

# MV-CU020-19GM/GC

2 MP 1/2.8" CMOS GigE Area Scan Camera



GEN*i*CAM

GIG*E* VISION

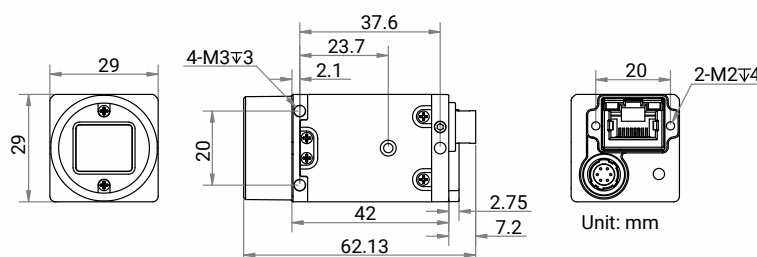
## Introduction

MV-CU020-19GM/GC camera adopts Sony® IMX290 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 56 fps in full resolution.

## Key Feature

- Adopts low consumption platform with stable performance.
- Supports wide dynamic range, noise reduction and sharpness functions.
- Customized filter with strong anti-interference ability is optional.
- Supports hardware trigger, software trigger, free run, etc.
- 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



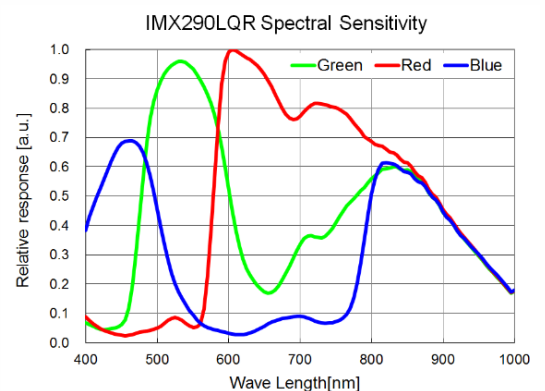
## Available Model

- Mono camera: MV-CU020-19GM
- Color camera: MV-CU020-19GC

## Applicable Industry

Mold protector, microscopy imaging, food and medicine package, etc.

## Sensor Quantum Efficiency



## Specification

| Model                     | MV-CU020-19GM   | MV-CU020-19GC        |
|---------------------------|---|----------------------|
| <b>Performance</b>        |   |                      |
| Sensor type               | CMOS, rolling shutter   |                      |
| Sensor model              | Sony® IMX290  |                      |
| Pixel size                | 2.9 μm × 2.9 μm   |                      |
| Sensor size               | 1/2.8"  |                      |
| Resolution                | 1920 × 1080   |                      |
| Max. frame rate           | 56 fps @1920 × 1080 Mono 8  |                      |
| Dynamic range             | 90 dB   |                      |
| SNR                       | 41 dB   |                      |
| Gain                      | 0 dB to 24 dB   | 0 dB to 30 dB        |
| Exposure time             | 64 μs to 130 ms   | 128 μs to 260 ms     |
| Exposure mode             | Off/Once/Continuous exposure mode   |                      |
| Mono/color                | Mono  | Color                |
| Pixel format              | Mono 8  | Mono 8, YUV422Packed |
| Binning                   | Supports 1 × 1, 2 × 2   | Not supported        |
| Decimation                | Not supported   |                      |
| Reverse image             | Supports horizontal and vertical reverse image output   |                      |
| <b>Electrical feature</b> |   |                      |
| 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. 2.1 W@12 VDC   |                      |
| <b>Mechanical</b>         |   |                      |
| 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        | IP30 (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% to 80% RH, non-condensing   |                      |
| <b>General</b>            |   |                      |
| 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  |                      |



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