

VZ-2MG-M/C 41H

Industrial Digital Cameras with GigE Interface



GiGE
VISION

GEN<i>i>CAM

VZ-2MG-M/C 41H, the new industrial GigE vision camera with improved built-in ISP algorithms provides multiple acquisition controls. Thanks to the extremely compact design (29mm x 29mm x 40.3mm), robust metal housings and locking screw connectors, the VZ-2MG-M/C 41H camera can secure the reliability of cameras deployed in harsh environments.

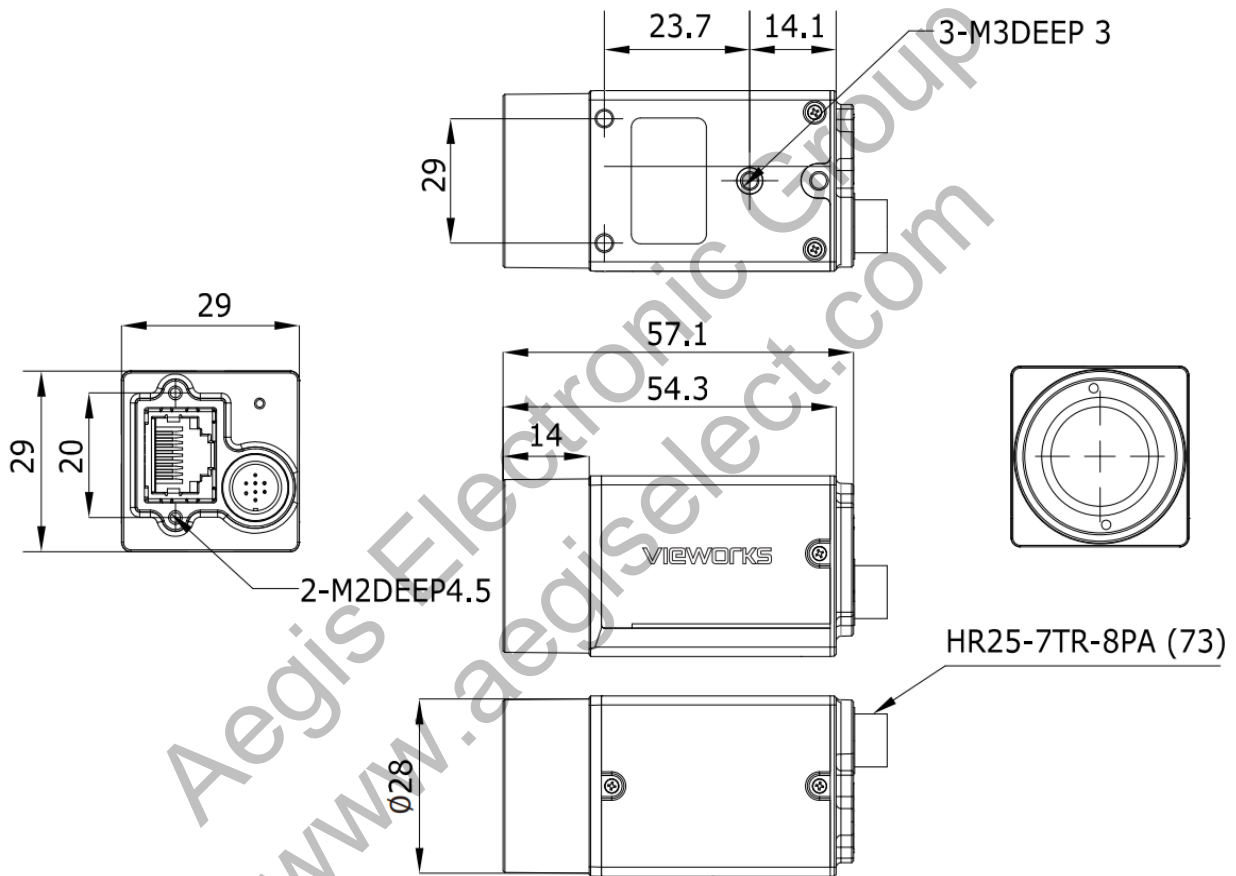
VZ-2MG-M/C 41H has opto-isolated I/Os, and the GPIOs give the camera maximum flexibility to adapt to specific needs. The VZ-2MG-M/C 41H camera is ideal for machine vision applications such as industrial inspection, medical, scientific research, education, security and so on.

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Industrial Digital Camera with GigE Interface

Mechanical Dimensions

Unit: mm



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Main Features

- Power over Ethernet (IEEE802.3af)
- Programmable ROI, increased frame rate with partial scan
- Programmable LUTs and storable user sets
- 4 acquisition 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.
- Compatible with GenICam™ and GigE Vision

Applications

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

Specifications

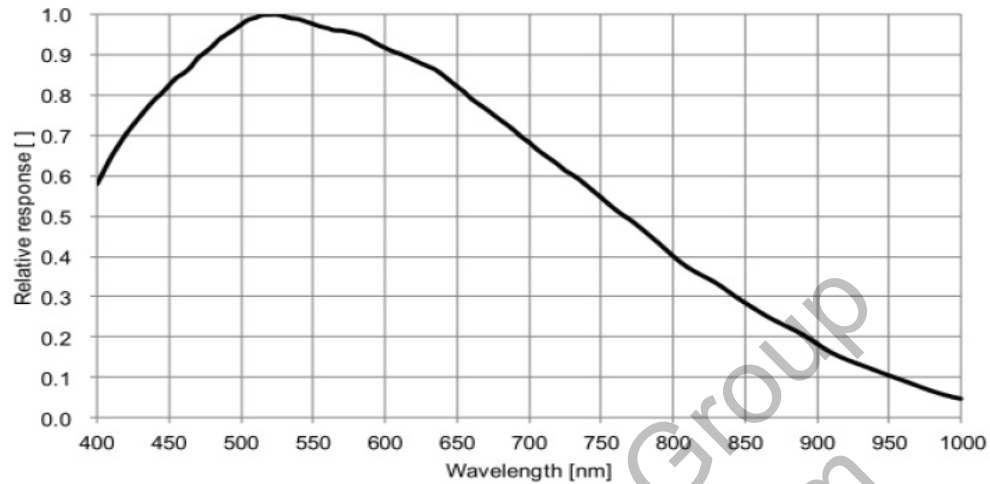
| | | |
|-----------------------|--|---------------|
| Model | VZ-2MG-M/C 41H00 | |
| Resolution (H x V) | 1920 x 1200 | |
| Sensor | 1/1.2" Sony IMX249 Global Shutter CMOS | |
| Pixel Size | 5.86 μm x 5.86 μm | |
| Data Interface | Fast Ethernet (100 Mbit/s) or Gigabit Ethernet (1000 Mbit/s) | |
| Frame Rate | 41fps @ 1920 x 1200 | |
| ADC Bit Depth | 12 bit | |
| Pixel Bit Depth | 8 bit, 12 bit | |
| Exposure Time | Standard: 20 μs ~ 1s Actual Steps: 1 row period | |
| Gain | 0dB ~ 24dB | |
| Mono / Color | Color | Mono |
| Pixel Formats | Bayer RG8, Bayer RG12 | Mono8, Mono12 |
| Single Noise Ratio | 39.46dB | |
| 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 | PoE (Power over Ethernet, IEEE802.3af compliant) or 12 VDC-10% ~ 24 VDC+10% supplied via the camera's Hirose connector | |
| Power Consumption | PoE (Power over Ethernet, IEEE802.3af compliant) or 12 VDC-10% ~ 24 < 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 | |

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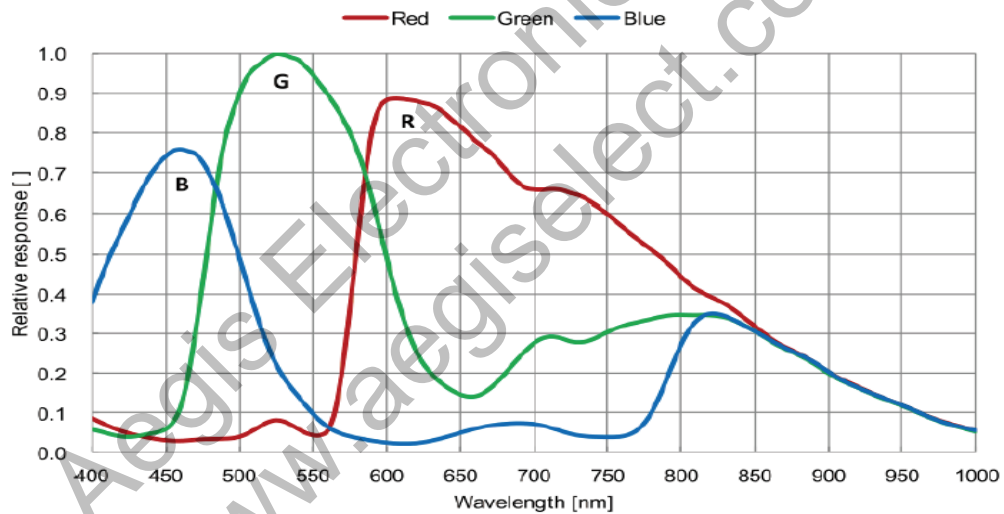
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Spectral Response

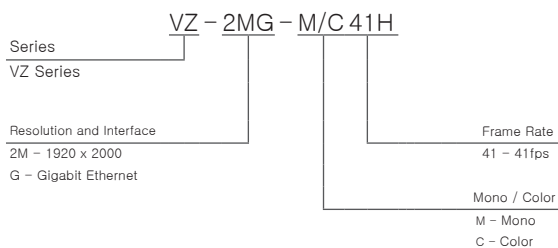
- VZ-2MG-M41H00 (Mono)



- VZ-2MG-C41H00 (Color)



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 | GPO input/output |
| 6: Line3 | GPO input/output |
| 7: Line1- | Opto-isolated input- |
| 8: Line1+ | Opto-isolated input+ |