

# MV-CT\*M/CG0004/G

## 0.4 MP GigE Area Scan Camera


**GEN*<i>i>*CAM**
**GigE<sup>®</sup>**  
VISION

## Introduction

Designed for industrial applications, MV-CT\*M/CG0004/G camera offers industry-leading performance and reliability, with various versions to meet diverse application needs. It supports IP67 protection, expanded interfaces, and integration of liquid/electric lenses, light sources, and lens cap, creating a more flexible and efficient system.

## Key Feature

- The devices with PRO version and MAX version support waterproof connector.
- The devices with PRO version and MAX version adopt precision temperature control design for fast heat balance.
- The color devices with PRO version and MAX version support auto color correction based on multi-spectral fusion technology.
- The device with MAX version integrates lens and light source, enabling lens focusing and light source control.
- Adopts GigE interface and max. transmission distance of 100 meters without relay.
- Compatible with GigE Vision V2.0 Protocol, GenICam Standard, and third-party software based on the protocol and standard.

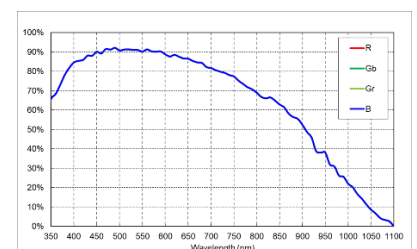
## Applicable Industry

Electronic semiconductor, factory automation, food and beverage, medicine packaging, etc.

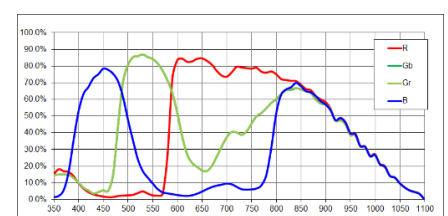
## Available Model

- Mono camera (BASE):  
MV-CT0MG0004/G/NN/NN
- Color camera (BASE):  
MV-CT0CG0004/G/NN/NN
- Mono camera (PRO):  
MV-CT1MG0004/G/NN/NN
- Color camera (PRO):  
MV-CT1CG0004/G/NN/NN
- Mono camera (MAX):  
MV-CT2MG0004/G/NN/NN
- Color camera (MAX):  
MV-CT2CG0004/G/NN/NN

## Sensor Quantum Efficiency



MV-CT\*MG0004/G



MV-CT\*CG0004/G

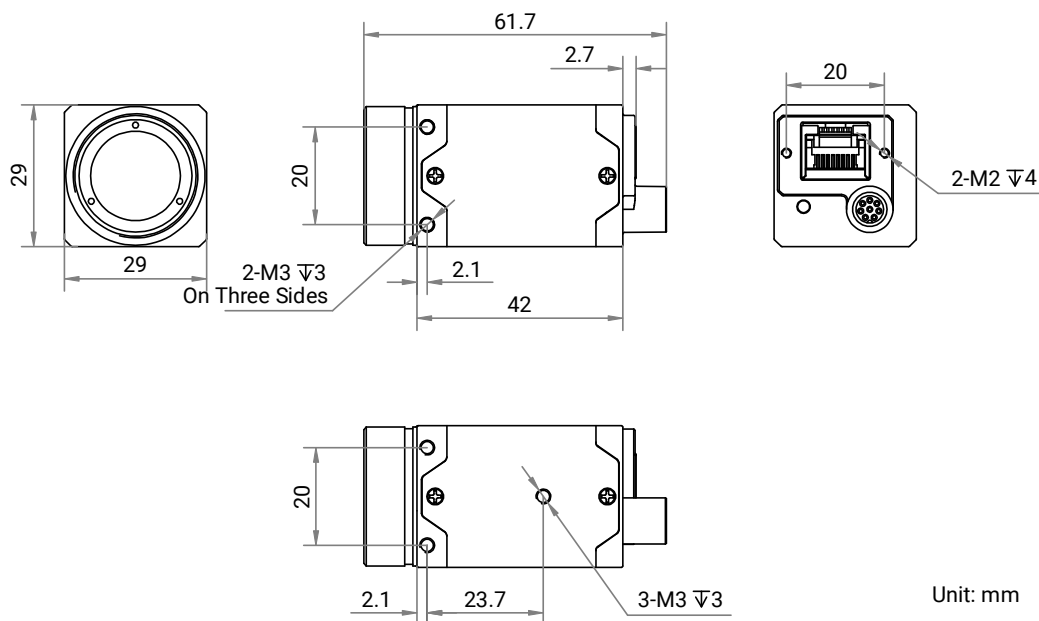
## Specification

| Model               | MV-CT*MG0004/G                                                                                                                                                                          | MV-CT*CG0004/G                                                                                                                                                                          |
|---------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Performance         |                                                                                                                                                                                         |                                                                                                                                                                                         |
| Sensor type         | CMOS, global shutter                                                                                                                                                                    |                                                                                                                                                                                         |
| Sensor model        | Stacked BSI                                                                                                                                                                             |                                                                                                                                                                                         |
| Pixel size          | 6.9 μm × 6.9 μm                                                                                                                                                                         |                                                                                                                                                                                         |
| Sensor size         | 1/2.9"                                                                                                                                                                                  |                                                                                                                                                                                         |
| Resolution          | 720 × 540                                                                                                                                                                               |                                                                                                                                                                                         |
| Max. frame rate     | 200.5 fps @ 720 × 540 Mono 8                                                                                                                                                            | 200.5 fps @ 720 × 540 Bayer GB 8                                                                                                                                                        |
| Dynamic range       | 62.3 dB                                                                                                                                                                                 | 62.6 dB                                                                                                                                                                                 |
| SNR                 | 43.8 dB                                                                                                                                                                                 | 43.9 dB                                                                                                                                                                                 |
| Gain                | 0 dB to 24 dB                                                                                                                                                                           |                                                                                                                                                                                         |
| Exposure time       | 23 μs to 10 sec                                                                                                                                                                         |                                                                                                                                                                                         |
| Exposure mode       | Off/Once/Continuous exposure mode, supports Trigger Width and Trigger Controlled                                                                                                        |                                                                                                                                                                                         |
| Mono/color          | Mono                                                                                                                                                                                    | Color                                                                                                                                                                                   |
| Pixel format        | Mono 8/10/10Packed/12/12Packed                                                                                                                                                          | Mono 8,<br>Bayer GB 8/10/10Packed/12/12Packed,<br>YUV422Packed, YUV422_YUYV_Packed,<br>RGB 8, BGR 8                                                                                     |
| Binning             | Not supported                                                                                                                                                                           |                                                                                                                                                                                         |
| Decimation          | Not supported                                                                                                                                                                           |                                                                                                                                                                                         |
| Reverse image       | Supports horizontal and vertical reverse image output                                                                                                                                   |                                                                                                                                                                                         |
| Electrical features |                                                                                                                                                                                         |                                                                                                                                                                                         |
| Data interface      | Gigabit Ethernet (1000 Mbit/s), compatible with Fast Ethernet (100 Mbit/s)                                                                                                              |                                                                                                                                                                                         |
| Data interface type | BASE: RJ45 connector<br>PRO + MAX: 8-pin M12 X-Code waterproof aviation connector                                                                                                       |                                                                                                                                                                                         |
| Control interface   | BASE + PRO: Not supported<br>MAX: 8-pin M12 A-Code waterproof aviation connector                                                                                                        |                                                                                                                                                                                         |
| Digital I/O         | 8-pin M8 A-Code aviation connector provides power and I/O, including opto-isolated input × 1 (Line 0), opto-isolated output × 1 (Line 1), bi-directional non-isolated I/O × 1 (Line 2). |                                                                                                                                                                                         |
| Power supply        | 9 VDC to 24 VDC, supports PoE                                                                                                                                                           |                                                                                                                                                                                         |
| Power consumption   | BASE: Typ. 1.5 W @ 12 VDC<br>PRO: Typ. 1.7 W @ 12 VDC (fast heat balance not enabled)<br>MAX: Typ. 1.8 W @ 24 VDC (fast heat balance not enabled and external device not be controlled) | BASE: Typ. 1.6 W @ 12 VDC<br>PRO: Typ. 1.8 W @ 12 VDC (fast heat balance not enabled)<br>MAX: Typ. 1.9 W @ 24 VDC (fast heat balance not enabled and external device not be controlled) |

| <b>Mechanical</b>         |                                                                                                                                    |
|---------------------------|------------------------------------------------------------------------------------------------------------------------------------|
| <b>Lens mount</b>         | C-mount                                                                                                                            |
| <b>Dimension</b>          | BASE + PRO: 29 mm × 29 mm × 42 mm (1.1" × 1.1" × 1.7")<br>MAX: 42 mm × 42 mm × 43 mm (1.7" × 1.7" × 1.7")                          |
| <b>Weight</b>             | BASE: Approx. 116 g (0.3 lb.)<br>PRO: Approx. 124 g (0.3 lb.)<br>MAX: Approx. 120 g (0.3 lb.)                                      |
| <b>Ingress protection</b> | BASE: IP40 (under proper lens installation and wiring)<br>PRO + MAX: IP67 (under proper lens and lens cap installation and wiring) |
| <b>Temperature</b>        | Working temperature: -30 °C to 60 °C (-22 °F to 140 °F)<br>Storage temperature: -30 °C to 80 °C (-22 °F to 176 °F)                 |
| <b>Humidity</b>           | 20% RH to 95% RH (no condensation)                                                                                                 |
| <b>General</b>            |                                                                                                                                    |
| <b>Client software</b>    | MVS or third-party software meeting with GigE Vision Protocol                                                                      |
| <b>Operating system</b>   | 32/64-bit Windows 7/10, 64-bit Windows 11, 32/64-bit Linux                                                                         |
| <b>Compatibility</b>      | GigE Vision V2.0, GenICam                                                                                                          |
| <b>Certification</b>      | CE, RoHS, KC                                                                                                                       |

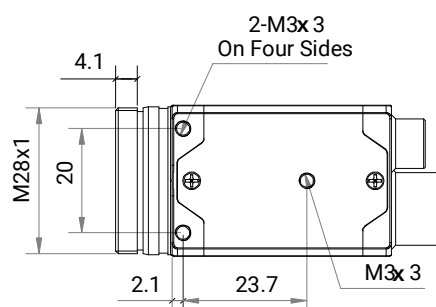
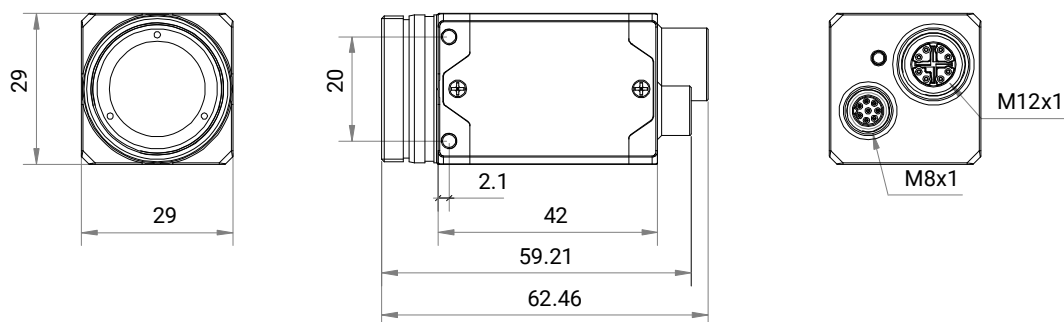
## Dimension

### BASE



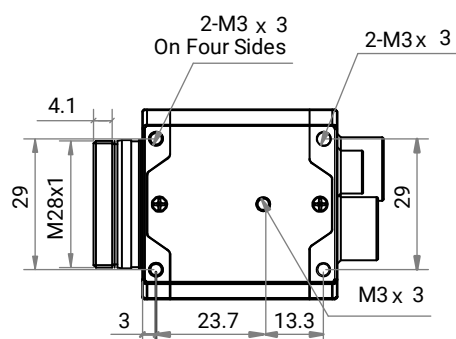
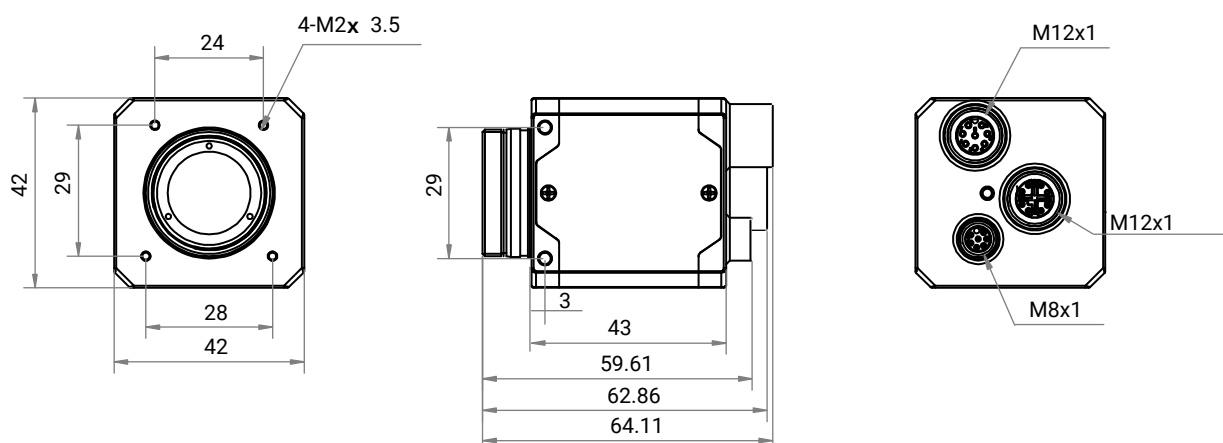
Unit: mm

## PRO



Unit: mm

## MAX



Unit: mm