# MV-CH250-90GM/GC/GN

## 25 MP 1.1" CMOS GigE Area Scan Camera

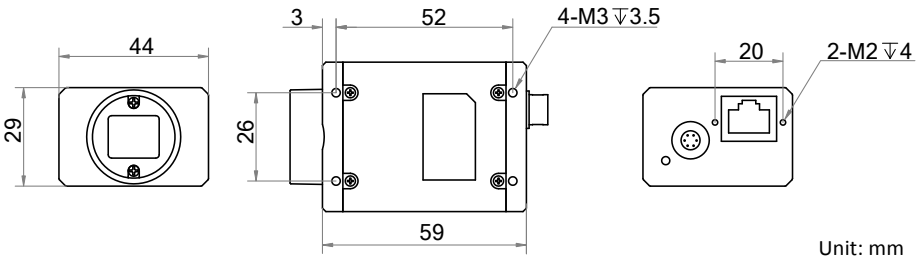

## Introduction

MV-CH250-90GM/GC/GN camera adopts Gpixel GMAX0505 sensor to provide high-quality images. It uses GigE interface to transmit non-compressed images in real time, and its max. frame rate can reach 4.5 fps in full resolution.

## Key Feature

- Resolution of 5120 × 5120, pixel size of 2.5 μm × 2.5 μm.
- Adopts GigE interface and max. transmission distance of 100 meters.
- Supports hardware trigger, software trigger, and free run.
- Compatible with GigE Vision V2.0 Protocol, GenICam Standard, and third-party software based on the protocol and standard.

## Dimension




Unit: mm

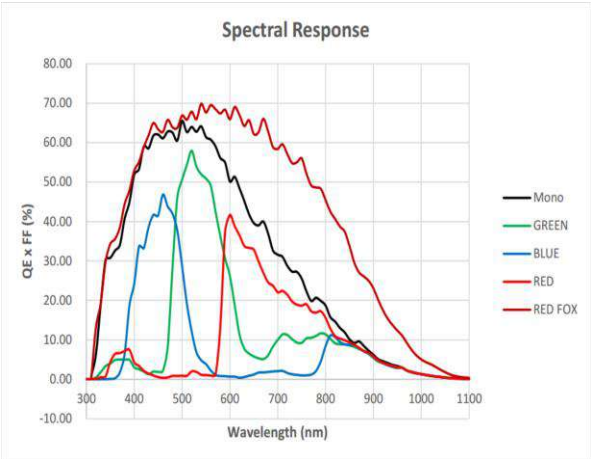
## Available Model

- Mono camera: MV-CH250-90GM
- Color camera: MV-CH250-90GC
- Near-infrared camera: MV-CH250-90GN

## Applicable Industry

SMT/ PCB AOI, FPD, railway related applications, etc.

## Sensor Quantum Efficiency



# Specification

| Model | MV-CH250-90GM | MV-CH250-90GC | MV-CH250-90GN |
|---|---|---|---|
| ***Camera*** | | | |
| **Sensor type** | CMOS, global shutter | | |
| **Sensor model** | Gpixel GMAX0505 | | |
| **Pixel size** | 2.5 μm × 2.5 μm | | |
| **Sensor size** | 1.1" | | |
| **Resolution** | 5120 × 5120 | | |
| **Max. frame rate** | 4.5 fps @5120 × 5120 | | |
| **Dynamic range** | 65 dB | | |
| **SNR** | 36 dB | | |
| **Gain** | Supports 2.0 ×, 2.5 ×, 3.0 ×, 3.5 ×, 4.0 ×, 4.5 ×, 5.0 × | | |
| **Exposure time** | 12 μs to 10 sec | | |
| **Exposure mode** | Off/Once/Continuous exposure mode | | |
| **Mono/color** | Mono | Color | Near-infrared |
| **Pixel format** | Mono 8/10/10p/12/12p | Mono 8/10/12,<br>Bayer BG 8/10/10p/12/12p,<br>YUV422Packed,<br>YUV422_YUYV_Packed,<br>RGB 8, BGR 8 | Mono 8/10/10p/12/12p |
| **Binning** | Supports 1 × 1, 2 × 2, 4 × 4 | | |
| **Decimation** | Supports 1 × 1, 2 × 2, 4 × 4 | | |
| **Reverse image** | Supports horizontal and vertical reverse image output | | |
| ***Electrical feature*** | | | |
| **Data interface** | Gigabit Ethernet, compatible with Fast Ethernet | | |
| **Digital I/O** | 6-pin Hirose 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). | | |
| **Power supply** | 12 VDC, supports PoE | | |
| **Power consumption** | Typ. 3.6 W@12 VDC | Typ. 4.2 W@12 VDC | Typ. 3.6 W@12 VDC |
| ***Mechanical*** | | | |
| **Lens mount** | C-mount | | |
| **Dimension** | 29 mm × 44 mm × 59 mm (1.1" × 1.7" × 2.3") | | |
| **Weight** | Approx. 100 g (0.2 lb.) | | |
| **Ingress protection** | IP30 (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 70 °C (-22 °F to 158 °F) | | |
| **Humidity** | 20% to 80% RH, non-condensing | | |
| ***General*** | | | |
| **Client software** | MVS or third-party software meeting with GigE Vision Protocol | | |
| **Operating system** | 32/64-bit Windows XP/7/10, 32/64-bit Linux and 64-bit MacOS | | |
| **Compatibility** | GigE Vision V2.0, GenICam | | |
| **Certification** | CE, FCC, RoHS, KC | | |

HIKROBOT
Hangzhou Hikrobot Technology Co., Ltd.
No.399 Danfeng Road, Binjiang District, Hangzhou 310051, China.
en.hikrobotics.com