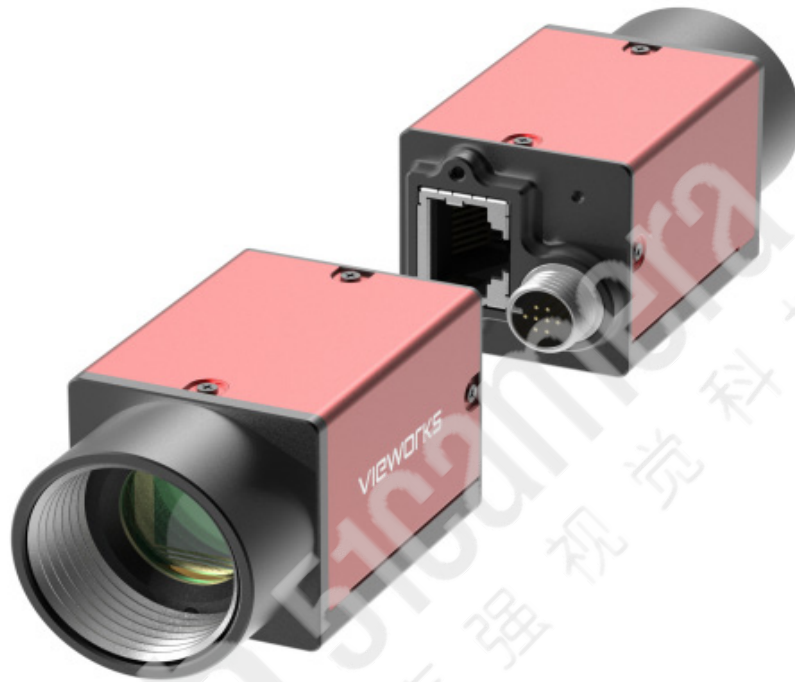


# VZ-12MG-M/C9H00

Industrial Digital Cameras with GigE Interface



**GiGE**  
VISION

**GEN<I>CAM**

VZ-12MG-M/C9H00 is the high definition industrial digital camera, featuring outstanding performance, compact design and flexible installation. With the extremely compact design and locking screw connectors, the VZ-12MG-M/C9H00 camera can secure the reliability of cameras deployed in harsh environments.

VZ-12MG-M/C9H00 is the monochrome/color GigE Vision camera with the Sony IMX226 CMOS sensor, and has opto-isolated I/Os that adapt to specific needs.

Featuring compact design, outstanding performance, and ease of installation and use, VZ-12MG-M/C9H00 is especially suitable for machine vision applications, including industrial inspection, medical, scientific research, education, and security.

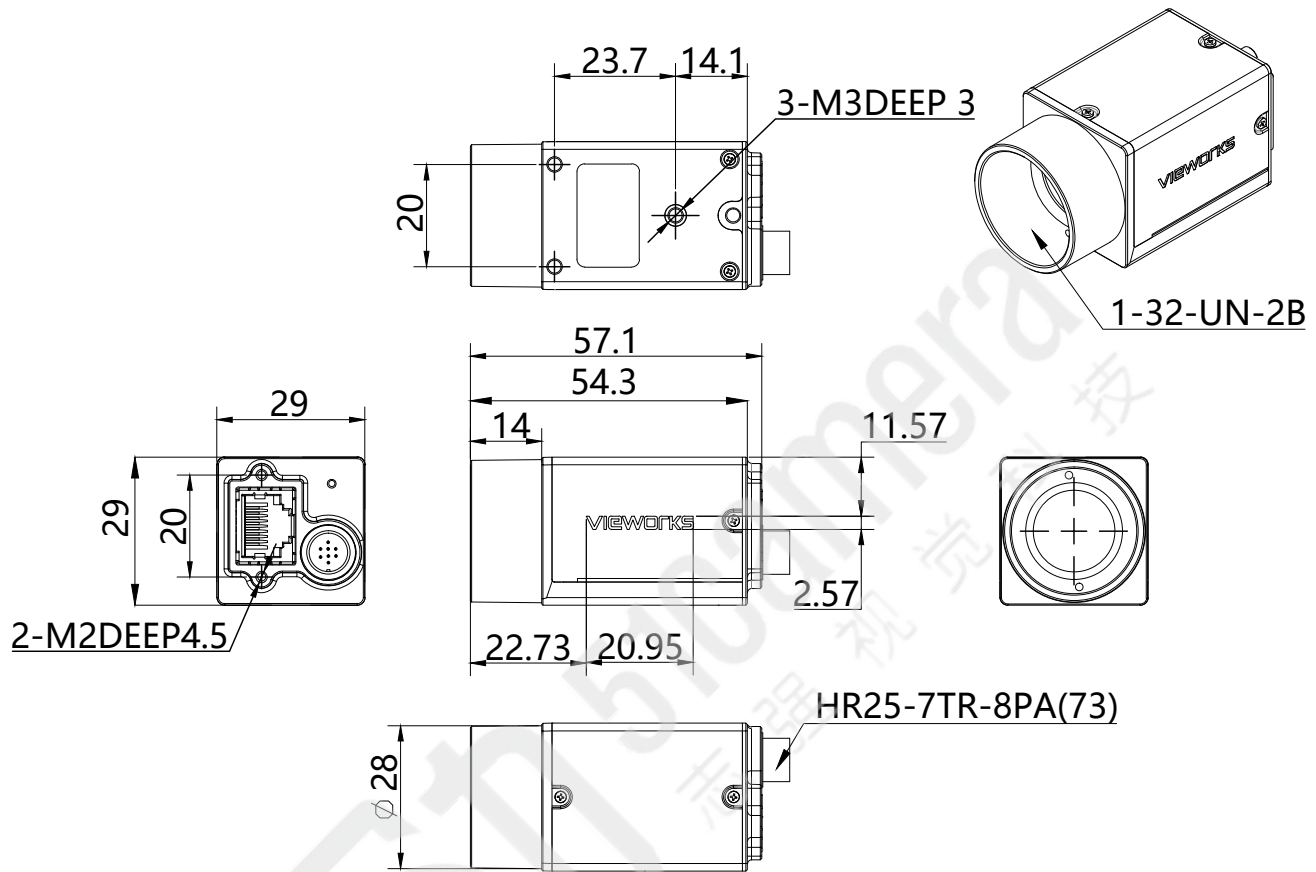
**vieworks**

[vision.vieworks.com](http://vision.vieworks.com)

# VZ-12MG-M/C9H00

Industrial Digital Camera with GigE Interface

## Mechanical Dimensions



# VZ-12MG-M/C9H00

Industrial Digital Camera with GigE Interface

## Main Features

- Power over Ethernet (IEEE802.3af compliant)
- Programmable ROI, increased frame rate with partial scan
- Supports Timer, Counter, LUTs and storable user sets
- 4 acquisition controls: single frame, continuous, software trigger, external trigger
- 16KB data storage area for saving algorithm coefficients and parameter configuration)
- Supports Remove Parameter Limit to expand the range of exposure, gain, white balance, etc.
- Supports Decimation,Binning,Digital Shift and Reverse X/Y(horizontal and vertical mirroring)

## Applications

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

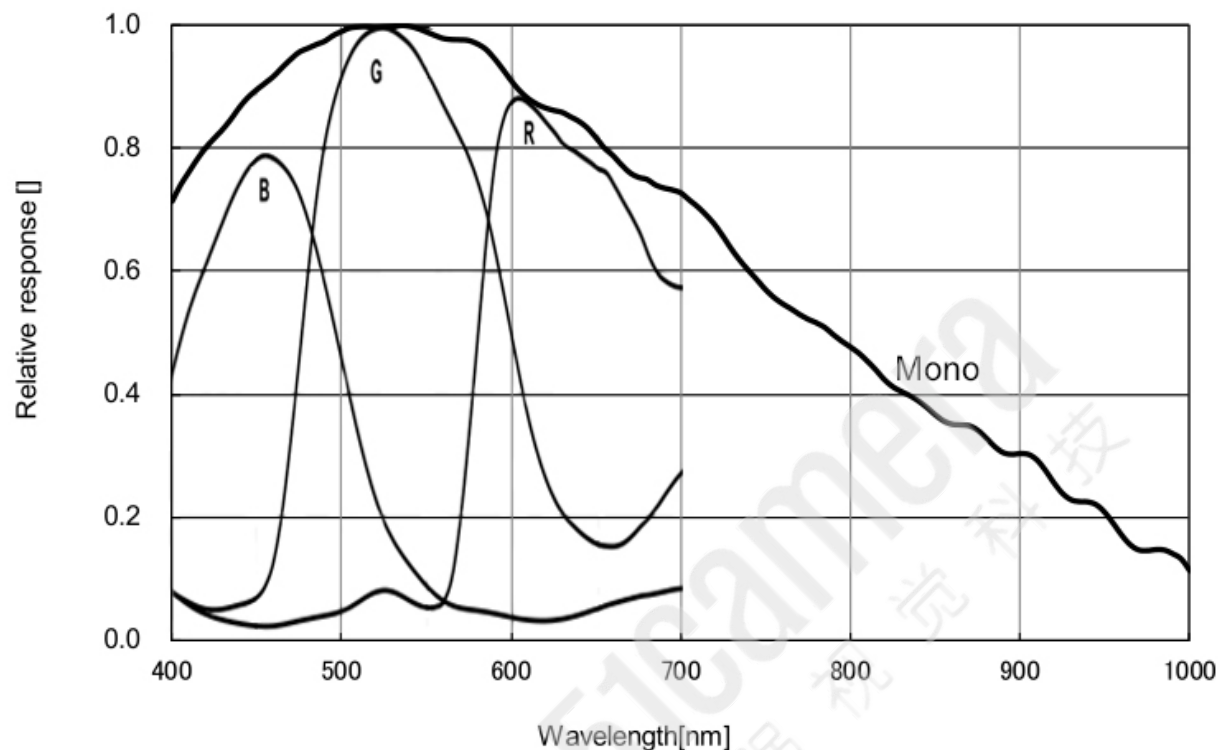
## Specifications

Model	VZ-12MG-M/C9H00	
Resolution (H x V)	4024 x 3036	
Sensor	Sony IMX226 rolling shutter CMOS	
Pixel Size	1.85 $\mu\text{m}$ $\times$ 1.85 $\mu\text{m}$	
Data Interface	Fast Ethernet (100Mbit/s) or Gigabit Ethernet (1000Mbit/s)	
Frame Rate	9.63 fps @ 4024 x 3036 (Adjust the packet size to 8192, reserved bandwidth to 5, and frame rate to 9fps))	
ADC Bit Depth	12 bit	
Pixel Bit Depth	8 bit, 12 bit	
Exposure Time	Standard: 36 $\mu\text{s}$ to 1s GRR: 23 $\mu\text{s}$ 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	39.86dB	40.2dB
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	PoE (Power over Ethernet, IEEE802.3af compliant) or 12VDC-10% to 24VDC+10% supplied via the camera's 8-pin Hirose connector	
Power Consumption	< 3.75 W @ 24 VDC, < 3.75 W @ PoE	
Lens Mount	C	
Dimensions and Weight	29mm x 29mm x 40.3mm (without lens adapter or connectors), 85g	
Programmable Control	Image size, Gain, Exposure time, Trigger polarity, and Flash polarity	
Conformity	CE, RoHS, FCC, GigE Vision, and GenICam	

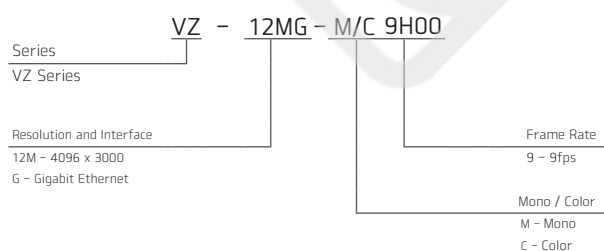
# VZ-12MG-M/C9H00

Industrial Digital Camera with GigE Interface

## Spectral Response



## Ordering Scheme



## 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