

# MV-CH210-90YM/YC

## 21 MP CMOS CoaXPress Area Scan Camera



**GEN<i>i>CAM**

### Introduction

MV-CH210-90YM/YC camera adopts Gsprint 4521 sensor to provide high-quality image. It uses CXP-12 interface to transmit non-compressed images in real time, and its max. frame rate can reach 222 fps in full resolution.

### Key Feature

- Resolution of 5120 × 4096, pixel size of 4.5 μm × 4.5 μm.
- Adopts global shutter CMOS to provide high dynamic range, SNR, and high-quality images.
- Supports LSC sequencer polling function.
- Low power consumption without fans.
- Adopts CXP-12 interface to transmit data.
- Compatible with CoaXPress Protocol and GenICam Standard.

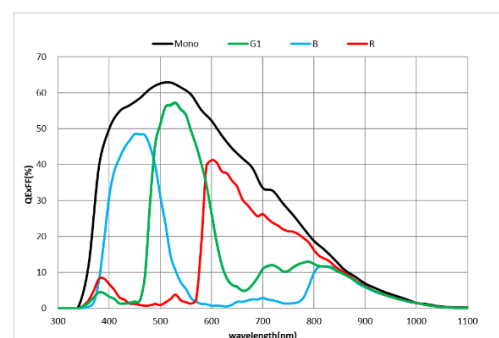
### Available Model

- Mono camera:  
MV-CH210-90YM-M58S-NN
- Color camera:  
Without fan: MV-CH210-90YC-M58S-NN  
With fan: MV-CH210-90YC-M58S-NF

### Applicable Industry

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

### Sensor Quantum Efficiency

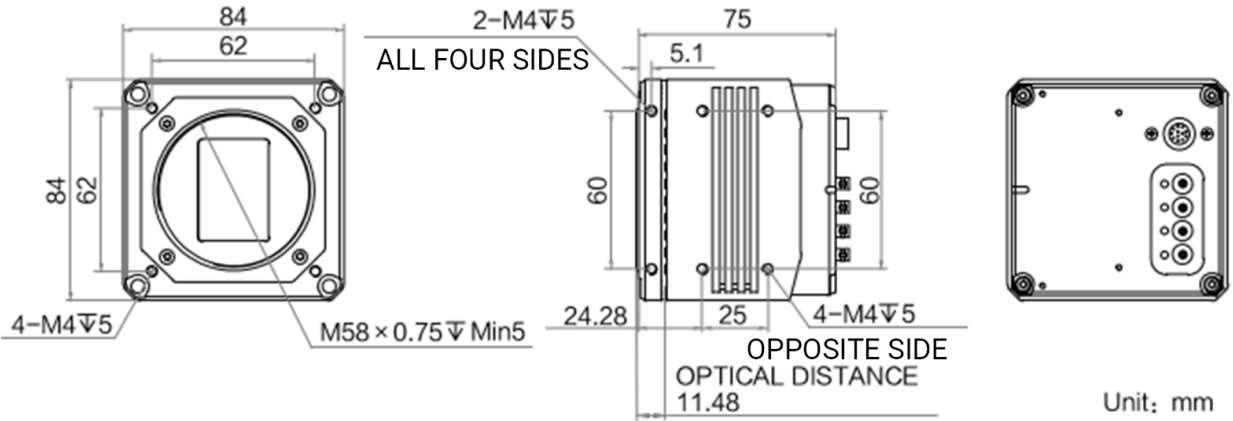


## Specification

Model	MV-CH210-90YM	MV-CH210-90YC
<b>Camera</b>		
Sensor type	CMOS, global shutter	
Sensor model	Gpixel Gsprint 4521	
Pixel size	4.5 $\mu\text{m}$ $\times$ 4.5 $\mu\text{m}$	
Sensor size	23.04 mm $\times$ 18.43 mm	
Resolution	5120 $\times$ 4096	
Max. frame rate	222 fps @ 5120 $\times$ 4096 Mono 8	222 fps @ 5120 $\times$ 4096 Bayer GB 8
Dynamic range	65 dB	
SNR	43 dB	
Gain	1.0 $\times$ , 2.0 $\times$ , 4.0 $\times$	
Exposure time	4 $\mu\text{s}$ 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	
<b>Electrical features</b>		
Data interface	CoaXPress with Micro-BNC 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-0 and CXP-1 connectors support PoCXP	
Power consumption	Typ. 18 W @ 24 VDC	With fan: Typ. 18.7 W @ 24 VDC Without fan: Typ. 16.3 W @ 24 VDC
<b>Mechanical</b>		
Lens mount	M58*0.75	
Dimension	With fan: 84 mm $\times$ 84 mm $\times$ 75 mm (3.3" $\times$ 3.3" $\times$ 3.0") Without fan: 84 mm $\times$ 84 mm $\times$ 62.5 mm (3.3" $\times$ 3.3" $\times$ 2.5")	
Weight	With fan: Approx. 790 g (1.7 lb.) Without fan: Approx. 650 g (1.4 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 70 $^{\circ}\text{C}$ (-22 $^{\circ}\text{F}$ to 158 $^{\circ}\text{F}$ )	
Humidity	20% RH to 95% RH (no condensation)	
<b>General</b>		
Client software	MVS or frame grabber software meeting with CoaXPress Protocol	
Operating system	32/64-bit Windows 7/10, 64-bit Windows 11	
Compatibility	CoaXPress, GenICam	
Certification	CE, RoHS, KC	

## Dimension

With fan



Without fan

