

MV-CH120-90Y1M/C

12 MP CMOS CoaXPress Area Scan Camera



GEN*i*CAM

Introduction

MV-CH120-90Y1M/C camera adopts Gpixel GMAX3412 sensor to provide high quality image. It uses 1-link CXP-12 interface to transmit non-compressed images in real time, and its max. frame rate can reach 93.9 fps in full resolution.

Key Feature

- Resolution of 4096 × 3072, 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.

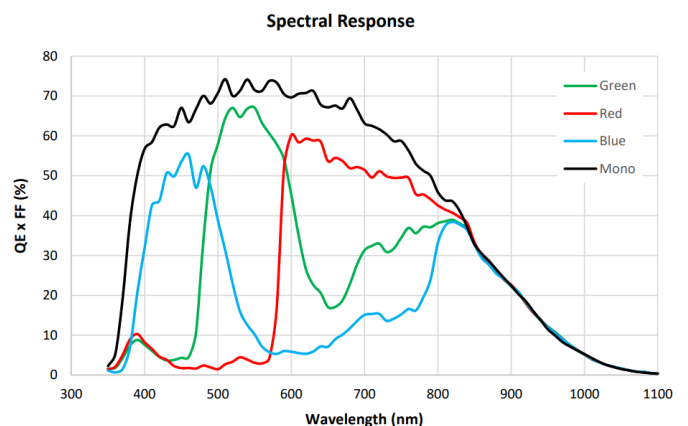
Available Model

- Mono camera without heat sink: MV-CH120-90Y1M-NN
- Color camera without heat sink: MV-CH120-90Y1C-NN
- Mono camera with heat sink: MV-CH120-90Y1M-NH
- Color camera with heat sink: MV-CH120-90Y1C-NH

Applicable Industry

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

Sensor Quantum Efficiency

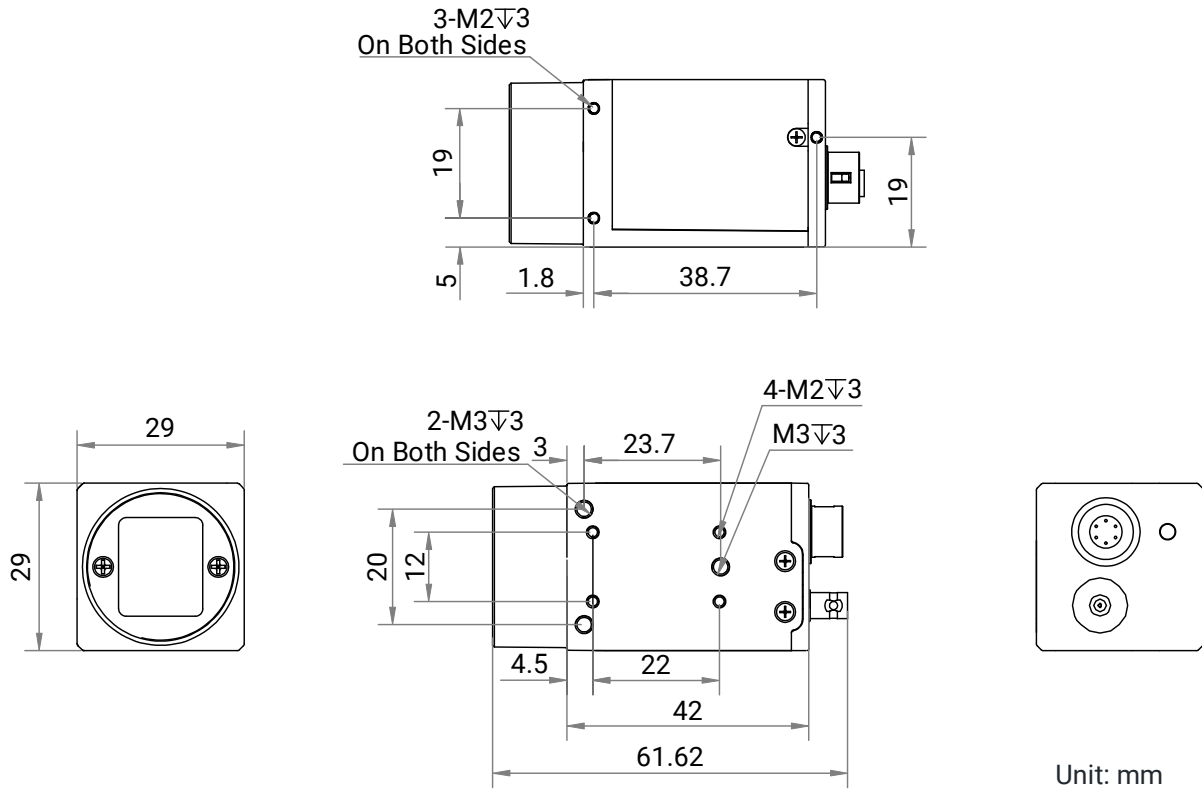


Specification

Model	MV-CH120-90Y1M	MV-CH120-90Y1C
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 3072	
Max. frame rate	93.9 fps @ 4096 \times 3072 Mono 8	93.9 fps @ 4096 \times 3072 Bayer GB 8
Dynamic range	59.7 dB	
SNR	39 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 interface	
Digital I/O	6-pin P7 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)	
Power supply	12 VDC to 24 VDC, supports PoCXP	
Power consumption	Typ. 5 W @ 12 VDC	
Mechanical		
Lens mount	C-mount	
Dimension	Device with heat sink: 29 mm \times 85 mm \times 42 mm (1.1" \times 3.3" \times 1.7") Device without heat sink: 29 mm \times 29 mm \times 42 mm (1.1" \times 1.1" \times 1.7")	
Weight	Device with heat sink: Approx. 170 g (0.4 lb.) Device without heat sink: Approx. 90 g (0.2 lb.)	
Ingress protection	IP40 (under proper lens installation and wiring)	
Temperature	Working temperature for device with heat sink: 0 $^{\circ}\text{C}$ to 50 $^{\circ}\text{C}$ (32 $^{\circ}\text{F}$ to 122 $^{\circ}\text{F}$) Working temperature for device without heat sink: 0 $^{\circ}\text{C}$ to 40 $^{\circ}\text{C}$ (32 $^{\circ}\text{F}$ to 104 $^{\circ}\text{F}$) 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 Window 11, and 32/64-bit Linux	
Compatibility	CoaXPress, GenICam	
Certifications	CE, RoHS, KC	

Dimension

Device without heat sink



Device with heat sink

