

MV-CU020-19GM/GC V3

2 MP CMOS GigE Area Scan Camera



GEN*i*CAM

GigE
VISION

Introduction

MV-CU020-19GM/GC V3 camera provides 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 Features

- 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, and anyway mode, 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.

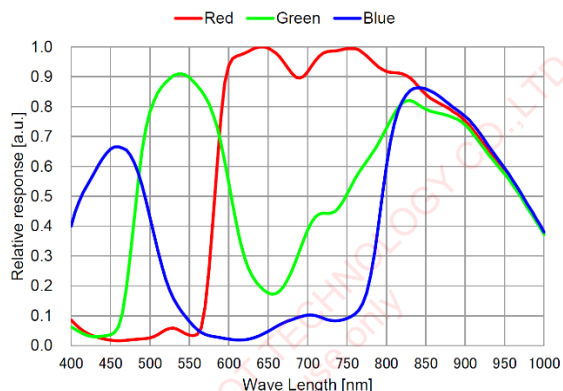
Applicable Industry

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

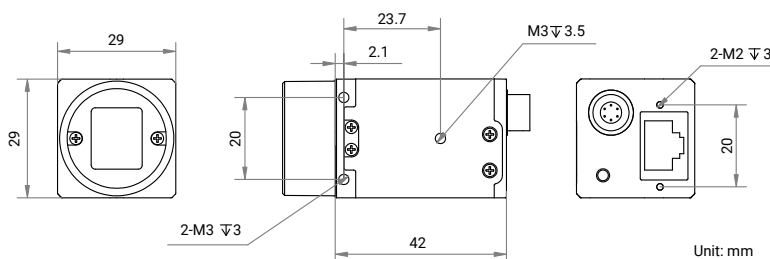
Available Model

- Mono camera: MV-CU020-19GM V3
- Color camera: MV-CU020-19GC V3
- 850 nm camera: MV-CU020-19GC (850 nm Bandpass) V3

Sensor Quantum Efficiency



Dimension



Unit: mm

Specification

Model	MV-CU020-19GM V3	MV-CU020-19GC V3	MV-CU020-19GC (850 nm Bandpass) V3
Performance			
Sensor type	CMOS, rolling shutter		
Pixel size	2.9 μm \times 2.9 μm		
Sensor size	1/2.8"		
Resolution	1920 \times 1080		
Max. frame rate	56 fps @ 1920 \times 1080 Mono 8		
Dynamic range	74 dB 90 dB @ WDR		
SNR	45.6 dB		
Gain	0 dB to 24 dB	0 dB to 30 dB	0 dB to 24 dB
Exposure time	64 μs to 130 ms	128 μs to 260 ms	64 μs to 130 ms
Exposure mode	Off/Once/Continuous exposure mode		
Mono/color	Mono	Color	Mono
Pixel format	Mono 8	Mono 8, YUV422Packed	Mono 8
Binning	Supports 1 \times 1, 2 \times 2	Not supported	Supports 1 \times 1, 2 \times 2
Decimation	Not supported		
Reverse image	Supports horizontal and vertical reverse image output		
Electrical feature			
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 \times 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. 2.4 W @ 12 VDC	Typ. 2.3 W @ 12 VDC	Typ. 2.4 W @ 12 VDC
Mechanical			
Lens mount	C-mount		
Dimension	29 mm \times 29 mm \times 42 mm (1.1" \times 1.1" \times 1.7")		
Weight	Approx. 100 g (0.2 lb.)		
Ingress protection	IP30 (under proper lens installation and wiring)		
Temperature	Working temperature: 0 $^{\circ}\text{C}$ to 50 $^{\circ}\text{C}$ (32 $^{\circ}\text{F}$ to 122 $^{\circ}\text{F}$) Storage temperature: -30 $^{\circ}\text{C}$ to 80 $^{\circ}\text{C}$ (-22 $^{\circ}\text{F}$ to 176 $^{\circ}\text{F}$)		
Humidity	20% RH to 80% 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, 32/64-bit Linux		
Compatibility	GigE Vision V2.0, GenICam		
Certification	CE, RoHS, KC		