

# MV-CS050-60GM/GC/GN

## 5 MP 2/3" CMOS GigE Area Scan Camera



**GEN*<i>i</i>*CAM**



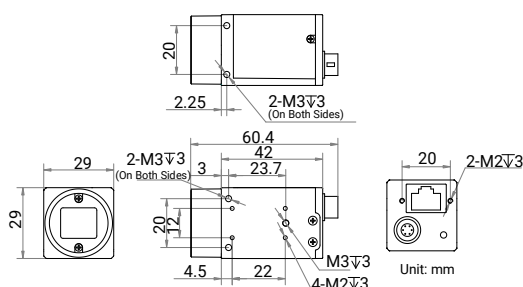
## Introduction

With GigE interface, MV-CS050-60GM/GC/GN camera adopts CMOS global sensor to provide high-quality images and transmit images in real time, and its max. frame rate can reach 23 fps in full resolution.

## Key Feature

- Adopts brand new design to reduce power consumption.
- Supports auto or manual adjustment of gain, exposure time, white balance, LUT, Gamma correction, etc., and supports Sequencer function.
- Supports ISP functions like CCM, Super Palette, and Super Bayer to provide high-quality images.
- Compact design with mounting holes on panels for flexible mounting from 4 sides.
- 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.

## Dimension



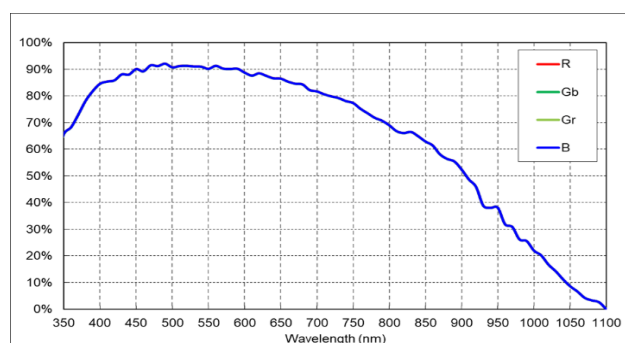
## Available Model

- Mono camera: MV-CS050-60GM
- Color camera: MV-CS050-60GC
- NIR camera: MV-CS050-60GN

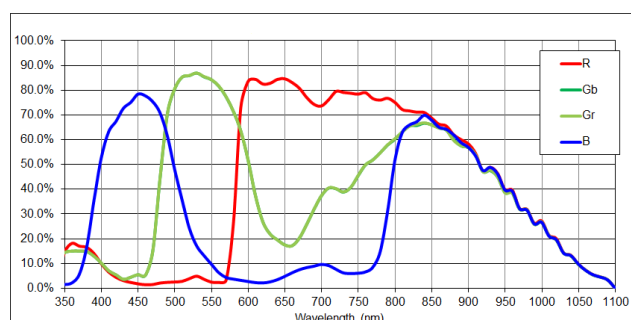
## Applicable Industry

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

## Sensor Quantum Efficiency



MV-CS050-60GM/GN



MV-CS050-60GC

## Specification

| Model               | MV-CS050-60GM   | MV-CS050-60GC  | MV-CS050-60GN                   |
|---------------------|---|--|---------------------------------|
| Performance         |   |  |                                 |
| Sensor type         | CMOS, global shutter  |  |                                 |
| Sensor model        | Stacked BSI   |  |                                 |
| Pixel size          | 3.45 μm × 3.45 μm   |  |                                 |
| Sensor size         | 2/3"  |  |                                 |
| Resolution          | 2448 × 2048   |  |                                 |
| Max. frame rate     | 23 fps @ 2448 × 2048 Mono 8   | 23 fps @ 2448 × 2048 Bayer GR 8  | 23 fps @ 2448 × 2048 Mono 8     |
| Dynamic range       | 73.9 dB   |  |                                 |
| SNR                 | 42.4 dB   |  |                                 |
| Gain                | 0 dB to 24 dB   |  |                                 |
| Exposure time       | High full well capacity: 30 μs to 10 sec<br>High sensitivity: 5 μs to 10 sec  |  |                                 |
| Exposure mode       | Off/Once/Continuous exposure mode   |  |                                 |
| Mono/color          | Mono  | Color  | Near IR                         |
| Pixel format        | Mono 8/10/10Packed /12/12Packed   | Mono 8/10/12, Bayer GR 8/10/10Packed/12/12Packed, YUV422Packed, YUV422_YUYV_Packed, RGB 8, BGR 8 | Mono 8/10/10Packed /12/12Packed |
| Binning             | Supports 1 × 1, 2 × 2, 4 × 4  |  |                                 |
| Decimation          | Supports 1 × 1, 2 × 2, 4 × 4  |  |                                 |
| 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)  |  |                                 |
| Digital I/O         | 6-pin P7 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   | Typ. 2.3 W @ 12 VDC   | Typ. 2.5 W @ 12 VDC  | Typ. 2.3 W @ 12 VDC             |
| Mechanical          |   |  |                                 |
| Lens mount          | C-mount   |  |                                 |
| Dimension           | 29 mm × 29 mm × 42 mm (1.1" × 1.1" × 1.7")  |  |                                 |
| Weight              | Approx. 100 g (0.2 lb.)   |  |                                 |
| Ingress protection  | IP40 (under proper lens installation and wiring)  |  |                                 |
| Temperature         | 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)  |  |                                 |
| Humidity            | 20% RH to 95% RH (no condensation)  |  |                                 |
| General             |   |  |                                 |
| Client software     | MVS or third-party software meeting with GigE Vision Protocol   |  |                                 |
| Operating system    | 32/64-bit Windows 7/10/11, 32/64-bit Linux  |  |                                 |
| Compatibility       | GigE Vision V2.0, GenICam   |  |                                 |
| Certification       | CE, RoHS, KC  |  |                                 |