

VZ-20MU-M/C19H00

Industrial Digital Cameras with USB3.0 Interface



USB[®]
VISION

GEN<i>i>CAM

VZ-20MU-M/C19H00 is a monochrome/color USB3.0 Vision camera with the Sony IMX183 rolling shutter CMOS sensor. Thanks to the extremely compact design (29mm x 29mm x 29mm), robust metal housings and locking screw connectors, VZ-20MU-M/C19H00 has an outstanding price and performance ratio. VZ-20MU-M/C19H00 is ideal for machine vision applications such as industrial inspection, medical, scientific research, education, security and so on.

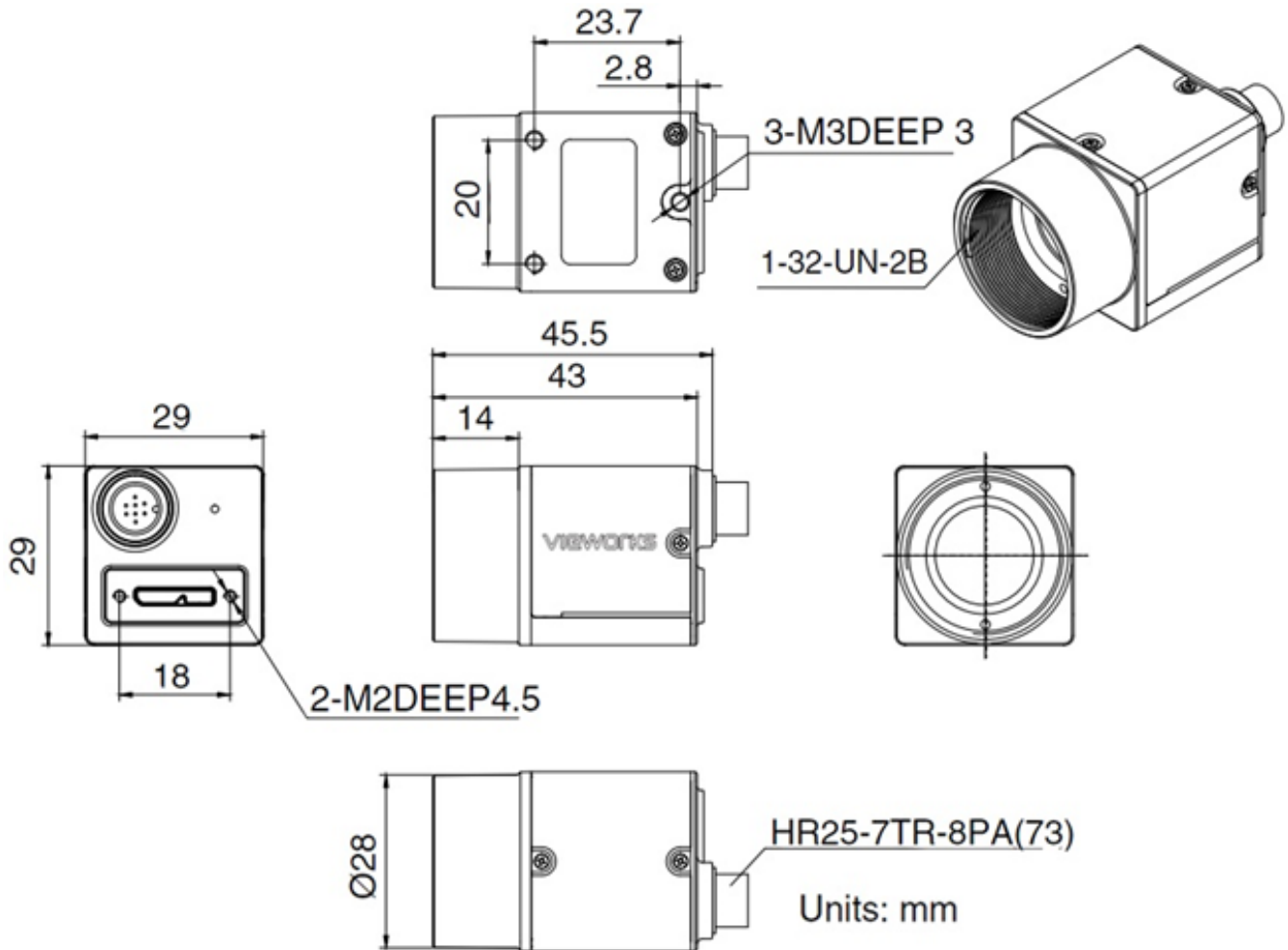
VIEWWORKS

vision.viewworks.com

VZ-20MU-M/C19H00

Industrial Digital Camera with USB3.0 Interface

Mechanical Dimensions



VZ-20MU-M/C19H00

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Main Features

- Trigger mode: Frame Start / Frame Burst Start
- Programmable ROI, increased frame rate with partial scan
- Four acquisition controls: Single frame acquisition. Continuous acquisition, Software trigger acquisition, and External trigger acquisition
- 16KB data storage area for saving algorithm coefficients and parameter configuration
- Multiple samples and easy-to-integrate SDKs for various programming tools
- Support LUTs, storable user sets, Timer and Counter
- Support Remove Parameter Limit to expand the range of exposure, gain, white balance, etc.
- Compatible with GenICam™ and USB3 Vision®

Applications

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

Specifications

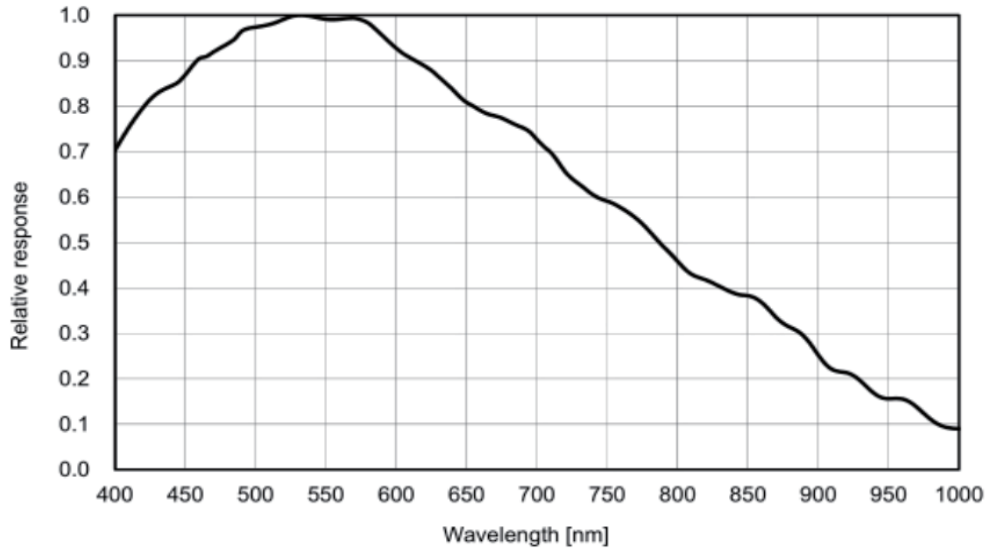
Model	VZ-20MU-M/C 19H00	
Resolution (H x V)	5496 x 3672	
Sensor	Sony IMX183 Rolling Shutter CMOS	
Pixel Size	2.4 μm \times 2.4 μm	
Data Interface	USB 3.0	
Frame Rate	19.6 fps @5496 \times 3672	
ADC Bit Depth	12 bit	
Pixel Bit Depth	8 bit, 12 bit	
Exposure Time	Standard: 12 μs to 1 s, Actual Steps: 1 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	41.56dB	42.08dB
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@5V	
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	

VZ-20MU-M/C19H00

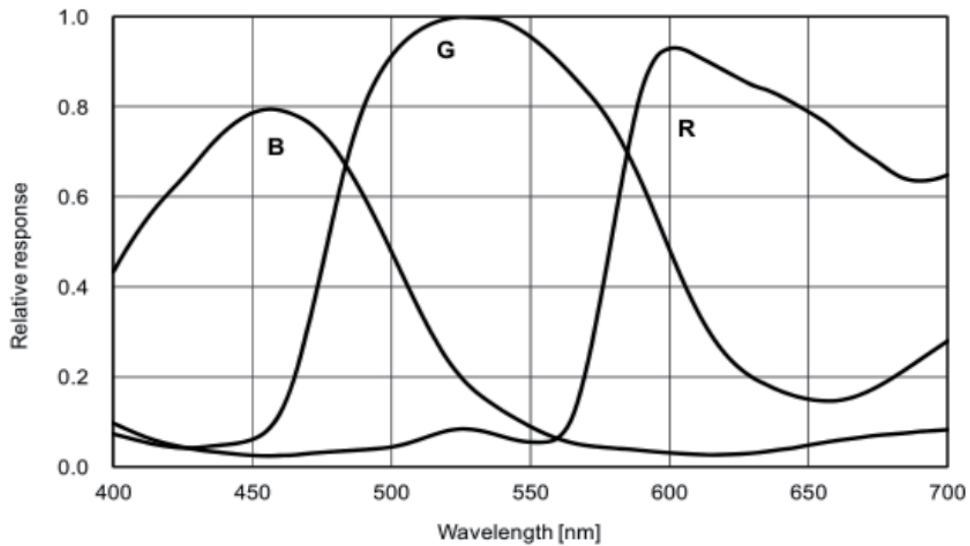
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Spectral Response

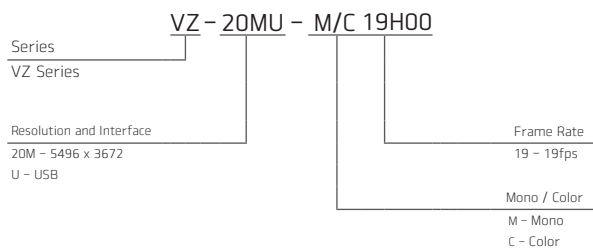
- VZ-20MU-M19H00 (Mono)



- VZ-20MU-C19H00 (Color)



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