

MV-CH120-90Y2M/C

12 MP CMOS CoaXPress Area Scan Camera



GEN<i>i>CAM

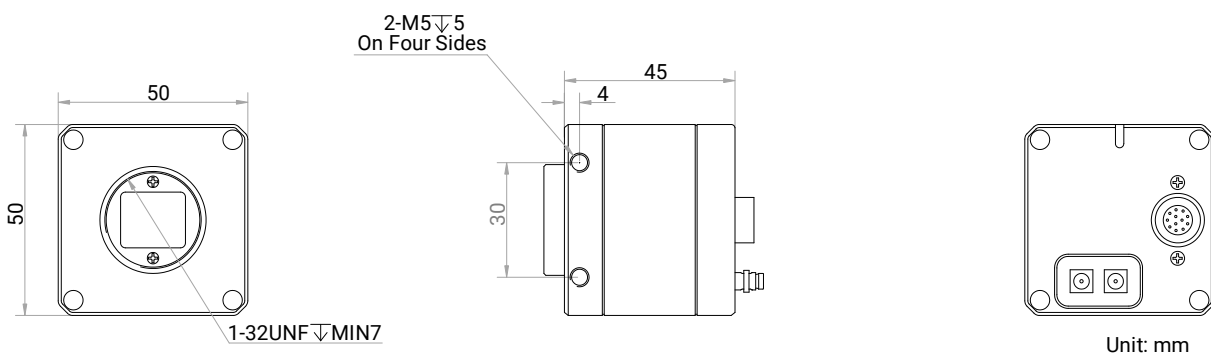
Introduction

MV-CH120-90Y2M/C camera adopts Gpixel GMAX3412 sensor to provide high quality image. It uses 2-link CXP-12 interface to transmit non-compressed images in real time, and its max. frame rate can reach 149 fps in full resolution.

Key Feature

- Resolution of 4096 × 3008, pixel size of 3.4 μm × 3.4 μm.
- Adopts global shutter CMOS sensor to provide high dynamic range, SNR, and high-quality image.
- Adopts CXP-12 interface to transmit data.
- Supports Off, Once, and Continuous exposure modes.
- Compatible with CoaXPress Protocol and GenICam Standard.

Dimension



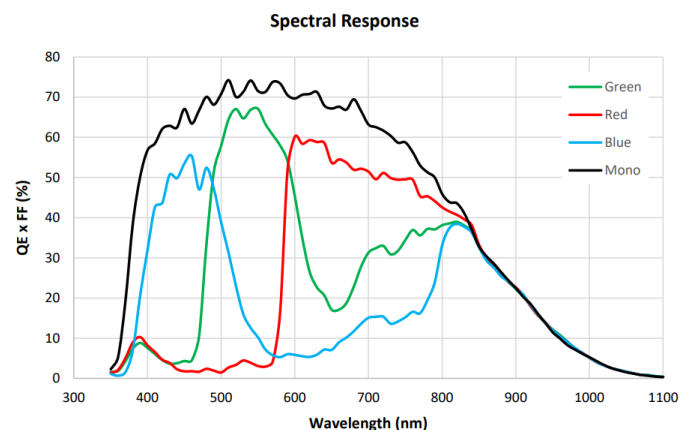
Available Model

- Mono camera: MV-CH120-90Y2M-C-NN
- Color camera: MV-CH120-90Y2C-C-NN

Applicable Industry

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

Sensor Quantum Efficiency



Specification

Model	MV-CH120-90Y2M	MV-CH120-90Y2C
Performance		
Sensor type	CMOS, global shutter	
Sensor model	Gpixel GMAX3412	
Pixel size	3.4 μm \times 3.4 μm	
Sensor size	1.1"	
Resolution	4096 \times 3008	
Max. frame rate	149 fps @ 4096 \times 3008 Mono 8	149 fps @ 4096 \times 3008 Bayer GB 8
Dynamic range	59.8 dB	59.7 dB
SNR	38.9 dB	39.1 dB
Gain	0 dB to 6.1 dB	
Exposure time	6 μs to 10 sec	
Exposure mode	Off/Once/Continuous exposure mode	
Mono/color	Mono	Color
Pixel format	Mono 8/10/12	Bayer GB 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 feature		
Data interface	CoaXPress with Micro-BNC interfaces	
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-0 supports PoCXP	
Power consumption	Typ. 6.1 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	