

MV-CH050-90XM/XC

5 MP CMOS CoaXPress Area Scan Camera



GEN<i>i</i>CAM

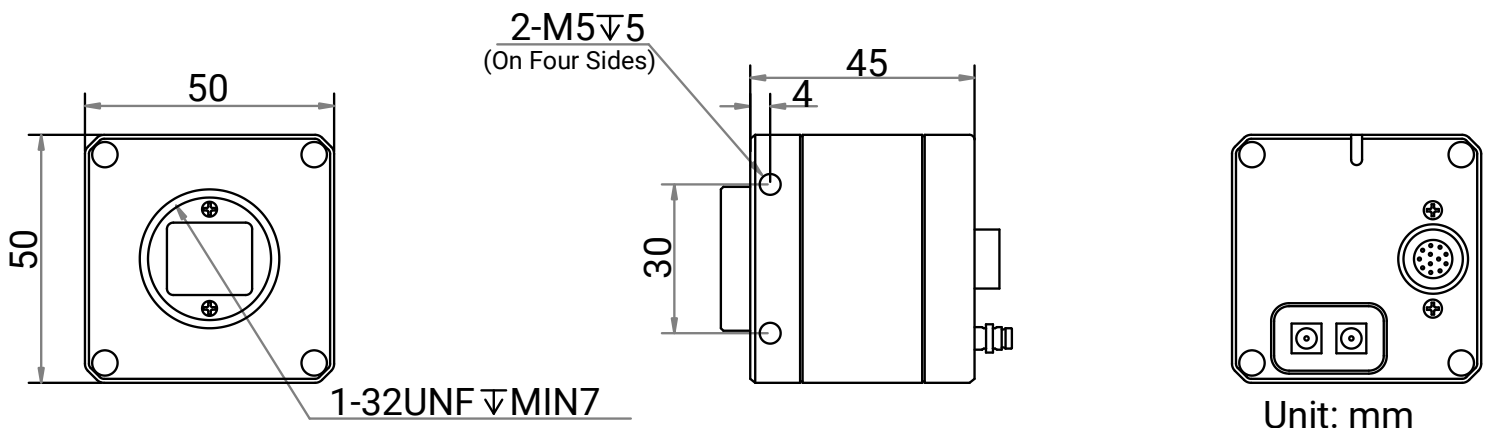
Introduction

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 Features

- Resolution: 2592 × 2160, pixel size: 2.5 μm × 2.5 μm.
- 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 GenICam Standard.

Dimension



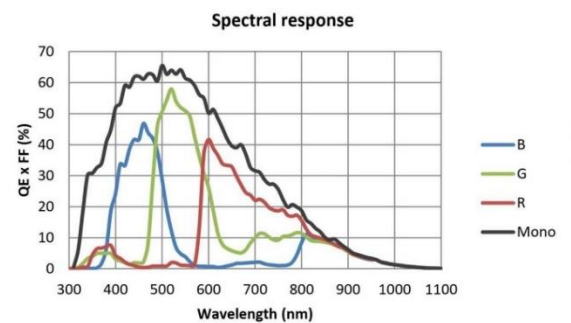
Available Model

- 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



Specification

Model	MV-CH050-90XM	MV-CH050-90XC
Performance		
Sensor type	CMOS, global shutter	
Sensor model	Gpixel GMAX2505	
Pixel size	2.5 μm \times 2.5 μm	
Sensor size	1/2"	
Resolution	2592 \times 2160	
Max. frame rate	213 fps @ 2592 \times 2160 Mono 8	213 fps @ 2592 \times 2160 Bayer BG 8
Dynamic range	63.8 dB	
SNR	37 dB	
Gain	1.0x, 1.25x, 1.5x, 1.75x, 2.0x	
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 YUV422_YUYV_Packed
Binning	Supports 1 \times 1, 1 \times 2, 1 \times 4, 2 \times 1, 2 \times 2, 2 \times 4, 4 \times 1, 4 \times 2, 4 \times 4	
Decimation	Supports 1 \times 1, 1 \times 2, 1 \times 4, 2 \times 1, 2 \times 2, 2 \times 4, 4 \times 1, 4 \times 2, 4 \times 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 \times 1 (Line 0), opto-isolated output \times 1 (Line 1), bi-directional non-isolated I/O \times 1 (Line 2), and RS-232 \times 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 back length 17.52 mm	
Dimension	50 mm \times 50 mm \times 45 mm (2.0" \times 2.0" \times 1.8")	
Weight	Approx. 220 g (0.5 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)	
General		
Client software	MVS or frame grabber software meeting with CoaXPress Protocol	
Operating system	32/64-bit Windows 7/10, 64-bit Windows 11, and 32/64-bit Linux	
Compatibility	CoaXPress, GenICam	
Certifications	CE, RoHS, KC	