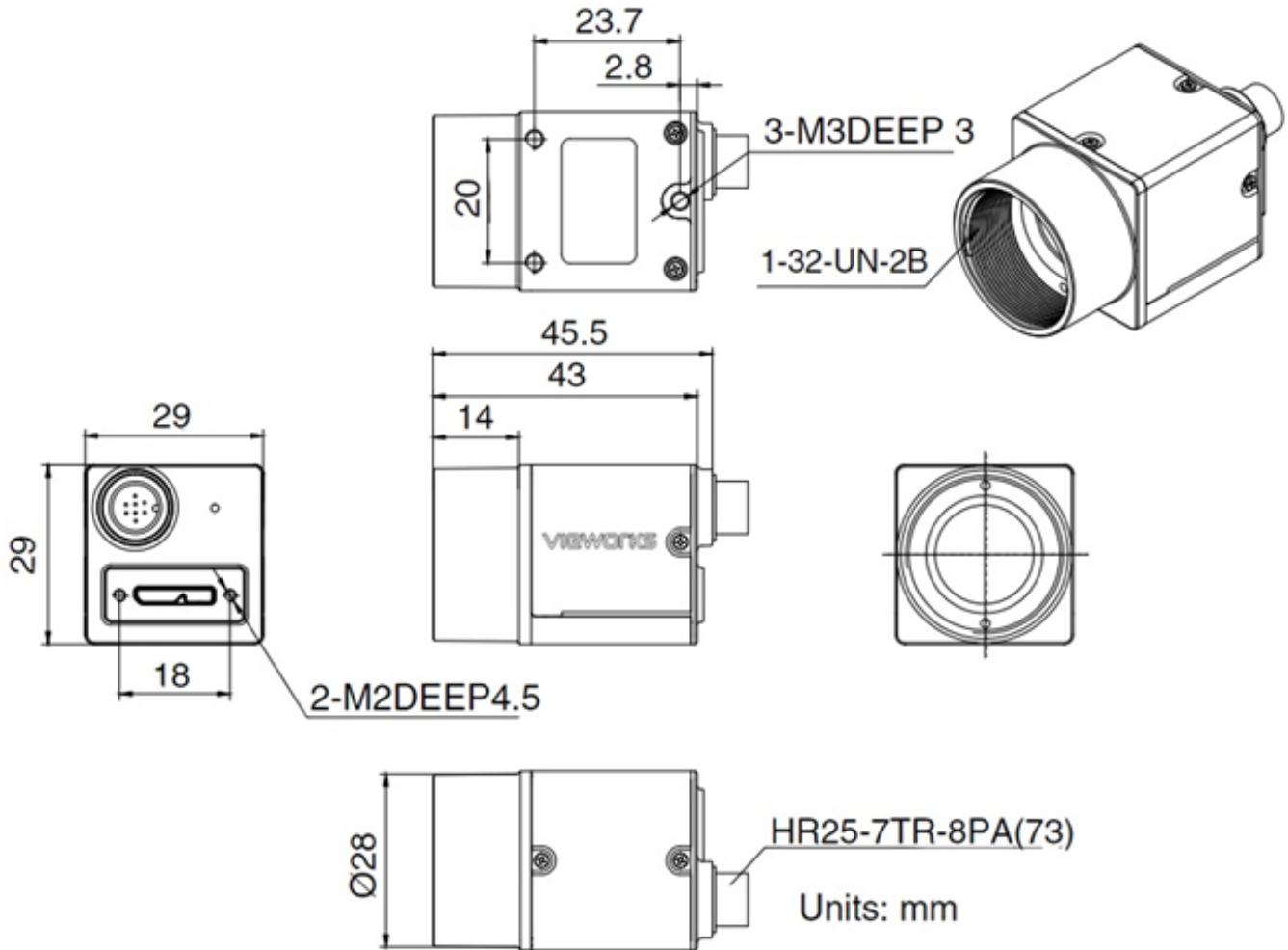
vision.vieworks.com

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Industrial Digital Camera with USB3.0 Interface

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

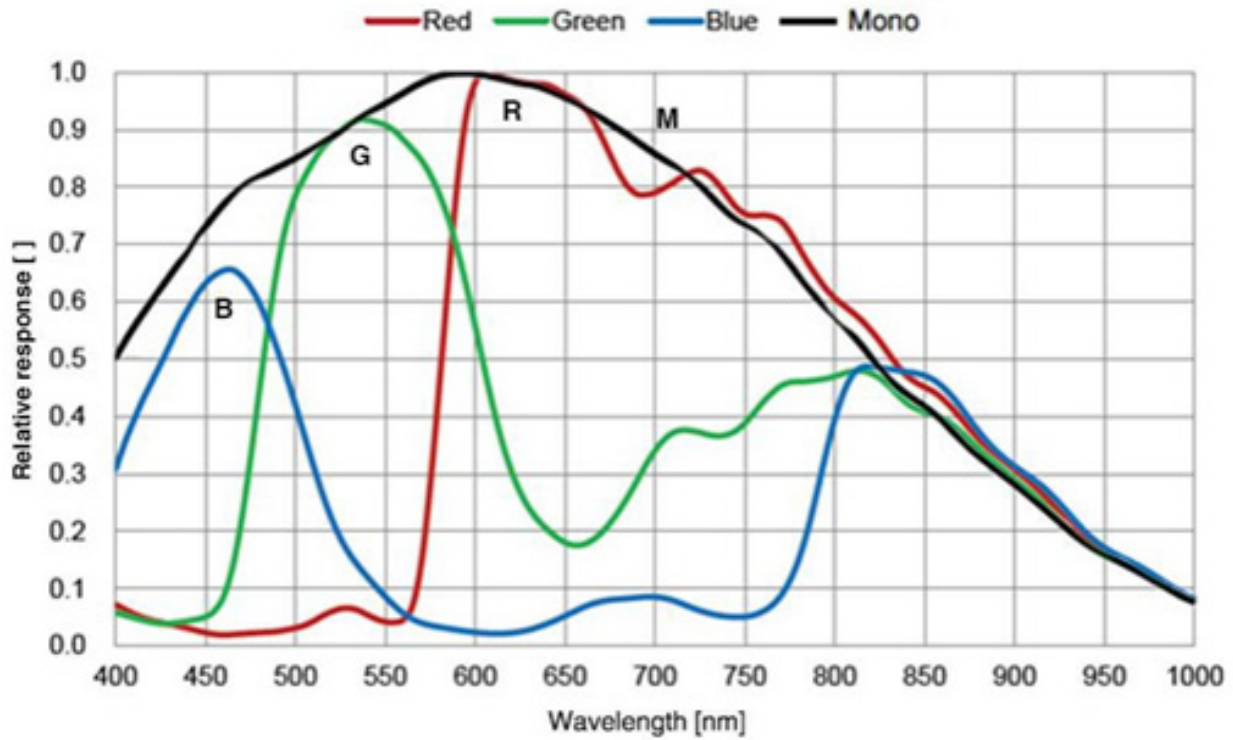
Applications

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

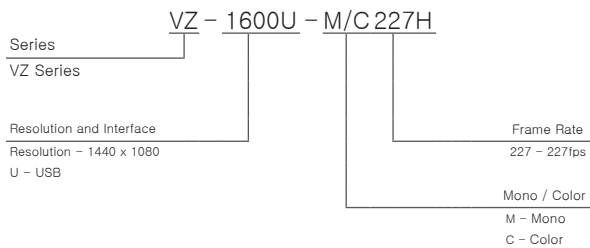
Specifications

Model	VZ-1600U-M/C 227H00	
Resolution (H x V)	1440 x 1080	
Sensor	Sony IMX273 Rolling Shutter CMOS	
Pixel Size	3.45 μm x 3.45 μm	
Data Interface	USB 3.0	
Frame Rate	227fps@1440 x 1080	
ADC Bit Depth	10 bit	
Pixel Bit Depth	8 bit, 10 bit	
Exposure Time	Ultrashort: 1 μs ~ 100 μs , Actual Steps: 1 μs Standard: 8 μs ~ 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
Single Noise Ratio	41dB	41dB
Synchronization	Hardware trigger, Software trigger	
I/O	1 input and 1 output with opto-isolated, 2 programmable GPIOs	
Temperature	Operating: 0 $^{\circ}\text{C}$ ~ 45 $^{\circ}\text{C}$, Storage: -20 $^{\circ}\text{C}$ ~ 70 $^{\circ}\text{C}$	
Operating Humidity	10% ~ 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), 65g	
Programmable Control	Image size, Gain, Exposure time, Trigger polarity, Flash polarity	
Conformity	CE, RoHS, FCC, USB3 Vision, GenICam, KC	

Spectral Response



Ordering Scheme



Connector Specification

Power/Control



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

Connectors on camera body