

# MV-CH050-90XM/XC

#### 5 MP CMOS CoaXPress Area Scan Camera







#### Introduction

MV-CH050-90XM/XC camera adopts Gpixel GMAX2505 sensor to provide high quality image. It uses CXP-6 interface to transmit data, and its max. frame rate can reach 213 fps.

### **Key Feature**

- Resolution:  $2592 \times 2160$ , pixel size:  $2.5 \mu m \times 2.5 \mu m$ .
- Adopts global shutter CMOS sensor to provide high dynamic range, SNR, and high-quality image.
- Supports LSC correction, super palette, CCM, and SuperBayer.
- Adopts CXP-6 interface to transmit data.
- Supports Off, Once, and Continuous exposure modes.
- Compatible with CoaXPress Protocol and GenlCam Standard.

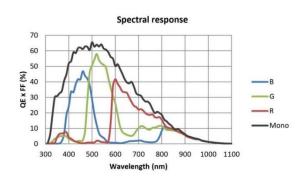
#### **Available Model**

- Mono camera: MV-CH050-90XM-C-NN
- Color camera: MV-CH050-90XC-C-NN

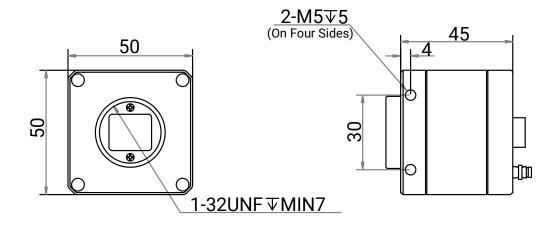
## **Applicable Industry**

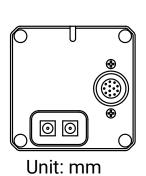
Electron semiconductor, PCB AOI, 3D application, motion capture, etc.

### **Sensor Quantum Efficiency**



### **Dimension**







# **Specification**

Model	MV-CH050-90XM	MV-CH050-90XC
Performance		
Sensor type	CMOS, global shutter	
Sensor model	Gpixel GMAX2505	
Pixel size	2.5 μm × 2.5 μm	
Sensor size	1/2"	
Resolution	2592 × 2160	
Max. frame rate	213 fps @ 2592 × 2160 Mono 8	213 fps @ 2592 × 2160 Bayer BG 8
Dynamic range	63.8 dB	
SNR	37 dB	
Gain	1.0 ×, 1.25 ×, 1.5 ×, 1.75 ×, 2.0 ×	
Exposure time	5 μs to 10 sec	
Exposure mode	Off/Once/Continuous exposure mode	
Mono/color	Mono	Color
Pixel format	Mono 8/12	Mono 8, Bayer BG 8/12
		RGB 8 Packed, YUV422_YUYV_Packed
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, 1 × 4, 2 × 1, 2 × 2, 2 × 4, 4 × 1, 4 × 2, 4 × 4	
Reverse image	Supports horizontal and vertical reverse image output	
Electrical features		
Data interface	CoaXPress with DIN interface	
Digital I/O	12-pin P10 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), and RS-232 × 1.	
Power supply	9 VDC to 24 VDC, CXP-1 supports PoCXP	
Power consumption	Typ. 5.3 W @ 12 VDC	Typ. 4.8 W @ 12 VDC
Mechanical		
Lens mount	C-mount, flange focal length 17.52 mm	
Dimension	50 mm × 50 mm × 45 mm (2.0" × 2.0" × 1.8")	
Weight	Approx. 220 g (0.5 lb.)	
Ingress protection	IP40 (under proper lens installation and wiring)	
Temperature	Working temperature: 0 °C to 50 °C (32 °F to 122 °F)	
	Storage temperature: -30 °C to 80 °C (-22 °F to 176 °F)	
Humidity	20% RH to 95% RH, no condensation	
General		
Client software	MVS or third-party software meeting with CoaXPress Protocol	
Operating system	32/64-bit Windows XP/7/10/11, 32/64-bit Linux	
Compatibility	CoaXPress, GenlCam	
Certifications	CE, RoHS, KC	

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