

MV-CH210-90Q2M

21MP XoFLink Area Scan Camera



GEN<i>i</i>CAM

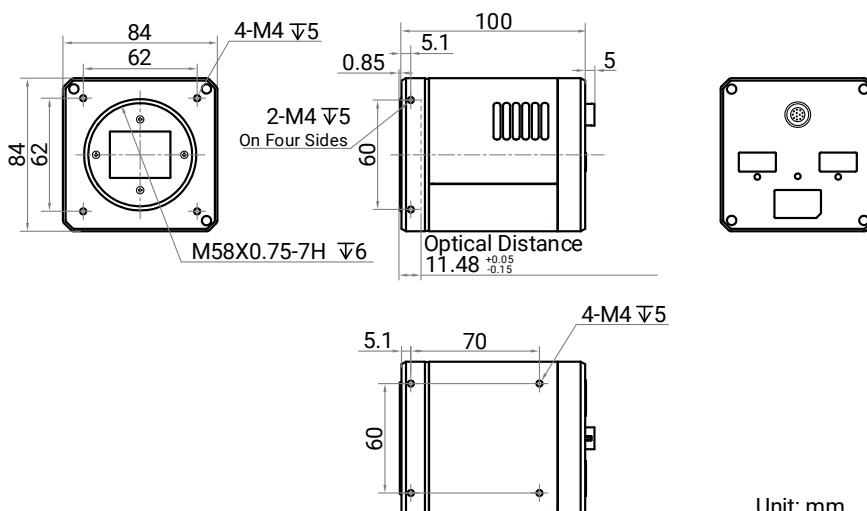
Introduction

MV-CH210-90Q2M camera adopts Gpixel Gsprint4521 CMOS sensor to provide high-quality images. It is equipped with two QSFP+ ports to transmit non-compressed data in real time, and its max. frame rate can reach 541 fps in full resolution.

Key Feature

- Resolution of 5120 × 4096, pixel size of 4.5 μm.
- Adopts global shutter CMOS sensor to provide high dynamic range, SNR, and high-quality image.
- Supports ISP functions such as Binning and multi-group polling for LSC.
- Supports data transmission through two 50 Gbps fiber ports.
- Features an M58 mount; can be adapted to F-mount lenses via an adapter ring.

Dimension



Unit: mm

Available Model

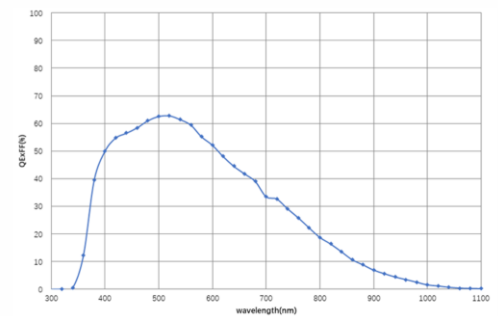
MV-CH210-90Q2M-M58S-NF

Applicable Industry

PCB AOI, 3D applications, electronic semiconductor, motion capture, etc.

Sensor Quantum

Efficiency



Accessories

- 50 Gbps Fiber Port Frame Grabber: MV-GQ1001 (without optical module)
- Optical Module of Fiber Port Frame Grabber: MV-AC100G-QSFP28
- Optical Fiber Patch Cord: MV-AC100G-MPO-MPO-ST

Specification

Model	MV-CH210-90Q2M
Performance	
Sensor type	CMOS, global shutter
Sensor model	Gpixel Gsprint4521
Pixel size	4.5 μm \times 4.5 μm
Sensor size	23.04 mm \times 18.43 mm
Resolution	5120 \times 4096
Max. frame rate	541 fps @ 5120 \times 4096 Mono 8
Dynamic range	65 dB
SNR	43 dB
Gain	1.0 x, 2.0 x, 4.0 x
Exposure time	1 μs to 10 sec
Exposure mode	Off/Once/Continuous exposure mode
Mono/color	Mono
Pixel format	Mono 8
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	QSFP+ \times 2
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), RS-232 \times 1.
Power supply	24 VDC
Power consumption	Typ. 33 W @ 24 VDC
Mechanical	
Lens mount	M58*0.75
Dimension (without lens)	84 mm \times 84 mm \times 100 mm (3.3" \times 3.3" \times 3.9")
Weight	Approx. 1153 g (2.5 lb.)
Ingress protection	IP40 (under proper lens installation and wiring)
Temperature	Working temperature: 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
Operating system	32/64-bit Windows 7/10, 64-bit Windows 11
Compatibility	XoFLink protocol, GenICam
Certification	RoHS