

# MV-CH250-90GM/C/N V4

25 MP 1.1" CMOS GigE Area Scan Camera



GEN*i*CAM

GIG*E*  
VISION

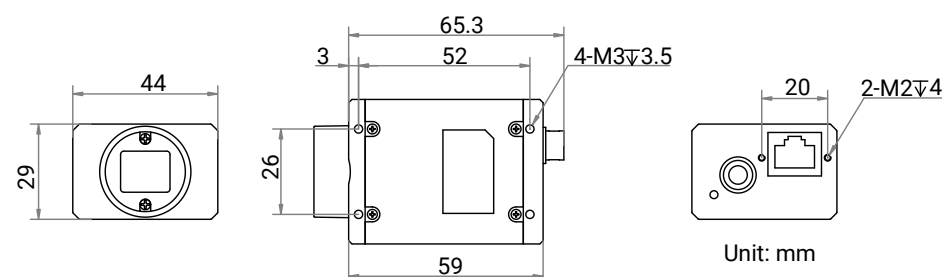
## Introduction

MV-CH250-90GM/GC/GN V4 camera adopts Gpixel GMAX0505 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 4.5 fps in full resolution.

## Key Feature

- Resolution of 5120 × 5120, pixel size of 2.5 μm × 2.5 μm.
- Supports binning, reverse image output and LSC. Compatible with C-mount lenses.
- Easy and flexible installation, with mounting holes on both panels of the camera.
- Adopts GigE interface and max. transmission distance of 100 meters without relay.
- Supports hardware trigger, software trigger, free run, etc.
- Compatible with GigE Vision V2.0 Protocol, GenICam Standard, and third-party software based on the protocol and standard.

## Dimension



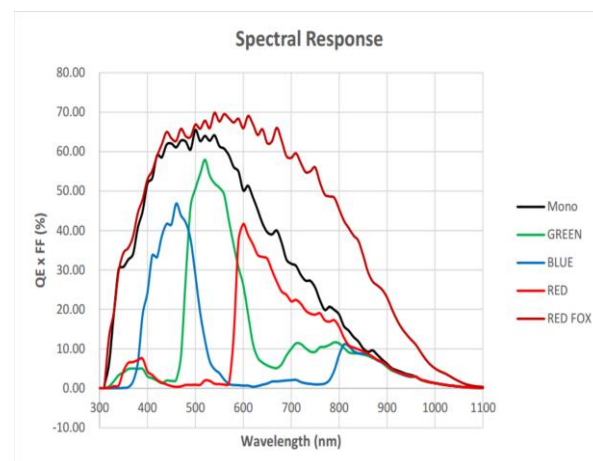
## Available Model

- Mono camera: MV-CH250-90GM V4
- Color camera: MV-CH250-90GC V4
- NIR camera: MV-CH250-90GN V4

## Applicable Industry

SMT/ PCB AOI, FPD, railway related applications, etc.

## Sensor Quantum Efficiency



# Specification

Model	MV-CH250-90GM V4	MV-CH250-90GN V4	MV-CH250-90GC V4
<b>Performance</b>			
Sensor type	CMOS, global shutter		
Sensor model	Gpixel GMAX0505		
Pixel size	2.5 $\mu\text{m}$ $\times$ 2.5 $\mu\text{m}$		
Sensor size	1.1"		
Resolution	5120 $\times$ 5120		
Max. frame rate	4.5 fps @ 5120 $\times$ 5120 Mono 8	4.5 fps @ 5120 $\times$ 5120 Bayer BG 8	
Dynamic range	63 dB		
SNR	36 dB		
Gain	0 dB to 24 dB		
Exposure time	12 $\mu\text{s}$ to 10 sec		
Exposure mode	Off/Once/Continuous exposure mode		
Mono/color	Mono	NIR	Color
Pixel format	Mono 8/10/10Packed/12/12Packed		Mono 8/10/12, Bayer BG 8/10/10Packed/12/12Packed, 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, 4 $\times$ 4		
Reverse image	Supports horizontal and vertical reverse image output		
<b>Electrical feature</b>			
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 $\times$ 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. 3.1 W @ 12 VDC	Typ. 3.2 W @ 12 VDC	
<b>Mechanical</b>			
Lens mount	C-mount		
Dimension	29 mm $\times$ 44 mm $\times$ 59 mm (1.1" $\times$ 1.7" $\times$ 2.3")		
Weight	Approx. 100 g (0.2 lb.)		
Ingress protection	IP40 (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 80 $^{\circ}\text{C}$ (-22 $^{\circ}\text{F}$ to 176 $^{\circ}\text{F}$ )		
Humidity	20% RH to 95% RH (no condensation)		
<b>General</b>			
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		