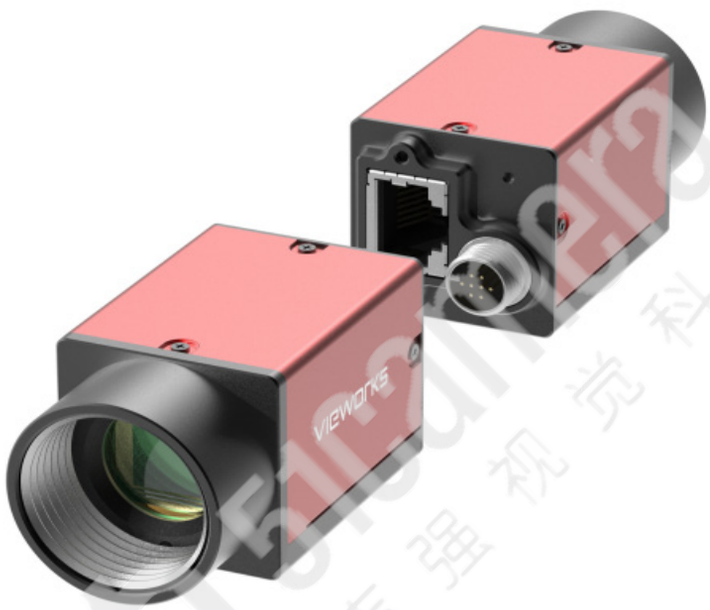
VZ-1600G-M/C 75H00

Industrial Digital Cameras with GigE Interface

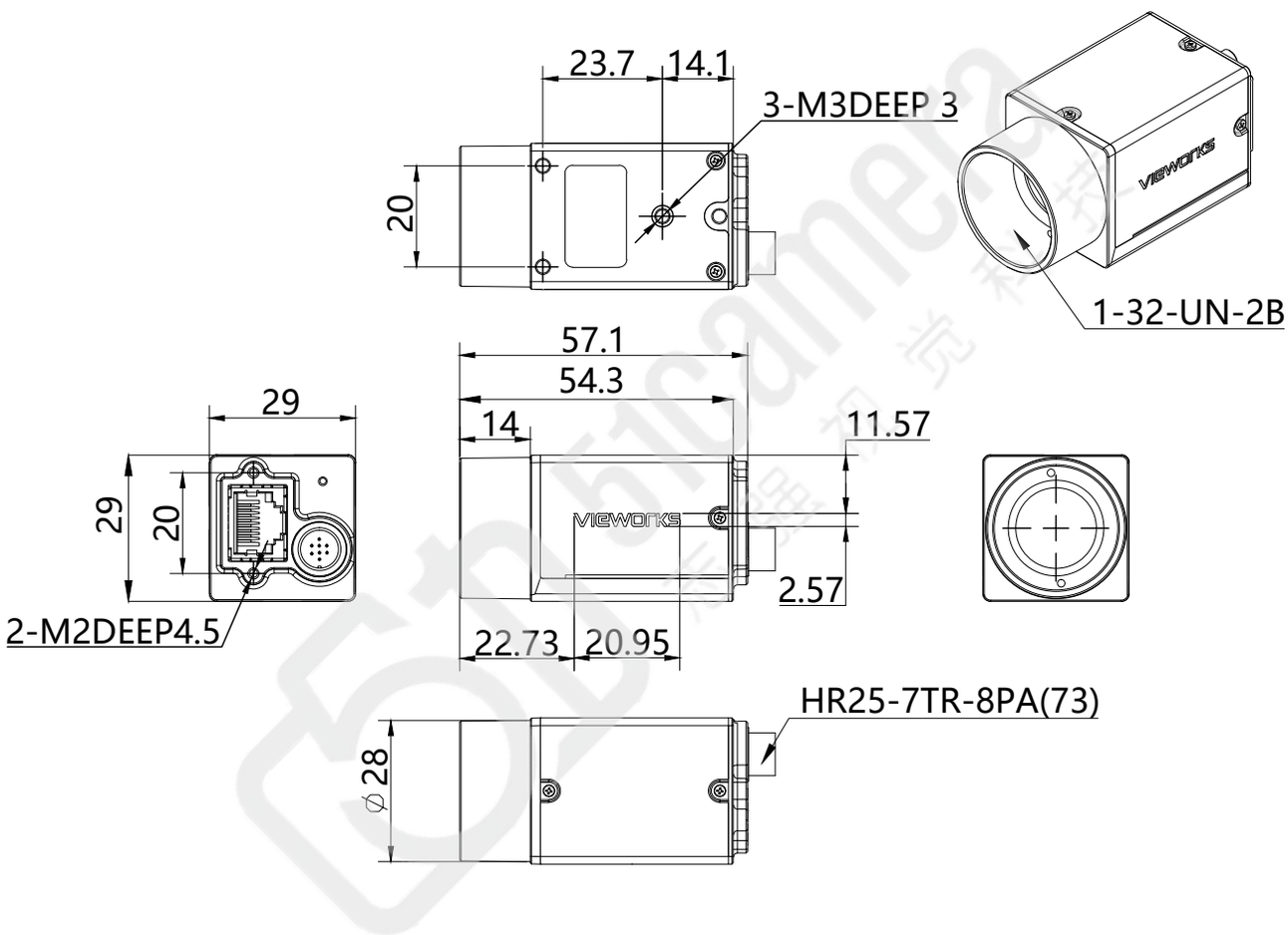


VZ-1600G-M/C 75H00, the new industrial GigE vision camera with improved built-in ISP algorithms provides multiple acquisition controls. Thanks to the extremely compact design (29㎜x29㎜x40.3㎜), robust metal housings and locking screw connectors, the VZ-1600G-M/C 75H00 camara can secure the realiability of cameras deployed in harsh environments.

VZ-1600G-M/C 75H00 has opto-isolated I/Os, and the GPIOs give the camera maximum flexibility to adapt to specific needs. The VZ-1600G-M/C 75H00 camera is ideal for machine vision applications such as industrial inspection, medical, scientific research, education, security and so on.

Mechanical Dimensions

Unit: mm



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VZ-1600G-M/C 75H00

Industrial Digital Camera with GigE Interface

Main Features

- Power over Ethernet (IEEE802.3af compliant)
- Programmable ROI, increased frame rate with partial scan
- Programmable LUTs and storable user sets
- 4 acquisiton controls: Single frame, Continuous, Software trigger, External trigger
- Adjustable Gamma and Sharpness for optimizing the brightness and sharpness of images
- Support Remove Parameter Limit to expand the range of exposure, gain, white balance, etc.
- Two exposure time modes: Standard / Minimal

Applications

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

Specifcations

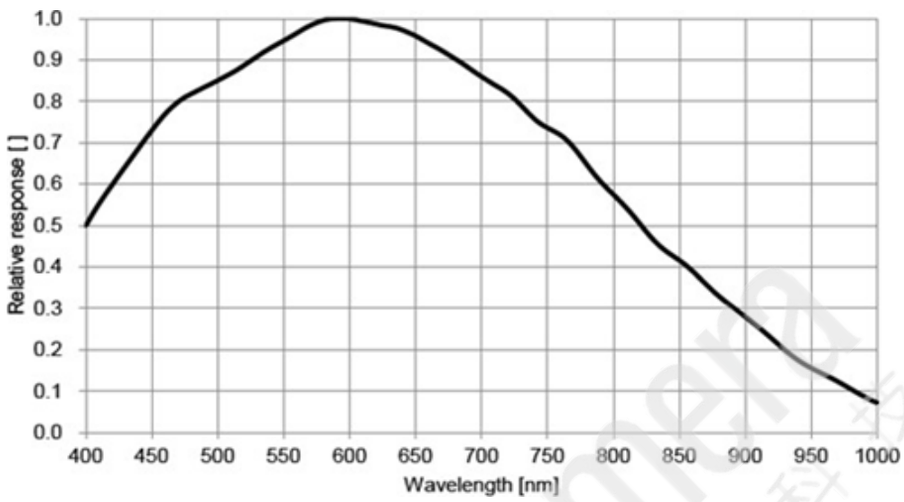
Model	VZ-1600G-M/C 75H00	
Resolution (H x V)	1440 x 1080	
Sensor	Sony IMX273 Global Shutter CMOS	
Pixel Size	3.45 μm × 3.45 μm	
Data Interface	Fast Ethernet (100 Mbit/s) or Gigabit Ethernet (1000 Mbit/s)	
Frame Rate	75.6 fps @ 1440 × 1080 (Adjust the packet size to 8192 and reserved bandwidth to 5)	
ADC Bit Depth	12 bit	
Pixel Bit Depth	8 bit, 12 bit	
Exposure Time	Ultrashort: 1μs to 100μs, Actual Steps: 1μs Standard: 20μs 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	40.76dB	40.61dB
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	12VDC-10% to 24VDC+10% supplied via the camera's Hirose connector Supports PoE (Power over Ethernet, IEEE802.3af compliant)	
Power Consumption	< 3 W @ 24 VDC, < 3.75 W @ PoE	
Lens Mount	C	
Dimensions and Weight	29mm x 29mm x 40.3mm, 85g	
Programmable Control	Image size, Gain, Exposure time, Trigger polarity, Flash polarity	
Conformity	CE, RoHS, FCC, GigE Vision, GenICam, KC	

VZ-1600G-M/C 75H00

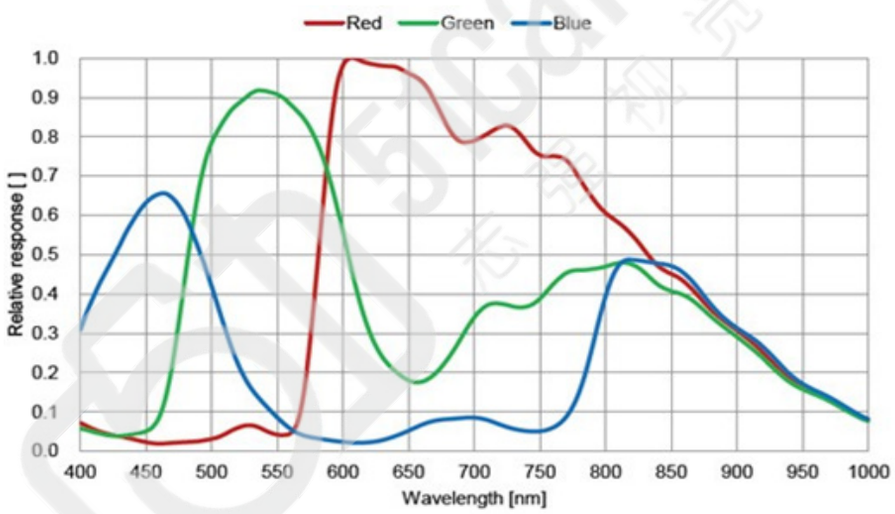
Industrial Digital Camera with GigE Interface

Spectral Response

- VZ-1600G-M75H00 (Mono)



- VZ-1600G-C75H00 (Color)



Ordering Scheme

VZ - 1600G - M/C 75H00

Series
VZ Series

Resolution and Interface
Resolution - 1440 x 1080
G - Gigabit Ethernet

Frame Rate
75 - 75.6fps

Mono / Color
M - Mono
C - Color

Connector Specification

Power/Control

1: Line0+	Opto-isolated input+
2: Ground	GND & GPIO GND
3: Line0-	Opto-isolated input-
4: POWER_IN	Camera external power (+12 VDC ~ +24 VDC)
5: Line2	GPIO input/output
6: Line3	GPIO input/output
7: Line1-	Opto-isolated input-
8: Line1+	Opto-isolated input+

Connectors on camera body