

MV-CH050-90XM/XC

5MPCMoSCoaxXPRESSAreaScanCamera



GEN*i*CAM

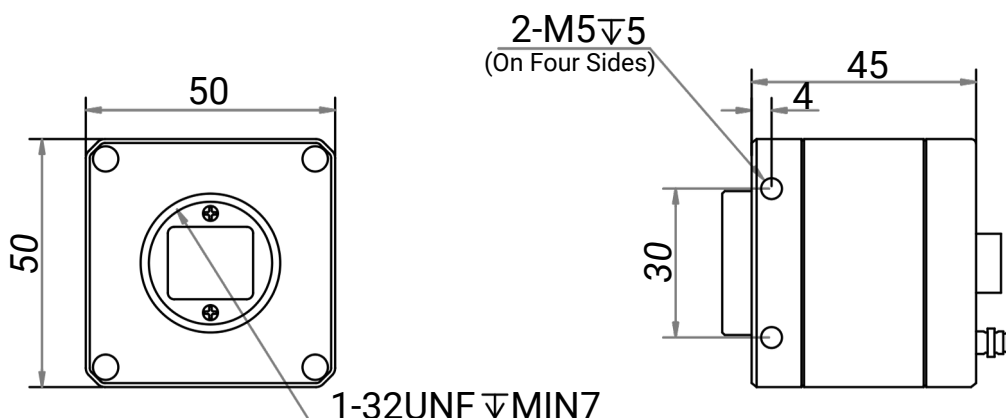
Introduction

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



Unit: mm

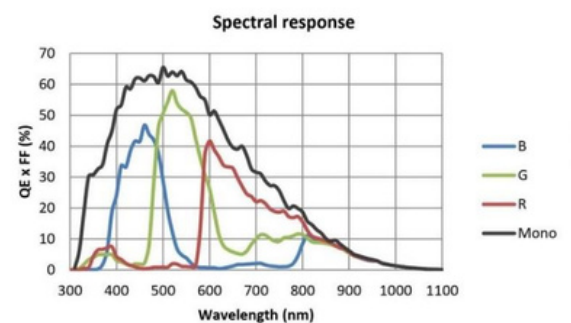
Available Model

- 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 × 2.5 μm	
Sensor size	1/2"	
Resolution Max.	2592 × 2160	
frame rate	213 fps @ 2592 × 2160 Mono 8	213 fps @ 2592 × 2160 Bayer BG 8
Dynamic range	63.8 dB	
SNR Gain	37 dB	
Exposure time	1.0x, 1.25x, 1.5x, 1.75x, 2.0x	
Exposure mode	5 μs to 10 sec	
Mono/color	Off/Once/Continuous exposure mode	
Pixel format	Mono	Color
	Mono 8/12	Mono 8 Bayer BG 8/12 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 back 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 General	20% RH to 95% RH (no condensation)	
Client software		
Operating system	MVS or frame grabber software meeting with CoaXPress Protocol	
Compatibility	32/64-bit Windows 7/10, 64-bit Windows 11, and 32/64-bit Linux	
Certifications	CoaXPress, GenICam	
	CE, RoHS, KC	