

MV-CH250-90XM/XC

25 MP CMOS CoaXPress Area Scan Camera



GEN<i>i</i>CAM

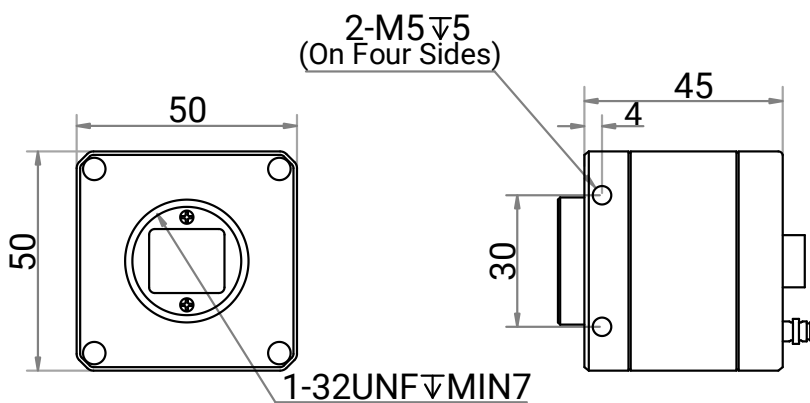
Introduction

MV-CH250-90XM/XC camera adopts Gpixel GMAX0505 sensor to provide high quality image. It uses CXP-6 interface to transmit images in real time, and its max. frame rate can reach 41.5 fps in full resolution.

Key Feature

- Resolution of 5120 × 5120, pixel size of 2.5 μm × 2.5 μm.
- Adopts global shutter CMOS sensor to provide high dynamic range, SNR, and high-quality image.
- Adopts CXP-6 interface to transmit data.
- Compatible with CoaXPress Protocol and GenICam Standard.

Dimension



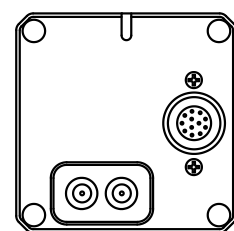
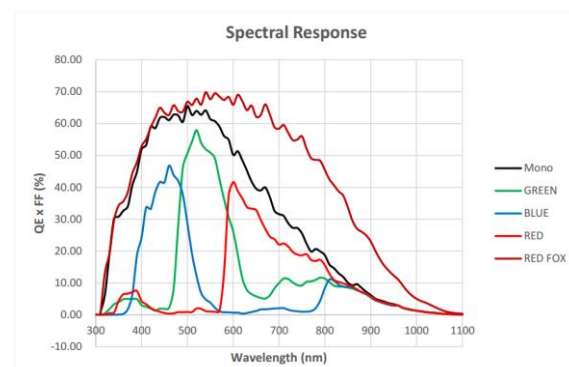
Available Model

Mono camera: MV-CH250-90XM-C-NN
Color camera: MV-CH250-90XC-C-NN

Applicable Industry

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

Sensor Quantum Efficiency



Unit: mm

Specification

Model	MV-CH250-90XM	MV-CH250-90XC
Performance		
Sensor type	CMOS, global shutter	
Sensor model	Gpixel GMAX0505	
Pixel size	2.5 μm \times 2.5 μm	
Sensor size	1.1"	
Resolution	5120 \times 5120	
Max. frame rate	41.5 fps @ 5120 \times 5120 Mono 8	41.5 fps @ 5120 \times 5120 Bayer BG 8
Dynamic range	65 dB	
SNR	41 dB	
Gain	2.0 \times to 5.0 \times	
Exposure time	13 μs to 10 sec	UltraShort exposure mode: 3 μs to 8 μs Standard exposure mode: 10 μs to 10 sec
Exposure mode	Off/Once/Continuous exposure mode	
Mono/color	Mono	Color
Pixel format	Mono 8/10/12	Bayer BG 8/10/12
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. 7.0 W @ 12 VDC	Typ. 6.5 W @ 12 VDC
Mechanical		
Lens mount	C-mount	
Dimension	50 mm \times 50 mm \times 45 mm (2.0" \times 2.0" \times 1.8")	
Weight	Approx. 207 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	