

# MV-CH250-90YM

25 MP 1.1" CMOS CoaXPress Area Scan Camera



GEN<i>i</i>CAM

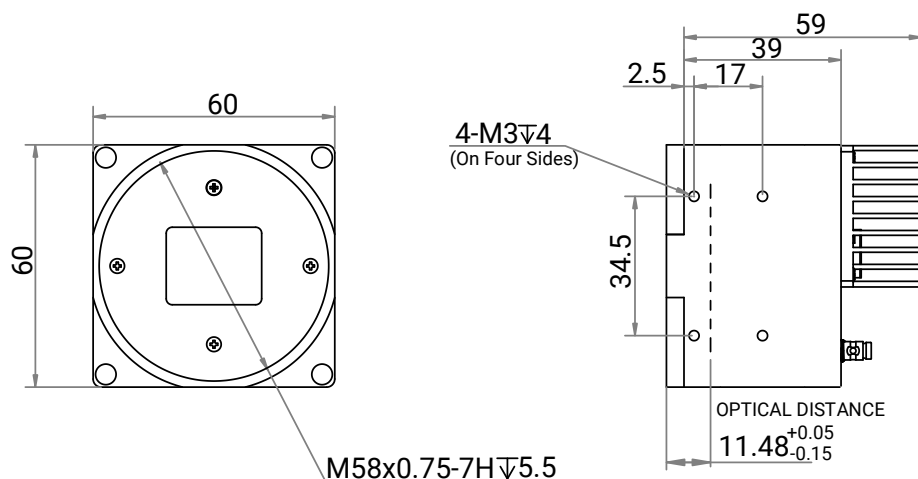
## Introduction

MV-CH250-90YM camera adopts Gpixel GMAX0505 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 150 fps in full resolution.

## Key Feature

- Resolution of 5120 × 5120, pixel size of 2.5 μm × 2.5 μm.
- Adopts global shutter CMOS sensor to provide high dynamic range and high-quality image.
- Adopts CXP-12 interface to transmit data.
- Supports Off, Once, and Continuous exposure modes.
- Compatible with CoaXPress Protocol, GenICam Standard, and third-party software based on the protocol and standard.

## Dimension



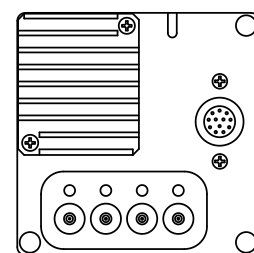
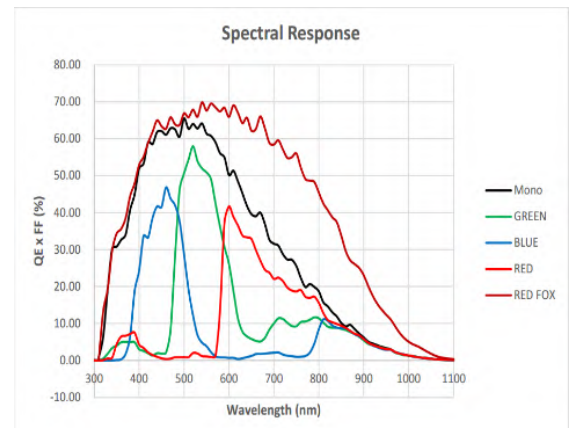
## Available Model

MV-CH250-90YM-M58S-NN (V2.0)

## Applicable Industry

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

## Sensor Quantum Efficiency



Unit: mm

## Specification

<b>Model</b>	<b>MV-CH250-90YM</b>
<b>Performance</b>	
<b>Sensor type</b>	CMOS, global shutter
<b>Sensor model</b>	Gpixel GMAX0505
<b>Pixel size</b>	2.5 $\mu\text{m}$ $\times$ 2.5 $\mu\text{m}$
<b>Sensor size</b>	1.1"
<b>Resolution</b>	5120 $\times$ 5120
<b>Max. frame rate</b>	150 fps @5120 $\times$ 5120 Mono 8
<b>Dynamic range</b>	63 dB
<b>SNR</b>	36 dB
<b>Gain</b>	2.5 $\times$
<b>Exposure time</b>	UltraShort exposure mode: 3 $\mu\text{s}$ to 8 $\mu\text{s}$
	Standard exposure mode: 10 $\mu\text{s}$ to 10 sec
<b>Exposure mode</b>	Off/Once/Continuous exposure mode
<b>Mono/color</b>	Mono
<b>Pixel format</b>	Mono 8/10/12
<b>Binning</b>	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
<b>Decimation</b>	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
<b>Reverse image</b>	Supports horizontal and vertical reverse image output
<b>Electrical features</b>	
<b>Data interface</b>	CoaXPress with micro-BNC interface
<b>Digital I/O</b>	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.
<b>Power supply</b>	12 VDC to 24 VDC, CXP-1 and CXP-2 support PoCXP
<b>Power consumption</b>	Typ. 9.9 W@12 VDC
<b>Mechanical</b>	
<b>Lens mount</b>	M58*0.75, flange focal length 11.48 mm (0.5")
<b>Dimension</b>	60 mm $\times$ 60 mm $\times$ 59 mm (2.4" $\times$ 2.4" $\times$ 2.3") (cooling fins are optional)
<b>Weight</b>	Approx. 285 g (0.6 lb.)
<b>Ingress protection</b>	IP40 (under proper lens installation and wiring)
<b>Temperature</b>	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 $^{\circ}\text{F}$ )
<b>Humidity</b>	20% to 95% RH, non-condensing
<b>General</b>	
<b>Client software</b>	MVS or third-party software meeting with CoaXPress Protocol
<b>Operating system</b>	32/64-bit Windows 7/10, 64-bit Windows 11, 32/64-bit Linux, 64-bit MacOS
<b>Compatibility</b>	CoaXPress, GenICam
<b>Certifications</b>	CE, RoHS, KC, UL