

MV-CH120-40XM

12 MP CMOS CoaXPress Area Scan Camera



GEN< i >CAM

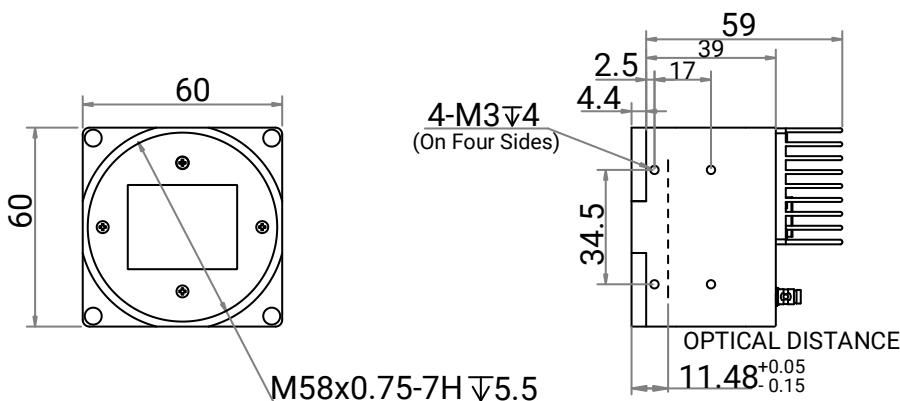
Introduction

MV-CH120-40XM camera adopts CMOS sensor to provide high-quality images. It uses CXP-6 interface to transmit non-compressed images in real time, and its max. frame rate can reach 188 fps in full resolution.

Key Feature

- Resolution of 4096×3072 , pixel size of $5.5 \mu\text{m} \times 5.5 \mu\text{m}$.
- Adopts global shutter CMOS sensor to provide high dynamic range, SNR, and high-quality images.
- Supports LSC sequencer polling function.
- Adopts CXP-6 interface to transmit data.
- Compatible with CoaXPress Protocol and GenICam Standard.

Dimension



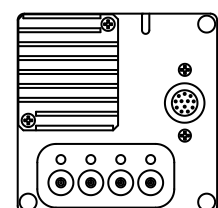
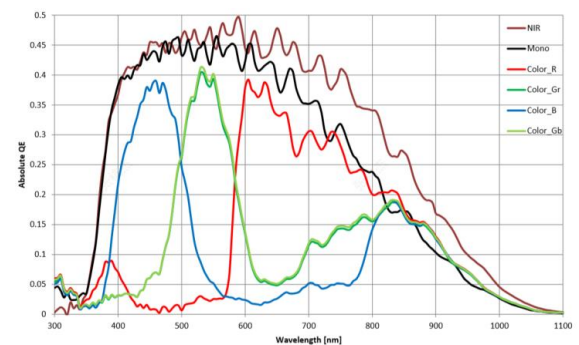
Available Model

MV-CH120-40XM-M58S-NN

Applicable Industry

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

Sensor Quantum Efficiency



Unit: mm

Specification

Model	MV-CH120-40XM
Performance	
Sensor type	CMOS, global shutter
Sensor model	AMS CMV12000
Pixel size	5.5 μm $\times$ 5.5 μm
Sensor size	22.5 mm $\times$ 16.9 mm
Resolution	4096 $\times$ 3072
Max. frame rate	188 fps @4096 $\times$ 3072 Mono 8
Dynamic range	55.2 dB
SNR	39.5 dB
Gain	Supports 1.0 $\times$, 2.0 $\times$, 3.0 $\times$, 4.0 $\times$
Exposure time	20 μs to 10 sec
Exposure mode	Off/Once/Continuous exposure mode
Mono/color	Mono
Pixel format	Mono 8/10
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	12 VDC to 24 VDC, CXP-1 and CXP-2 support PoCXP
Power consumption	Typ. 11.6 W@12 VDC
Mechanical	
Lens mount	M58*0.75, flange focal length 11.48 mm (0.5")
Dimension	60 mm $\times$ 60 mm $\times$ 59 mm (2.4" $\times$ 2.4" $\times$ 2.3")
Weight	TBD
Ingress protection	IP40 (under proper lens installation and wiring)
Temperature	Working temperature: 0 $^{\circ}\text{C}$ to 32 $^{\circ}\text{C}$ (32 $^{\circ}\text{F}$ to 89.6 $^{\circ}\text{F}$) Storage temperature: -30 $^{\circ}\text{C}$ to 80 $^{\circ}\text{C}$ (-22 $^{\circ}\text{F}$ to 176 $^{\circ}\text{F}$)
Humidity	20% to 95% RH, non-condensing
General	
Client software	MVS or frame grabber software meeting with CoaXPress Protocol
Operating system	32/64-bit Windows 7/10, 64-bit Windows 11, 32/64-bit Linux, 64-bit MacOS
Compatibility	CoaXPress, GenICam
Certification	CE, RoHS, KC