

# MV-CE050-31GM/GC

5 MP 1/2.5" CMOS GigE Area Scan Camera



GEN*i*CAM

GIG*E*  
VISION

## Introduction

MV-CE050-31GM/GC camera adopts Aptina AR0521 sensor to provide high-quality image. It uses GigE interface to transmit non-compressed images in real time with max. frame rate reaching 24 fps in full resolution.

## Key Feature

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

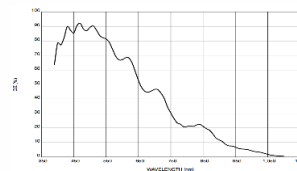
## Available Model

Mono camera: MV-CE050-31GM  
Color camera: MV-CE050-31GC

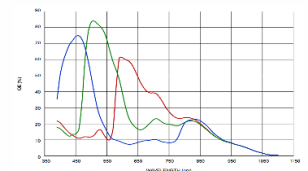
## Applicable Industry

Electronic semiconductor, factory automation, logistics code reading, medical packing, quality inspection, etc.

## Sensor Quantum Efficiency

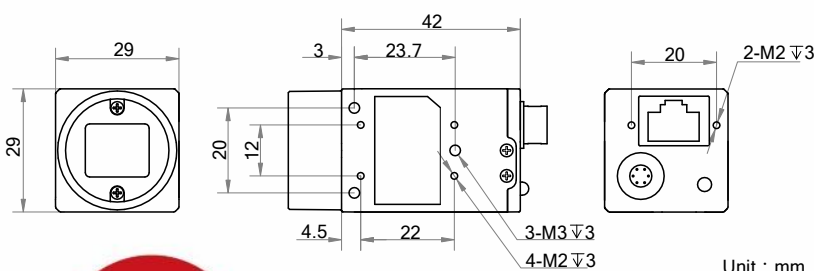


MV-CE050-31GM



MV-CE050-31GC

## Dimension



Unit : mm



## Specification

Model	MV-CE050-31GM	MV-CE050-31GC
<b>Camera</b>		
Sensor type	CMOS, rolling shutter	
Sensor model	Aptina AR0521	
Pixel size	2.2 $\mu\text{m}$ $\times$ 2.2 $\mu\text{m}$	
Sensor size	1/2.5"	
Resolution	2592 $\times$ 1944	
Max. frame rate	24 fps @2592 $\times$ 1944	
Dynamic range	63 dB	
SNR	37 dB	
Gain	0 dB to 23 dB	
Exposure time	21 $\mu\text{s}$ to 1 s	
Shutter mode	Off/Once/Continuous exposure mode	
Mono/color	Mono	Color
Pixel format	Mono 8/10/10p/12/12p	Mono 8/10/12, RGB 8, BGR 8, Bayer GB 8/10/10p/12/12p, YUV422Packed, YUV422_YUYV_Packed
Binning	Supports 2 $\times$ 2, 4 $\times$ 4	
Decimation	Supports 2 $\times$ 2, 4 $\times$ 4	
Reverse image	Supports horizontal and vertical reverse image output	
Image buffer	128 MB	
<b>Electrical features</b>		
Data interface	Gigabit Ethernet interface	
Digital I/O	6-pin Hirose connector provides power and I/O, including Opto-isolated input x 1 (Line 0), opto-isolated output x 1 (Line 1), and bi-directional non-isolated I/O x 1 (Line 2).	
Power supply	9 VDC to 24 VDC, supports PoE	
Power consumption	Approx. 2.4 W@12 VDC	
<b>Structure</b>		
Lens mount	C-Mount	
Dimension	29 mm $\times$ 29 mm $\times$ 42 mm (1.1" $\times$ 1.1" $\times$ 1.7")	
Weight	Approx. 68 g (0.15 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, without condensation	
<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	



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