

# MV-CH120-10GM/GC

12MP1.1"CMOSGigEAreaScanCamera



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

**GiGE**  
VISION

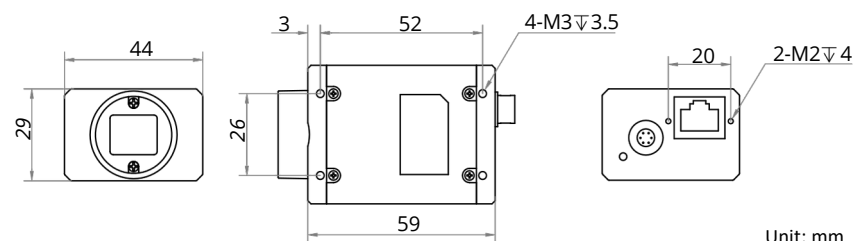
## Introduction

MV-CH120-10GM/GC camera adopts Sony® IMX304 sensor. Mono camera: MV-CH120-10GM to provide high-quality image. It uses GigE interface to transmit. Color camera: MV-CH120-10GC non-compressed images in real time with max. frame rate reaching 9.4 fps.

## Key Feature

- ☐ Adopts GigE interface and max. transmission distance of etc. 100 meters without relay. Support auto exposure control,
- ☐ LUT, Gamma correction, etc.
- ☐ Supports hardware trigger, software trigger, etc.
- ☐ Compatible with GigE Vision Protocol V2.0, GenICam Standard, and third-party software based on these protocol and standard.

## Dimension



Unit: mm

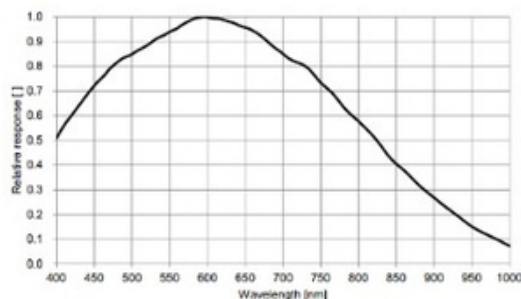
## Available Model

Mono camera: MV-CH120-10GM to provide high-quality image. It uses GigE interface to transmit. Color camera: MV-CH120-10GC non-compressed images in real time with max. frame rate reaching 9.4 fps.

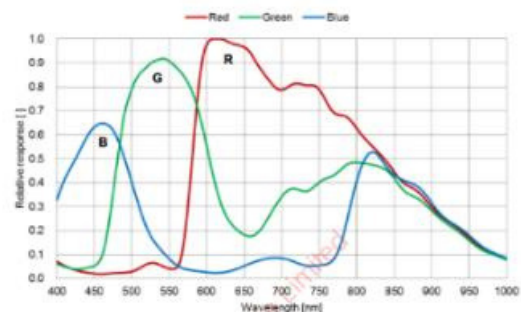
## Applicable Industry

Electronic semiconductor, factory automation, logistics code reading, medicine packaging,

## Sensor Quantum Efficiency



MV-CH120-10GM



MV-CH120-10GC

## Specification

| Model              | Camera | MV-CH120-10GM                                                                                                                                                                   | MV-CH120-10GC                                                                                |
|--------------------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|
| Sensor type        |        |                                                                                                                                                                                 |                                                                                              |
| Sensor             | model  | CMOS, global shutter                                                                                                                                                            |                                                                                              |
| Pixel              | size   | Sony® IMX304                                                                                                                                                                    |                                                                                              |
| Sensor             | size   | 3.45 μm × 3.45 μm                                                                                                                                                               |                                                                                              |
| Resolution         | Max.   | 1.1"                                                                                                                                                                            |                                                                                              |
| frame              | rate   | 4096 × 3000                                                                                                                                                                     |                                                                                              |
| Dynamic            | range  | 9.4 fps @ 4096 × 3000                                                                                                                                                           |                                                                                              |
| SNR                | Gain   | 72.2 dB                                                                                                                                                                         |                                                                                              |
| Exposure time      |        | 40.2 dB                                                                                                                                                                         |                                                                                              |
|                    |        | 0 dB to 20 dB                                                                                                                                                                   |                                                                                              |
|                    |        | UltraShort exposure mode: 2 μs to 14 μs                                                                                                                                         |                                                                                              |
|                    |        | Standard exposure mode: 15 μs to 10 sec                                                                                                                                         |                                                                                              |
| Exposure mode      |        | Off/Once/Continuous exposure mode                                                                                                                                               |                                                                                              |
| Mono/color         |        | Mono                                                                                                                                                                            | Color                                                                                        |
| Pixel format       |        | Mono 8/10/10p/12/12p                                                                                                                                                            | Mono 8/10/12, Bayer GR<br>8/10/10p/12/12p, YUV422Packed,<br>YUV422_YUYV_Packed, RGB 8, BGR 8 |
| Binning            |        | Supports 1 × 1, 1 × 2, 1 × 4, 2 × 1, 2 × 2, 2 × 4, 4 × 1, 4 × 2, 4 × 4                                                                                                          |                                                                                              |
| Decimation         |        | Supports 1 × 1, 1 × 2, 2 × 1, 2 × 2                                                                                                                                             |                                                                                              |
| 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 Hirose 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       |        | 12 VDC, supports PoE                                                                                                                                                            |                                                                                              |
| Power consumption  |        | Typ. 4.3 W @ 12 VDC                                                                                                                                                             | Typ. 4.6 W @ 12 VDC                                                                          |
| Mechanical         |        |                                                                                                                                                                                 |                                                                                              |
| Lens mount         |        | C-mount                                                                                                                                                                         |                                                                                              |
| Dimension          |        | 44 mm × 29 mm × 59 mm (1.7" × 1.1" × 2.3")                                                                                                                                      |                                                                                              |
| Weight             |        | Approx. 140 g (0.3 lb.)                                                                                                                                                         |                                                                                              |
| Ingress protection |        | IP 30 (under proper lens installation and wiring)                                                                                                                               |                                                                                              |
| Temperature        |        | Working temperature: 0 °C to 50 °C (32 °F to 122 °F)<br>Storage temperature: -30 °C to 70 °C (-22 °F to 158 °F)                                                                 |                                                                                              |
| Humidity           |        | 20% RH to 80% 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                                                                                                                                                                    |                                                                                              |