

# MV-CH120-20GM/GC

12 MP 1" CMOS GigE Area Scan Camera



**GEN*i*CAM**

**GIG*E***  
VISION

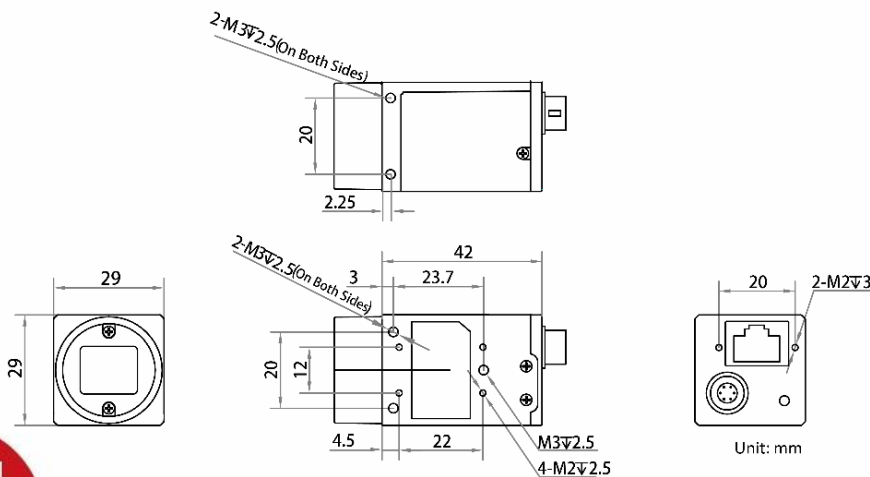
## Introduction

MV-CH120-20GM/GC camera adopts OnSemi XGS12000 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 9.6 fps in full resolution.

## Key Feature

- Supports auto or manual adjustment for gain and exposure time, and manual adjustment for LUT and Gamma correction.
- Adopts GigE interface and max. transmission distance of 100 meters without relay.
- Compact design with mounting holes on panels for flexible mounting from 4 sides.
- Compatible with GigE Vision V2.0 Protocol, GenICam Standard, and third-party software based on the protocol and standard.

## Dimension



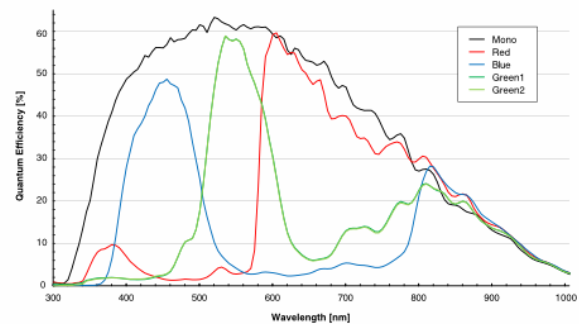
## Available Model

- Mono camera: MV-CH120-20GM
- Color camera: MV-CH120-20GC

## Applicable Industry

Electronic semiconductor, factory automation, logistics, etc.

## Sensor Quantum Efficiency



# Specification

Model	MV-CH120-20GM	MV-CH120-20GC
<b>Camera</b>		
Sensor type	CMOS, global shutter	
Sensor model	OnSemi XGS12000	
Pixel size	3.2 $\mu\text{m}$ $\times$ 3.2 $\mu\text{m}$	
Sensor size	1"	
Resolution	4096 $\times$ 3072	
Max. frame rate	9.6 fps @4096 $\times$ 3072	
Dynamic range	66.4 dB	
SNR	40 dB	
Gain	0 dB to 18 dB	
Exposure time	UltraShort exposure mode: 52 $\mu\text{s}$ to 161 $\mu\text{s}$	
	Standard exposure mode: 162 $\mu\text{s}$ 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 RG 8/10/10p/12/12p, 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	
<b>Electrical feature</b>		
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. 3.2 W@12 VDC	Typ. 3.5 W@12 VDC
<b>Mechanical</b>		
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 70 $^{\circ}\text{C}$ (-22 $^{\circ}\text{F}$ to 158 $^{\circ}\text{F}$ )	
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	

Distribution Partner:



# SCORPION VISION