HIKROBOT

# MV-CA003-20GM/GC

0.3 MP 1/4" CMOS GigE Area Scan Camera







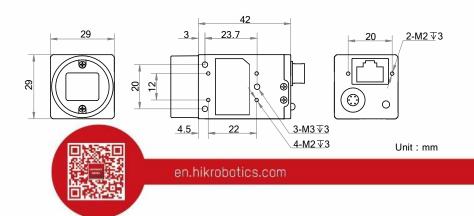
## Introduction

MV-CA003-20GM/GC adopts PYTHON300 sensor to ● provide high quality image. The GigE interface provides 
Color camera: MV-CA003-20GC high-speed real-time transmission of uncompressed Applicable Industry data with the maximum frame rate reaching 300 fps at Electronic semiconductor, factory automation, full resolution.

## **Key Feature**

- Adopts GigE interface and max. transmission distance of 100 meters without relay.
- Up to 128 MB local memory for burst transmission and retransmission.
- Supports auto exposure control, LUT, Gamma correction, etc.
- Supports hardware trigger, software trigger, etc.
- Compatible with GigE Vision V1.2 Protocol and the third-party software based on the protocol.

## Dimension

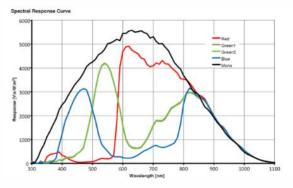


### **Available Model**

- Mono camera: MV-CA003-20GM

quality inspection, etc.

## Sensor Quantum Efficiency



## Specification

| Model              | MV-CA003-20GM   | MV-CA003-20GC  |
|--------------------|---|--|
| Camera             |   |  |
| Sensor type        | CMOS, global shutter  |  |
| Sensor model       | PYTHON300   |  |
| Pixel size         | 4.8 μm × 4.8 μm   |  |
| Sensor size        | 1/4"  |  |
| Resolution         | 672 × 512   |  |
| Max. frame rate    | 344 fps @672 × 512  | 336 fps @672 × 512   |
| Dynamic range      | 59 dB   |  |
| SNR                | 39.9 dB   |  |
| Gain               | 0 dB to 15 dB   |  |
| Exposure time      | 49 µs to 10 sec   | 40 µs to 10 sec  |
| Exposure mode      | Off/Once/Continuous exposure mode   |  |
| Mono/color         | Mono  | Color  |
| Pixel format       | Mono 8/10/10p/12/12p  | Mono8/10/12, Bayer RG 8/10/10p/12/12p,<br>YUV 422 Packed, YUV422_YUYV_Packed,<br>RGB 8 |
| Binning            | Supports 1 × 1, 1 × 2, 2 × 1, 1 × 4, 4 × 1, 2 × 2, 2 × 4, 4 × 2, 4 × 4                            |  |
| Decimation         | Supports 1 × 1, 2 × 2   |  |
| Reverse image      | Supports horizontal and vertical reverse image output   |  |
| Image buffer       | 128 MB  |  |
| Electrical feature |   |  |
| Data interface     | Gigabit Ethernet, compatible with Fast Ethernet   |  |
| Digital I/O        | 6-pin Hirose connector provides power and I/O, including opto-isolated input $\times$ 1 (Line 0), |  |
|                    | opto-isolated output $\times$ 1 (Line 1), bi-directional non-isolated I/O $\times$ 1 (Line 2).    |  |
| Power supply       | 12 VDC, supports PoE  |  |
| Power              | Typ. 2.6 W @ 12 VDC   |  |
| consumption        |   |  |
| Mechanical         |   |  |
| Lens mount         | C-Mount   |  |
| Dimension          | 29 mm × 29 mm × 42 mm (1.1" × 1.1" × 1.7")  |  |
| Weight             | Approx. 68 g (0.15 lb.)   |  |
| Ingress protection | IP30 (under proper lens installation and wiring)  |  |
| Temperature        | Working temperature: 0 °C to 50 °C (32 °F to 122 °F)  |  |
|                    | Storage temperature: -30 °C to 70 °C (-22 °F to 158 °F)   |  |
| Humidity           | 20% to 80% 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 V1.2, GenICam   |  |
| Certification      | CE, RoHS, KC  |  |

**HIKROBOT** 

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