

MV-CS120-10GM/GC V5

12 MP 1/1.7" CMOS GigE Area Scan Camera



GEN<i>i</i>CAM

GigE VISION

Introduction

With GigE interface, MV-CS120-10GM/GC camera adopts Sony® IMX226 rolling shutter sensor to provide various image processing functions and transmit data without compression in real time, and its max. frame rate can reach 10 fps.

Key Feature

- Provides optimized hardware design, stable performance, and low power consumption.
- Supports auto or manual adjustment of gain, exposure time, etc.
- Supports hardware triggers, software triggers, and free run mode.
- 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.

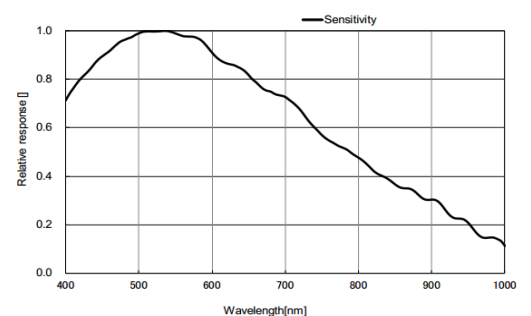
Available Model

- Mono camera: MV-CS120-10GM V5
- Color camera: MV-CS120-10GC V5

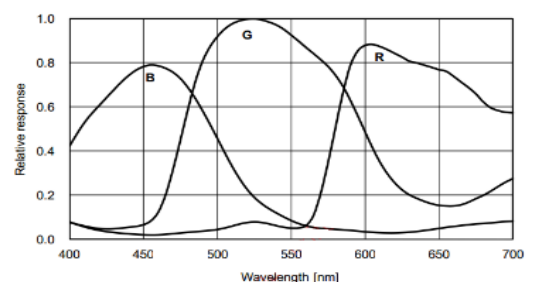
Applicable Industry

Electrical semiconductor, factory automation, logistic code reading, pharmaceutical packaging, etc.

Sensor Quantum Efficiency

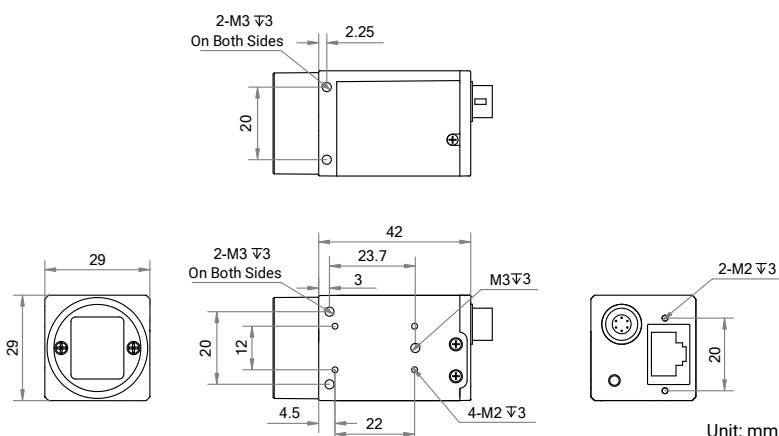


MV-CS120-10GM V5



MV-CS120-10GC V5

Dimension



Specification

| Model | MV-CS120-10GM V5 | MV-CS120-10GC V5 |
|----------------------------|---|--|
| Camera | | |
| Sensor type | CMOS, rolling shutter | |
| Sensor model | Sony® IMX226 | |
| Pixel size | 1.85 μm × 1.85 μm | |
| Sensor size | 1/1.7" | |
| Resolution | 4024 × 3036 | |
| Max. frame rate | 10 fps @ 4024 × 3036 Mono 8 | 10 fps @ 4024 × 3036 Bayer RG 8 |
| Dynamic range | 69.4 dB | |
| SNR | 42.3 dB | |
| Gain | 0 dB to 20 dB | |
| Exposure time | 33 μs to 2 sec | |
| Exposure mode | Off/Once/Continuous exposure mode, and supports Rolling and Global Reset mode | |
| Mono/color | Mono | Color |
| Pixel format | Mono 8/10/10Packed/12/12Packed | Mono 8 Bayer RG 8/10/10Packed/12/12Packed, YUV422Packed, YUV422_YUYV_Packed, 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 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. 1.5 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) 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, 64-bit Windows 11, and 32/64-bit Linux | |
| Compatibility | GigE Vision V2.0, GenICam | |
| Certification | CE, RoHS, KC | |