

# MV-CS020-21GM

2 MP 2/3" CMOS GigE Area Scan Camera



**GEN<i>i>CAM**

**GigE**  
VISION

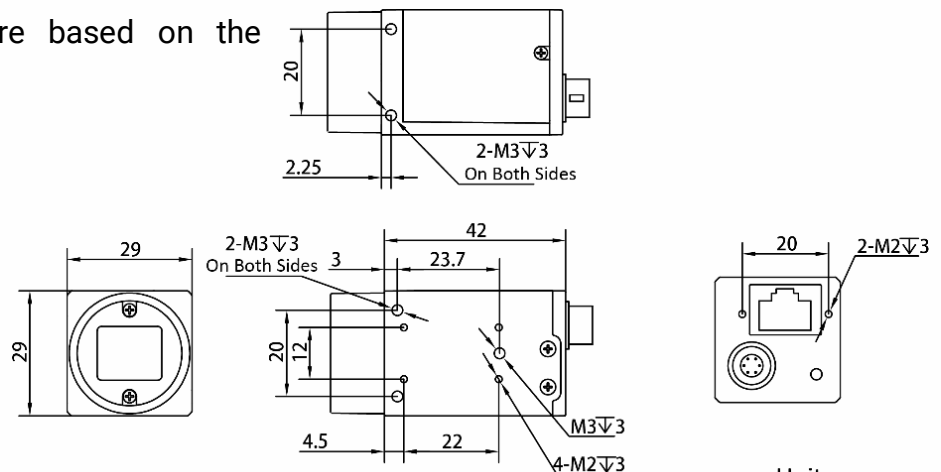
## Introduction

With GigE interface, MV-CS020-21GM camera adopts OnSemi sensor to provide high-quality images and transmit images in real time, and its max. frame rate can reach 51.3 fps in full resolution.

## Key Feature

- Adopts brand new design to reduce power consumption.
- Supports auto or manual adjustment for gain, exposure control, contrast ratio, 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, GenlCam Standard, and third-party software based on the protocol and standard.

## Dimension



Unit: mm

## Available Model

MV-CS020-21GM

## Applicable Industry

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

## Sensor Quantum Efficiency

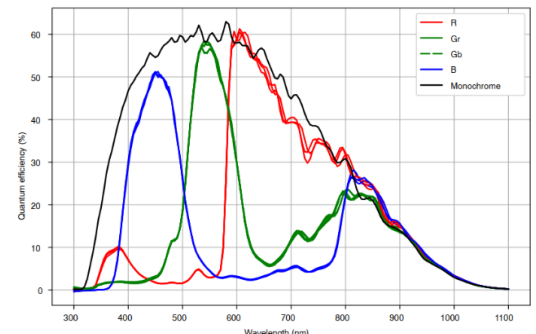


Figure 57. Quantum Efficiency (Mono)



# Specification

<b>Model</b>	<b>MV-CS020-21GM</b>
<b>Camera</b>	
<b>Sensor type</b>	CMOS, global shutter
<b>Sensor model</b>	OnSemi
<b>Pixel size</b>	4.5 $\mu\text{m}$ $\times$ 4.5 $\mu\text{m}$
<b>Sensor size</b>	2/3"
<b>Resolution</b>	1920 $\times$ 1200
<b>Max. frame rate</b>	51.3 fps @1920 $\times$ 1200 Mono 8
<b>Dynamic range</b>	66 dB
<b>SNR</b>	39.6 dB
<b>Gain</b>	0 dB to 12 dB
<b>Exposure time</b>	UltraShort exposure mode: 9 $\mu\text{s}$ to 59 $\mu\text{s}$ Standard exposure mode: 60 $\mu\text{s}$ to 10 sec
<b>Exposure mode</b>	Off/Once/Continuous exposure mode
<b>Mono/color</b>	Mono
<b>Pixel format</b>	Mono 8/10/10Packed/12/12Packed
<b>Binning</b>	Supports 1 $\times$ 1, 2 $\times$ 2, 4 $\times$ 4
<b>Decimation</b>	Supports 1 $\times$ 1, 2 $\times$ 2
<b>Reverse image</b>	Supports horizontal and vertical reverse image output
<b>Electrical features</b>	
<b>Data interface</b>	Gigabit Ethernet, compatible with Fast Ethernet
<b>Digital I/O</b>	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).
<b>Power supply</b>	9 VDC to 24 VDC, supports PoE
<b>Power consumption</b>	Typ. 2.8 W@12 VDC
<b>Mechanical</b>	
<b>Lens mount</b>	C-Mount
<b>Dimension</b>	29 mm $\times$ 29 mm $\times$ 42 mm (1.1" $\times$ 1.1" $\times$ 1.2")
<b>Weight</b>	Approx. 100 g (0.22 lb.)
<b>Ingress protection</b>	IP40 (under proper lens installation and wiring)
<b>Temperature</b>	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 $^{\circ}\text{F}$ )
<b>Humidity</b>	20% to 95% RH, non-condensing
<b>General</b>	
<b>Client software</b>	MVS or third-party software meeting with GigE Vision Protocol
<b>Operating system</b>	32/64-bit Windows XP/7/10, 32/64-bit Linux and 64-bit MacOS
<b>Compatibility</b>	GigE Vision V2.0, GenICam
<b>Certification</b>	CE, FCC, RoHS, KC

Distribution Partner:



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