

MV-CH120-10GM/GC V5

12 MP 1.1" CMOS GigE Area Scan Camera



GEN*i*CAM

GigE
VISION

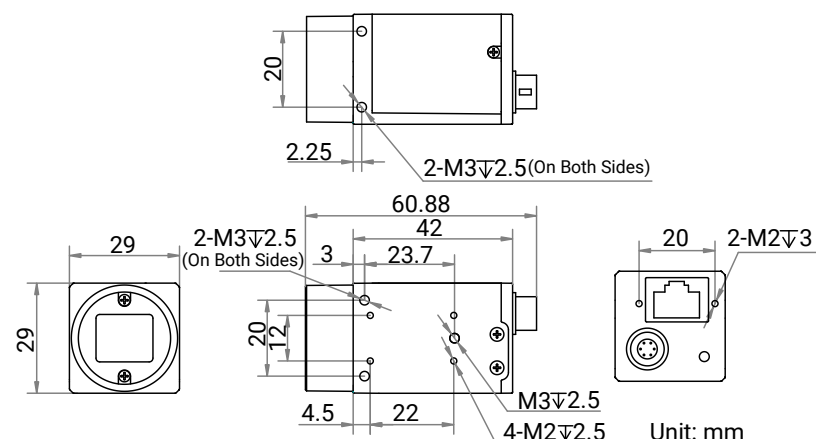
Introduction

MV-CH120-10GM/GC V5 camera adopts Sony® IMX304 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 9.9 fps in full resolution.

Key Features

- Compact design with mounting holes on panels for flexible mounting from 4 sides.
- Supports auto and manual adjustment of gain, exposure control, and manual adjustment of LUT and Gamma correction.
- Supports LSC, Sequencer, transfer passive mode, etc.
- Color camera supports interpolation, white balance, CCM, Super Palette, and Super Bayer, etc.
- Compatible with GigE Vision Protocol V2.0, GenICam Standard, and third-party software based on the protocol and standard.

Dimension



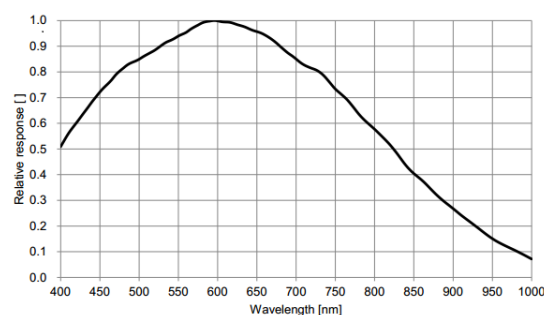
Available Model

- Mono camera: MV-CH120-10GM V5
- Color camera: MV-CH120-10GC V5

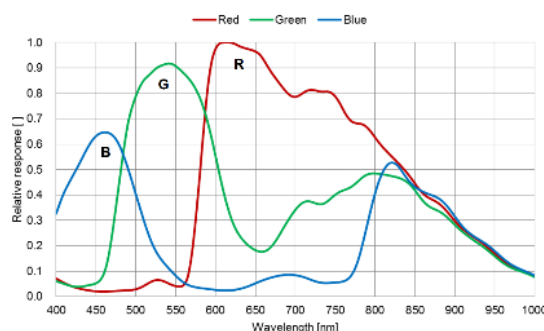
Applicable Industry

Electric semiconductor, factory automation, logistic code reading, pharmaceutical packaging, etc.

Sensor Quantum Efficiency



MV-CH120-10GM V5



MV-CH120-10GC V5

Specification

Model	MV-CH120-10GM V5		MV-CH120-10GC V5
Performance			
Sensor type	CMOS, global shutter		
Sensor model	Sony® IMX304		
Pixel size	3.45 μm × 3.45 μm		
Sensor size	1.1"		
Resolution	4096 × 3000		
Max. frame rate	9.9 fps @ 4096 × 3000 Mono 8	9.9 fps @ 4096 × 3000 Bayer RG 8	
Dynamic range	70.4 dB		
SNR	40 dB		
Gain	0 dB to 24 dB		
Exposure time	UltraShort exposure mode: 1 μs to 14 μs Standard exposure mode: 15 μs to 10 sec		
Exposure mode	Off/Once/Continuous exposure mode, and supports Trigger Width		
Mono/color	Mono	Color	
Pixel format	Mono 8/10/10Packed/12/12Packed	Mono 8, Bayer RG 8/10/10Packed/12/12Packed, YUV422Packed, YUV422_YUYV_Packed, RGB 8, BGR 8	
Binning	Supports 1 × 1, 2 × 2, 4 × 4		
Decimation	Supports 1 × 1, 2 × 2, 4 × 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 × 1 (Line 0), opto-isolated output × 1 (Line 1), bi-directional non-isolated I/O × 1 (Line 2).		
Power supply	9 VDC to 24 VDC, supports PoE		
Power consumption	Typ. 2.3 W @ 12 VDC		
Mechanical			
Lens mount	C-mount		
Dimension	29 mm × 29 mm × 42 mm (1.1" × 1.1" × 1.7")		
Weight	Approx. 98 g (0.2 lb.)		
Ingress protection	IP40 (under proper lens installation and wiring)		
Temperature	Working temperature: −10 °C to 50 °C (14 °F to 122 °F) Storage temperature: −30 °C to 80 °C (−22 °F to 176 °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		