

MV-CH120-90Y1M/C

12MPCMoSCoaXPressAreaScanCamera



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.

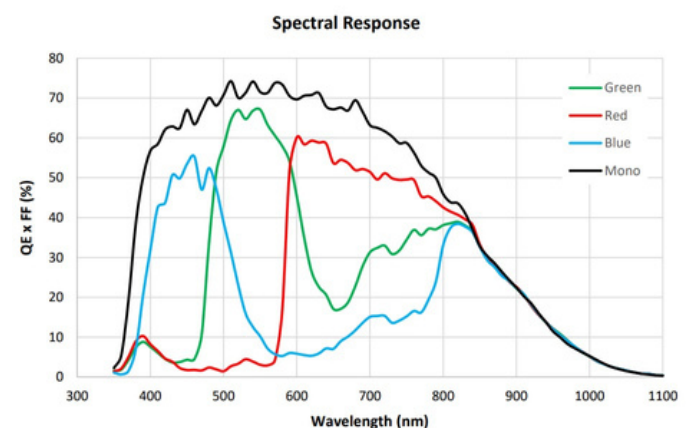
Available Model

- 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



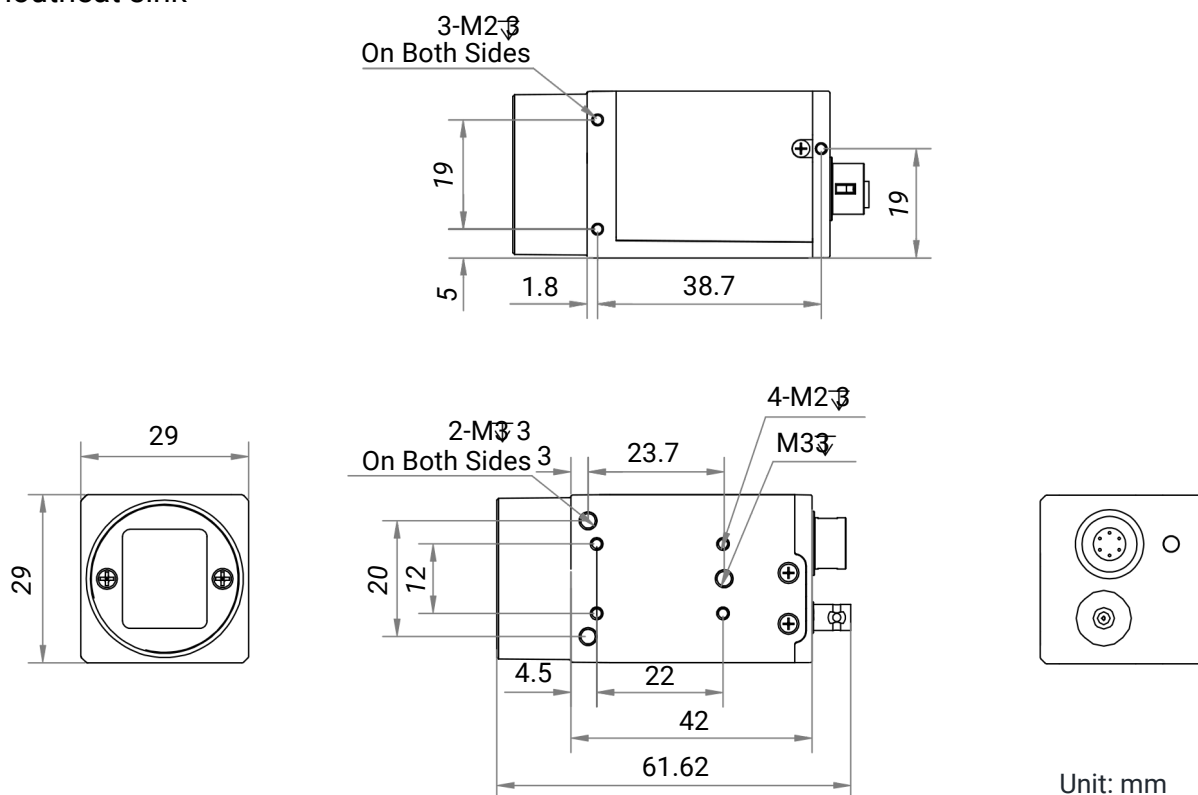
Specification

Model	MV-CH120-90Y1M	MV-CH120-90Y1C
Performance		
Sensor type	CMOS, global shutter	
Sensor model	Gpixel GMAX3412	
Pixel size	3.4 μm × 3.4 μm	
size Resolution	1.1"	
Max. frame rate	4096 × 3072	
Dynamic range	93.9 fps @ 4096 × 3072 Mono 8	93.9 fps @ 4096 × 3072 Bayer GB 8
SNR Gain	59.7 dB	
Exposure time	39 dB	
Exposure mode	0 dB to 6.1 dB	
Mono/color Pixel	6 μs to 10 sec	
format Binning	Off/Once/Continuous exposure mode	
Decimation	Mono	Color
Reverse image	Mono 8/10/12	Bayer GB 8/10/12
Electrical feature	Supports 1 × 1, 1 × 2, 1 × 4, 2 × 1, 2 × 2, 2 × 4, 4 × 1, 4 × 2, 4 × 4	
Data interface	Supports 1 × 1, 1 × 2, 1 × 4, 2 × 1, 2 × 2, 2 × 4, 4 × 1, 4 × 2, 4 × 4	
Digital I/O	Supports horizontal and vertical reverse image output	
	CoaXPress with Micro-BNC interface	
	6-pin P7 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)	
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 × 85 mm × 42 mm (1.1" × 3.3" × 1.7") Device without heat sink: 29 mm × 29 mm × 42 mm (1.1" × 1.1" × 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 °C to 50 °C (32 °F to 122 °F) Working temperature for device without heat sink: 0 °C to 40 °C (32 °F to 104 °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 Window 11, and 32/64-bit Linux	
Certifications	CoaXPress, GenICam	
	CE, RoHS, KC	



Dimension

Device without heat sink



Device with heat sink

