

# MV-CH120-10GM/GC

12 MP 1.1" CMOS GigE Area Scan Camera



GEN*i*CAM

**GigE**  
VISION

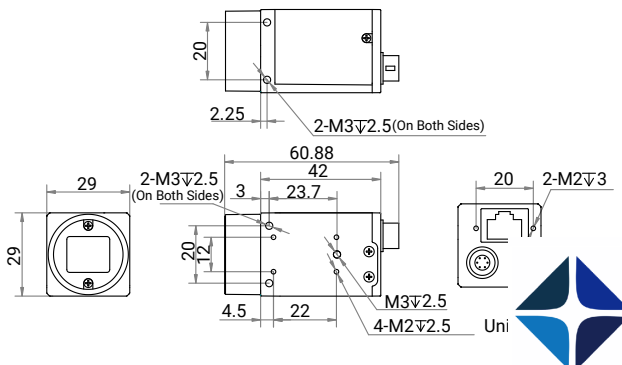
## Introduction

MV-CH120-10GM/GC camera adopts Sony® IMX304 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 9.9 fps in full resolution.

## Key Feature

- Supports LSC, Sequencer, passive transmission, Super Bayer, Super Palette, etc.
- 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.
- Supports hardware trigger, software trigger, free run, etc.
- Compatible with GigE Vision Protocol V2.0, GenICam Standard, and third-party software based on these protocol and standard.

## Dimension



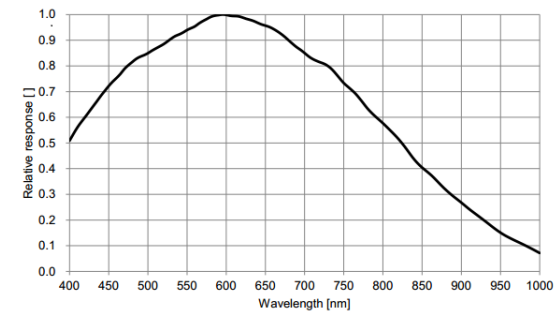
## Available Model

- Mono camera: MV-CH120-10GM
- Color camera: MV-CH120-10GC

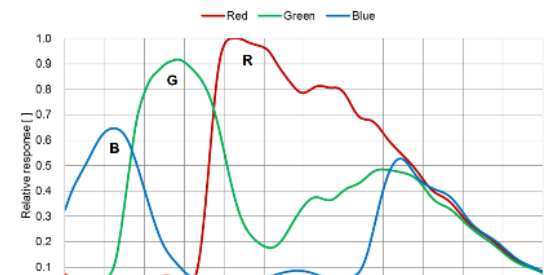
## Applicable Industry

Electronic semiconductor, factory automation, liquor and beverage, medicine packing, etc.

## Sensor Quantum Efficiency



MV-CH120-10GM



**Aremak Bilişim Teknolojileri**  
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## Specification

| Model              | MV-CH120-10GM   | MV-CH120-10GC  |
|--------------------|---|--|
| Performance        |   |  |
| Sensor type        | CMOS, global shutter  |  |
| Sensor model       | Sony® IMX304  |  |
| Pixel size         | 3.45 μm × 3.45 μm   |  |
| Sensor size        | 1.1"  |  |
| Resolution         | 4096 × 3000   |  |
| Max. frame rate    | 9.9 fps @4096 × 3000 Mono 8   | 9.9 fps @4096 × 3000 Bayer RG 8  |
| Dynamic range      | 70.4 dB   |  |
| SNR                | 40 dB   |  |
| Gain               | 0 dB to 24 dB   |  |
| Exposure time      | UltraShort exposure mode: 1 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 8/10/10Packed/12/12Packed  | Mono 8/10/12,<br>Bayer RG 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 |   |  |
| Data interface     | Gigabit Ethernet, compatible with Fast Ethernet   |  |
| 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. 2.9 W@12 VDC   | Typ. 3.0 W@12 VDC  |
| Mechanical         |   |  |
| Lens mount         | C-Mount   |  |
| Dimension          | 29 mm × 29 mm × 42 mm (1.1" × 1.1" × 1.7")  |  |
| Weight             | 100 g (0.2 lb.)   |  |
| Ingress protection | IP 40 (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% to 95% RH, non-condensing   |  |
| General            |   |  |
| Client software    | MVS or third-party software meeting with GigE Vision Protocol   |  |
| Operating system   | 32/64-bit Windows XP/7/10, 32/64-bit Linux and 64-bit MacOS   |  |
| Compatibility      | GigE Vision V2.0, GenICam   |  |
| Certification      | CE, RoHS, KC  |  |

