# MV-CH120-90X2M

## 12 MP CMOS CoaXPress Area Scan Camera


GEN<i>CAM

## Introduction

MV-CH120-90X2M camera adopts Gpixel GMAX3412 sensor to provide high quality image. It uses CXP-6 interface to transmit non-compressed images in real time, and its max. frame rate can reach 95 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-6 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.

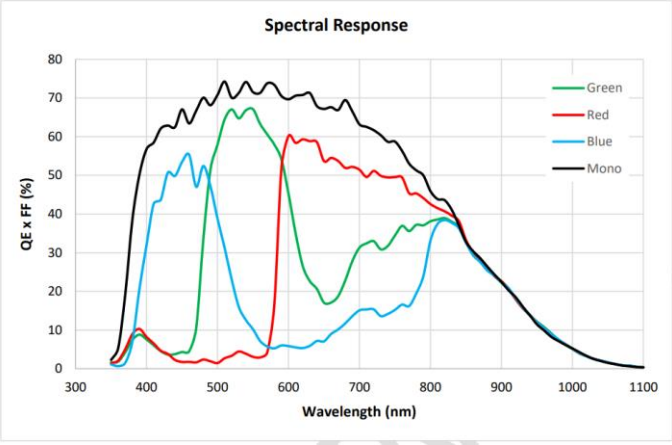
## Available Model

MV-CH120-90X2M-C-NN

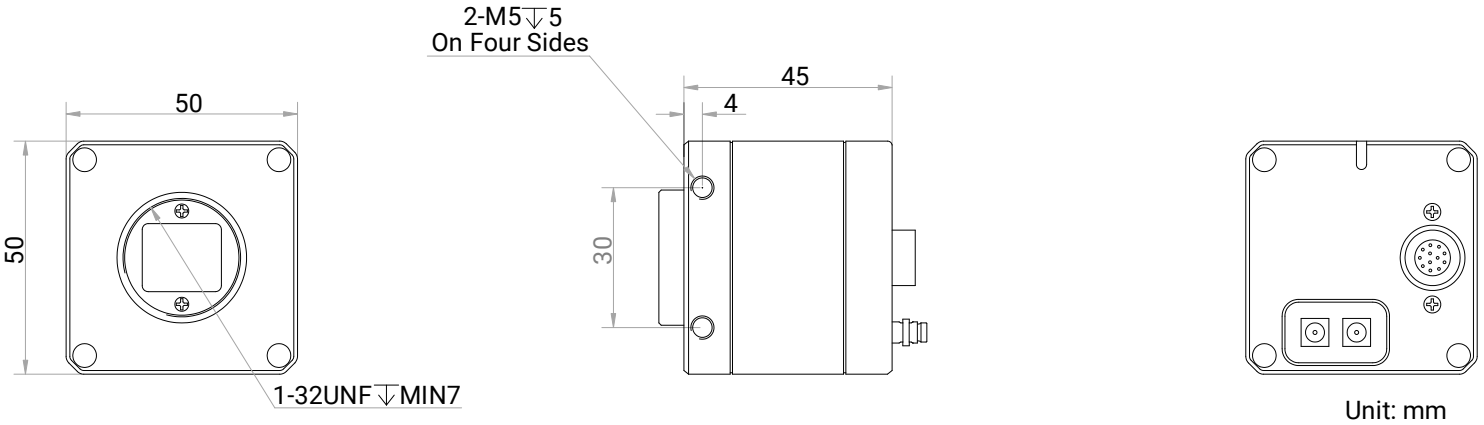
## Applicable Industry

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

## Sensor Quantum Efficiency




## Dimension




Unit: mm

# Specification

| Model | MV-CH120-90X2M |
|---|---|
| ***Performance*** | |
| **Sensor type** | CMOS, global shutter |
| **Sensor model** | Gpixel GMAX3412 |
| **Pixel size** | 3.4 μm × 3.4 μm |
| **Sensor size** | 1.1" |
| **Resolution** | 4096 × 3072 |
| **Max. frame rate** | 95 fps @ 4096 × 3072 Mono 8 |
| **Dynamic range** | 59.6 dB |
| **SNR** | 38.9 dB |
| **Gain** | 0 dB to 6.1 dB |
| **Exposure time** | 6 μs to 10 sec |
| **Exposure mode** | Off/Once/Continuous exposure mode |
| **Mono/color** | Mono |
| **Pixel format** | Mono 8/10/12 |
| **Binning** | Supports 1 × 1, 1 × 2, 1 × 4, 2 × 1, 2 × 2, 2 × 4, 4 × 1, 4 × 2, 4 × 4 |
| **Decimation** | Supports 1 × 1, 1 × 2, 1 × 4, 2 × 1, 2 × 2, 2 × 4, 4 × 1, 4 × 2, 4 × 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 × 1 (Line 0), opto-isolated output × 1(Line 1), bi-directional non-isolated I/O × 1 (Line 2), and RS-232 × 1. |
| **Power supply** | 9 VDC to 24 VDC, CXP-1 supports PoCXP |
| **Power consumption** | Typ. 5.8 W @ 24 VDC |
| ***Mechanical*** | |
| **Lens mount** | C-mount |
| **Dimension** | 50 mm × 50 mm × 45 mm (2.0" × 2.0" × 1.8") |
| **Weight** | Approx. 207 g (0.5 lb.) |
| **Ingress protection** | IP40 (under proper lens installation and wiring) |
| **Temperature** | Working temperature: 0 °C to 50 °C (32 °F to 122 °F)<br>Storage temperature: –30 °C to 80 °C (–22 °F to 176 °F) |
| **Humidity** | 20% RH to 95% RH (no condensation) |
| ***General*** | |
| **Client software** | MVS or third-party software meeting with CoaXPress Protocol |
| **Operating system** | 32/64-bit Windows XP/7/10/11, 32/64-bit Linux |
| **Compatibility** | CoaXPress, GenICam |
| **Certifications** | CE, RoHS, KC |