

# MV-CH120-60GM/GC

12MP1.1"CMOSGigEAreaScanCamera



GEN*<i>i>*CAM

**GigE**  
VISION

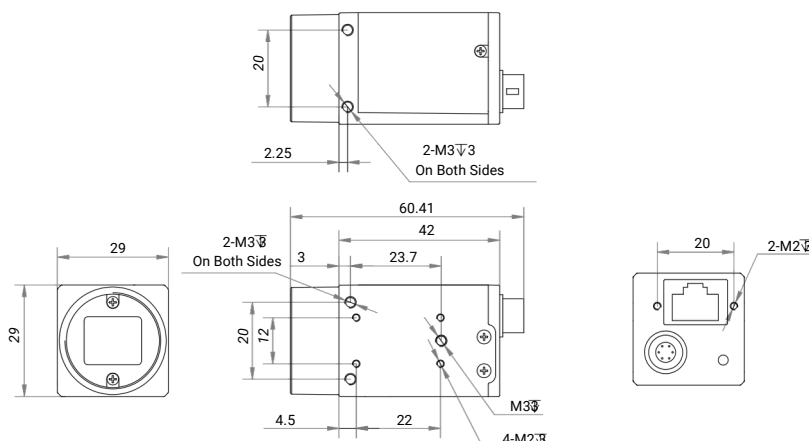
## Introduction

MV-CH120-60GM/GC camera adopts CMOS sensor to provide high-quality images. It uses GigE interface to transmit non-compressed images in real time, and its max. frame rate can reach 9.5fps in full resolution.

## Key Feature

- Compact design with mounting holes on panels for flexible mounting from 4 sides.
- Supports auto or manual adjustment of gain and exposure time, and LUT and Gamma correction function.
- Supports LSC, Sequencer, passive transmission, etc.
- Supports functions like white balance, CCM, Super Palette, and Super Bayer to provide high-quality images.
- Compatible with GigE Vision V2.0 Protocol, GenICam Standard, and third-party software based on the protocol and standard.

## Dimension



Unit: mm

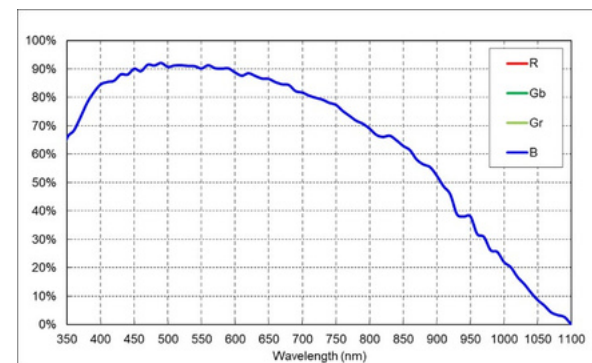
## Available Model

- Mono camera: MV-CH120-60GM
- Color camera: MV-CH120-60GC

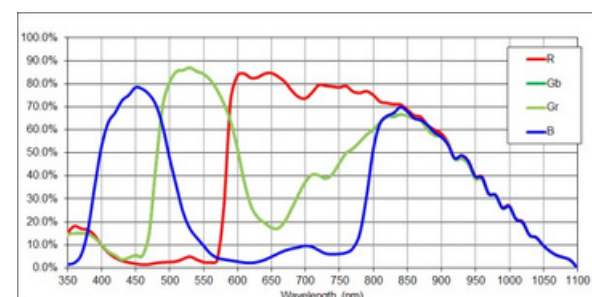
## Applicable Industry

Electronic semiconductor, factory automation, logistics code reading, medicine packing, etc.

## Sensor Quantum Efficiency



MV-CH120-60GM



MV-CH120-60GC

| Model                    | MV-CH120-60GM                                                                                                                                                                                                                                                       | MV-CH120-60GC                                                                                            |
|--------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------|
| Performance              |                                                                                                                                                                                                                                                                     |                                                                                                          |
| Sensor type              | CMOS, global shutter                                                                                                                                                                                                                                                |                                                                                                          |
| Sensor model             | Stacked BSI                                                                                                                                                                                                                                                         |                                                                                                          |
| Pixel size               | 3.45 μm × 3.45 μm                                                                                                                                                                                                                                                   |                                                                                                          |
| Sensor size              | 1.1"                                                                                                                                                                                                                                                                |                                                                                                          |
| Resolution Max.          | 4096 × 3000                                                                                                                                                                                                                                                         |                                                                                                          |
| frame rate               | 9.5 fps @ 4096 × 3000 Mono 8                                                                                                                                                                                                                                        | 9.5 fps @ 4096 × 3000 Bayer GB 8                                                                         |
| Dynamic range            | 67.2 dB                                                                                                                                                                                                                                                             |                                                                                                          |
| SNR Gain                 | 44.1 dB                                                                                                                                                                                                                                                             |                                                                                                          |
| Exposure time            | 0 dB to 12 dB                                                                                                                                                                                                                                                       |                                                                                                          |
| Exposure mode            | 45 μs to 10 sec                                                                                                                                                                                                                                                     |                                                                                                          |
| Mono/color               | Off/Once/Continuous exposure mode, supports TriggerWidth                                                                                                                                                                                                            |                                                                                                          |
| Pixel format             | Mono                                                                                                                                                                                                                                                                | Color                                                                                                    |
|                          | Mono 8/10/10Packed/12/12Packed                                                                                                                                                                                                                                      | Mono 8/10/12<br>Bayer GB 8/10/10Packed/12/12Packed,<br>YUV422Packed, YUV422_YUYV_Packed,<br>RGB 8, BGR 8 |
| 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 feature       |  VISCON TECHNOLOGY CO., LTD.<br>54/88 KHLONGSEE, KHLONG LUANG DISTRICT, PATHUM THANI 12120 THAILAND<br>TEL : 02-0009297<br>MB : 0809293068<br>E-MAIL : SALE@VISCONTECHNOLOGY.COM |                                                                                                          |
| 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. 2.1 W @ 12 VDC                                                                                                                                                                                                                                                 | Typ. 2.2 W @ 12 VDC                                                                                      |
| Mechanical               |                                                                                                                                                                                                                                                                     |                                                                                                          |
| Lens mount               | C-mount                                                                                                                                                                                                                                                             |                                                                                                          |
| Dimension (without lens) | 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: −10 °C to 50 °C (14 °F to 122 °F)<br>Storage temperature: −30 °C to 70 °C (−22 °F to 158 °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, 64-bit Windows 11, and 32/64-bit Linux                                                                                                                                                                                                      |                                                                                                          |
| Compatibility            | GigE Vision V2.0, GenICam                                                                                                                                                                                                                                           |                                                                                                          |
| Certification            | CE, RoHS, KC                                                                                                                                                                                                                                                        |                                                                                                          |