

MV-CH120-60GM/GC V5

12 MP 1.1" CMOS GigE Area Scan Camera



GEN*i*CAM

GIG*E*
VISION

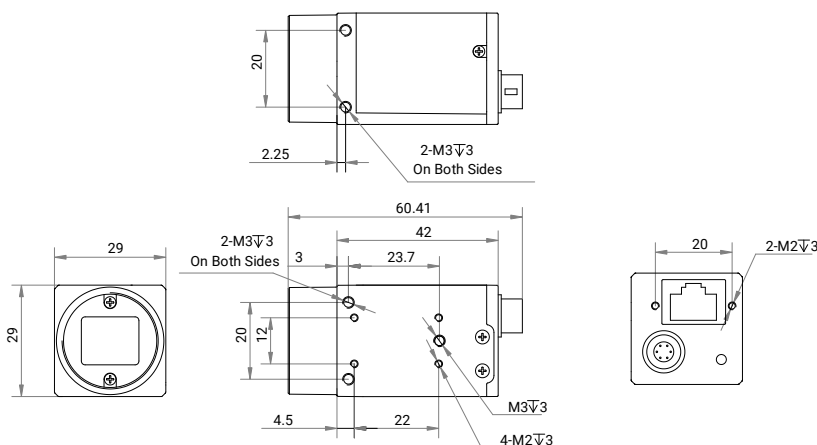
Introduction

MV-CH120-60GM/GC V5 camera adopts CMOS 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 10 fps in full resolution.

Key Feature

- Compact design with mounting holes on panels for flexible mounting from 4 sides.
- Supports auto or manual adjustment of gain and exposure time, and LUT and Gamma correction function.
- Supports LSC, Sequencer, passive transmission, etc.
- Supports functions like white balance, CCM, Super Palette, and Super Bayer to provide high-quality images.
- Compatible with GigE Vision V2.0 Protocol, GenICam Standard, and third-party software based on the protocol and standard.

Dimension



Unit: mm

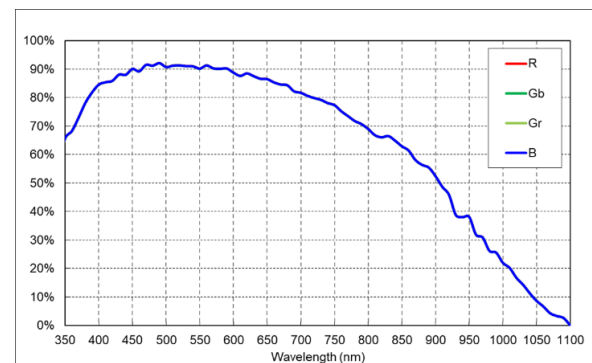
Available Model

- Mono camera: MV-CH120-60GM V5
- Color camera: MV-CH120-60GC V5

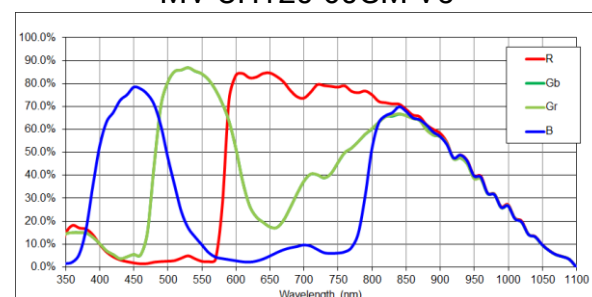
Applicable Industry

Electronic semiconductor, factory automation, logistics code reading, medicine packing, etc.

Sensor Quantum Efficiency



MV-CH120-60GM V5



MV-CH120-60GC V5

Model	MV-CH120-60GM V5	MV-CH120-60GC V5
Performance		
Sensor type	CMOS, global shutter	
Sensor model	Stacked BSI	
Pixel size	3.45 μm \times 3.45 μm	
Sensor size	1.1"	
Resolution	4096 \times 3000	
Max. frame rate	10 fps @ 4096 \times 3000 Mono 8	10 fps @ 4096 \times 3000 Bayer GB 8
Dynamic range	67.2 dB	
SNR	44.1 dB	
Gain	0 dB to 12 dB	
Exposure time	UltraShort exposure mode: 10 μs to 19 μs	
	Standard exposure mode: 20 μs to 10 sec	
Exposure mode	Off/Once/Continuous exposure mode, supports TriggerWidth	
Mono/color	Mono	Color
Pixel format	Mono 8/10/10Packed/12/12Packed	Mono 8/10/12 Bayer GB 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, 4 \times 4	
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. 1.7 W @ 12 VDC	
Mechanical		
Lens mount	C-mount	
Dimension (without lens)	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	IP40 (under proper lens installation and wiring)	
Temperature	Working temperature: -10 $^{\circ}\text{C}$ to 50 $^{\circ}\text{C}$ (14 $^{\circ}\text{F}$ 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 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, and 32/64-bit Linux	
Compatibility	GigE Vision V2.0, GenICam	
Certification	CE, RoHS, KC	