VZ-20MU-M/C19H00

Industrial Digital Cameras with USB3.0 Interface

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 (29㎜ x 29㎜ x 29㎜), 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.
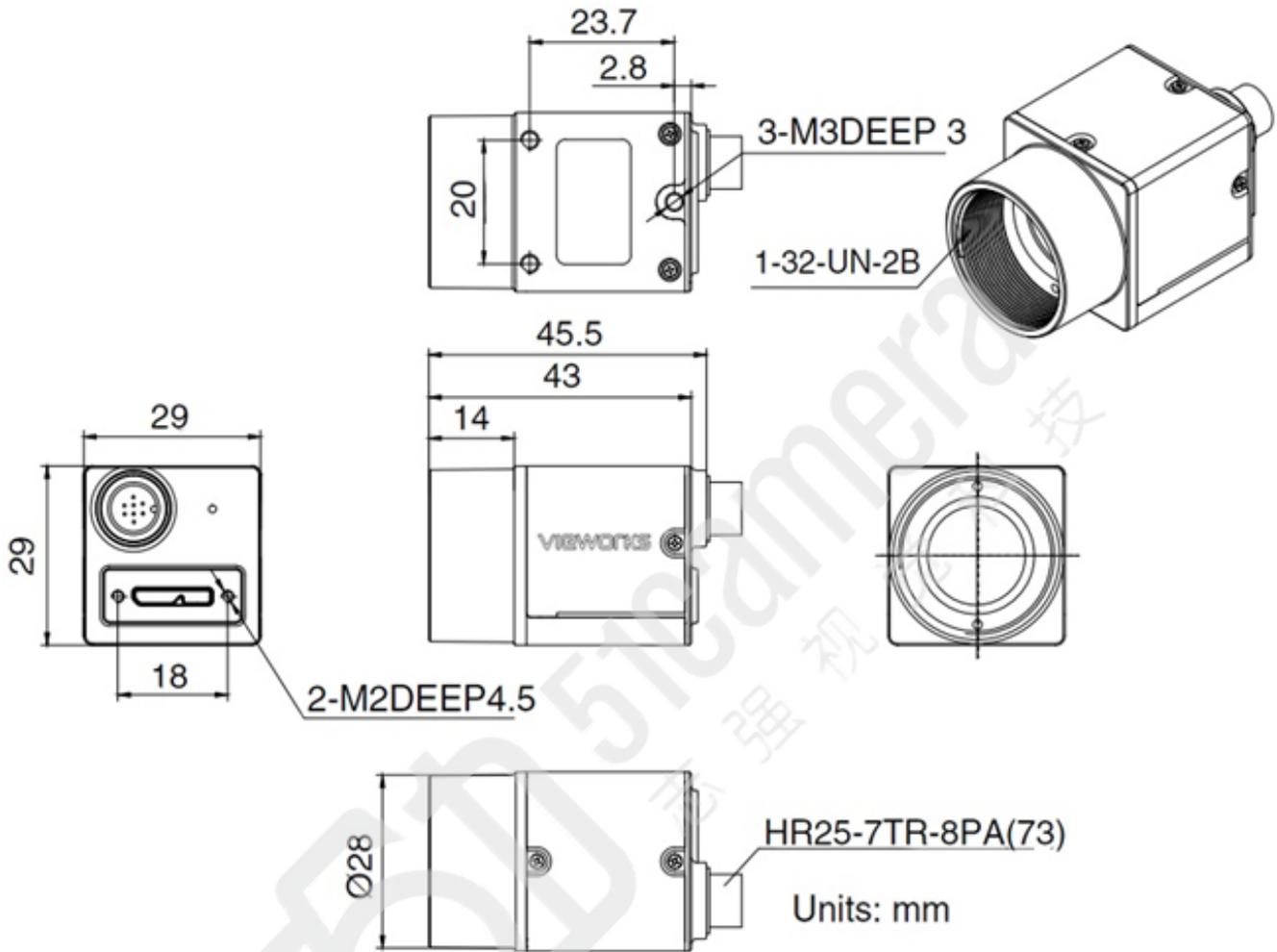
Mechanical Dimensions

23.7
2.8
20
3-M3DEEP 3
1-32-UN-2B

45.5
43
14
29
29
18
2-M2DEEP4.5

Ø28
HR25-7TR-8PA(73)
Units: mm

vieworks

D-24-2820

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
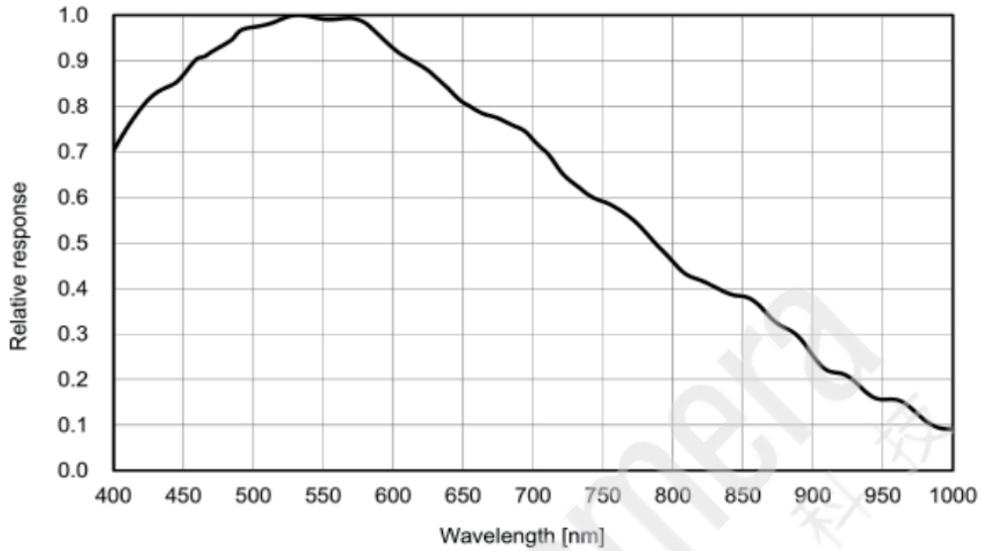- Education
- Security

Specifcations

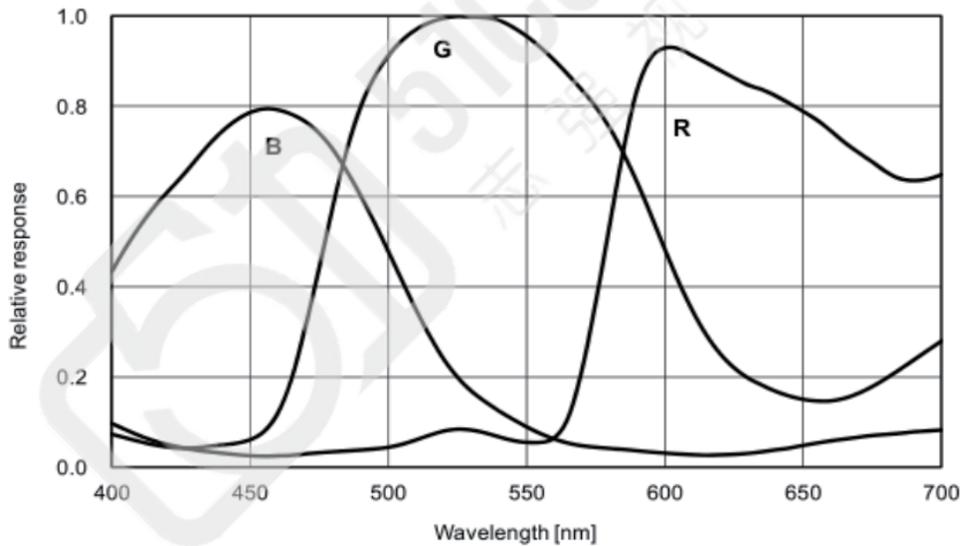| Model	VZ-20MU-M/C 19H00	
Resolution (H x V)	5496 x 3672	
Sensor	Sony IMX183 Rolling Shutter CMOS	
Pixel Size	2.4 μm × 2.4 μm	
Data Interface	USB 3.0	
Frame Rate	19.6 fps @5496 × 3672	
ADC Bit Depth	12 bit	
Pixel Bit Depth	8 bit, 12 bit	
Exposure Time	Standard: 12 μs to 1 s, Actual Steps: 1 row period	
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℃ to 45℃, Storage: -20℃ to 70℃	
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

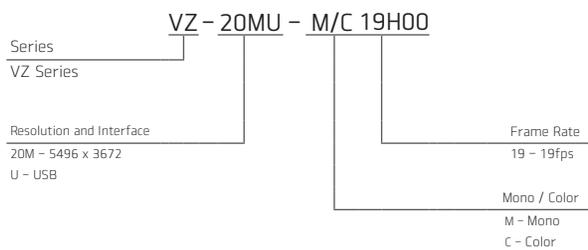Industrial Digital Camera with USB3.0 Interface

Spectral Response

• VZ-20MU-M19H00 (Mono)

• VZ-20MU-C19H00 (Color)

Ordering Scheme

VZ – 20MU – M/C 19H00

Series
VZ Series

Resolution and Interface
20M – 5496 x 3672
U – USB

Frame Rate
19 – 19fps

Mono / Color
M – Mono
C – Color

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