

# MV-CH120-10GM/GC

12 MP 1.1" CMOS GigE Area Scan Camera



GEN*i*CAM

**GigE**  
VISION

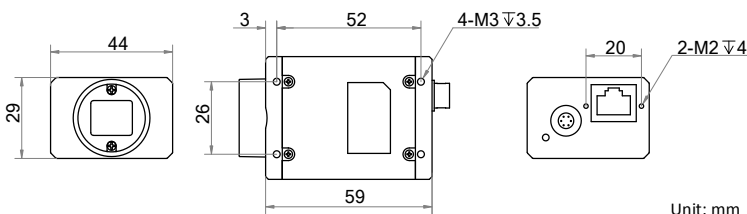
## Introduction

MV-CH120-10GM/GC camera adopts Sony® IMX304 sensor to provide high-quality image. It uses GigE interface to transmit non-compressed images in real time with max. frame rate reaching 9.4 fps.

## Key Feature

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

## Dimension



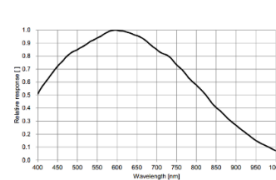
## Available Model

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

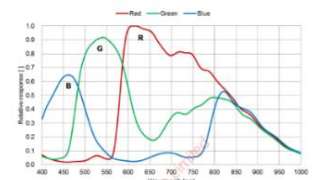
## Applicable Industry

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

## Sensor Quantum Efficiency



MV-CH120-10GM



MV-CH120-10GC

## Specification

Model	MV-CH120-10GM	MV-CH120-10GC
<b>Camera</b>		
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	9.4 fps @4096 × 3000	
Dynamic range	72.2 dB	
SNR	40.2 dB	
Gain	0 dB to 20 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	
Mono/color	Mono	Color
Pixel format	Mono 8/10/10p/12/12p	Mono 8/10/12, Bayer GR 8/10/10p/12/12p, YUV422Packed, YUV422_YUYV_Packed, RGB 8, BGR 8
Binning	Supports 1 × 1, 1 × 2, 1 × 4, 2 × 1, 2 × 2, 2 × 4, 4 × 1, 4 × 2, 4 × 4	
Decimation	Supports 1 × 1, 1 × 2, 2 × 1, 2 × 2	
Reverse image	Supports horizontal and vertical reverse image output	
Image buffer	128 MB	
<b>Electrical feature</b>		
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 × 1 (Line 1), bi-directional non-isolated I/O × 1 (Line 2).	
Power supply	12 VDC, supports PoE	
Power consumption	Typ. 4.3 W@12 VDC	Typ. 4.6 W@12 VDC
<b>Mechanical</b>		
Lens mount	C-Mount	
Dimension	44 mm × 29 mm × 59 mm (1.7" × 1.1" × 2.3")	
Weight	< 100 g (0.2 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	
<b>General</b>		
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, GenICam	
Certification	CE, FCC, RoHS, KC	