HIKROBO1

# MV-CA016-10GM/GC

1.6 MP 1/2.9" CMOS GigE Area Scan Camera



GEN**<i>**CAM



#### Introduction

MV-CA016-10GM/GC camera adopts Sony® IMX 273 • sensor and provides high quality image. The GigE interface • provides high-speed and real-time transmission of uncompressed data with the maximum frame rate reaching 78.2 fps at full resolution.

#### **Key Feature**

- Adopts GigE interface and max. transmission distance of 100 meters without relay.
- Supports auto and manual adjustment for exposure control, LUT, Gamma correction, etc.
- Up to 128 MB local memory for burst transmission and retransmission.
- Supports hardware trigger, software trigger, etc.
- Compatible with GigE Vision Protocol V2.0, GenlCam Standard, and third-party software based on these protocol and standard.

## Dimension



## **Available Model**

- Mono camera: MV-CA016-10GM
- Color camera: MV-CA016-10GC

## **Applicable Industry**

Electronic semiconductor, factory automation, and quality inspection, etc.

#### **Sensor Quantum Efficiency**





MV-CA016-10GM

MV-CA016-10GC

## Specification

| Model              | MV-CA016-10GM  | MV-CA016-10GC                               |
|--------------------|--|---|
| Camera             |  |   |
| Sensor type        | CMOS, global shutter   |   |
| Sensor model       | Sony® IMX273   |   |
| Pixel size         | 3.45 μm × 3.45 μm  |   |
| Sensor size        | 1/2.9"   |   |
| Resolution         | 1440 × 1080  |   |
| Max. frame rate    | 78.2 fps @1440 × 1080  |   |
| Dynamic range      | 71.4 dB  |   |
| SNR                | 41 dB  |   |
| Gain               | 0 dB to 20 dB  |   |
| Exposure time      | 1 µs to 10 sec   |   |
| Exposure mode      | Off/ Once /Continuous exposure mode  |   |
| Mono/color         | Mono   | Color                                       |
| Pixel format       |  | Mono8/10/12, Bayer RG 8/10/10p/12/12p       |
|                    | Mono 8/10/10p/12/12p   | YUV 422 Packed, YUV422_YUYV_Packed,<br>RGB8 |
| Binning            | Supports 1 × 1, 2 × 2  |   |
| 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 × 1                     |   |
|                    | (Line 0), opto-isolated output $\times$ 1 (Line 1), bi-directional non-isolated I/O $\times$ 1 (Line |   |
|                    | 2).  |   |
| Power supply       | 9 VDC to 24 VDC, supports PoE  |   |
| Power consumption  | Typ. 3 W@12 VDC  |   |
| 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 | IP 30 (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 V2.0, GenlCam  |   |
| Certification      | CE, FCC, RoHS  |   |

**HIKROBOT** 

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