

MV-CS050-20GM/GC

5 MP 2/3" CMOS GigE Area Scan Camera



GEN*i*CAM

GigE
VISION

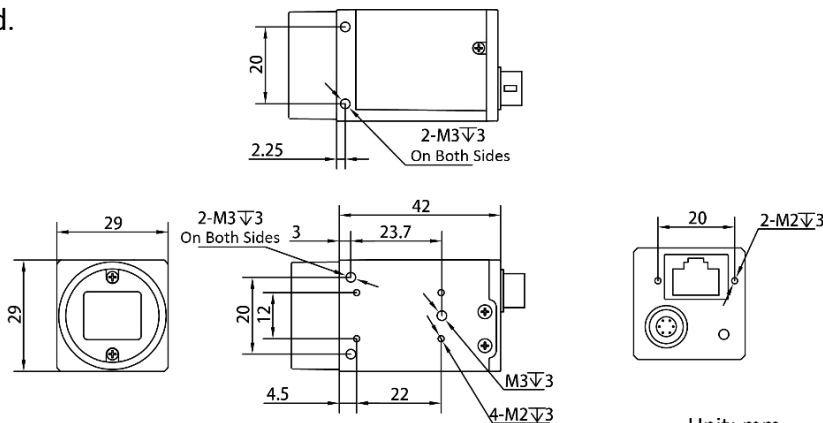
Introduction

With GigE interface, MV-CS050-20GM/GC camera adopts OnSemi XGS5000 sensor to provide high-quality images and transmit images in real time, and its max. frame rate can reach 22.7 fps in full resolution.

Key Feature

- Adopts brand new design to reduce power consumption.
- Supports contrast ratio function to adjust image clarity.
- Supports auto or manual adjustment for gain, exposure control, LUT, Gamma correction, etc.
- Compact design with mounting holes on panels for flexible mounting from 4 sides.
- 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



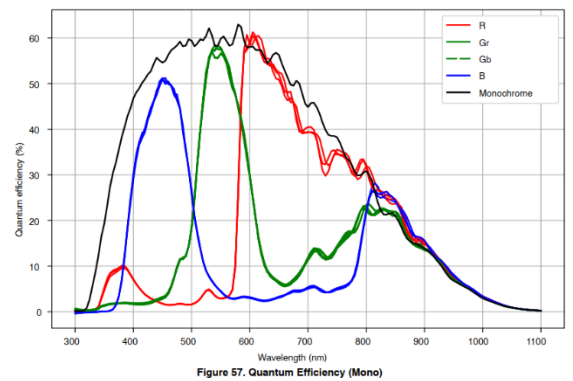
Available Model

- Mono camera: MV-CS050-20GM
- Color camera: MV-CS050-20GC

Applicable Industry

SMT/ PCB AOI, consumer electronics, electrical semiconductor, etc.

Sensor Quantum Efficiency



Specification

Model	MV-CS050-20GM	MV-CS050-20GC
Camera		
Sensor type	CMOS, global shutter	
Sensor model	OnSemi XGS5000	
Pixel size	3.2 μm \times 3.2 μm	
Sensor size	2/3"	
Resolution	2592 \times 2048	
Max. frame rate	22.7 fps @ 2592 \times 2048	
Dynamic range	66 dB	
SNR	39.6 dB	
Gain	0 dB to 18 dB	
Exposure time	UltraShort exposure mode: 23 μs to 99 μs	
	Standard exposure mode: 100 μs to 10 sec	
Exposure mode	Off/Once/Continuous exposure mode	
Mono/color	Mono	Color
Pixel format	Mono 8/10/10Packed/12/12Packed	Mono 8/10/12, Bayer RG 8/10/10Packed/12/12Packed, YUV422Packed, YUV422_YUYV_Packed, RGB 8, BGR 8
Binning	Supports 1 \times 1, 2 \times 2, 4 \times 4	
Decimation	Supports 1 \times 1, 2 \times 2	
Reverse image	Supports horizontal and vertical reverse image output	
Electrical features		
Data interface	Gigabit Ethernet, compatible with Fast Ethernet	
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. 2.5 W @ 12 VDC	Typ. 2.7 W @ 12 VDC
Mechanical		
Lens mount	C-mount	
Dimension	29 mm \times 29 mm \times 42 mm (1.1" \times 1.1" \times 1.2")	
Weight	Approx. 100 g (0.22 lb.)	
Ingress protection	IP40 (under proper lens installation and wiring)	
Temperature	Working temperature: -30 $^{\circ}\text{C}$ to 60 $^{\circ}\text{C}$ (-22 $^{\circ}\text{F}$ to 140 $^{\circ}\text{F}$)	
	Storage temperature: -30 $^{\circ}\text{C}$ to 70 $^{\circ}\text{C}$ (-22 $^{\circ}\text{F}$ to 158 $^{\circ}\text{F}$)	
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, 32/64-bit Linux	
Compatibility	GigE Vision V2.0, GenICam	
Certification	CE, RoHS, KC	