

# MV-CH650-90YM/YC

65 MP CMOS CoaXPress Area Scan Camera



**GEN*i*CAM**

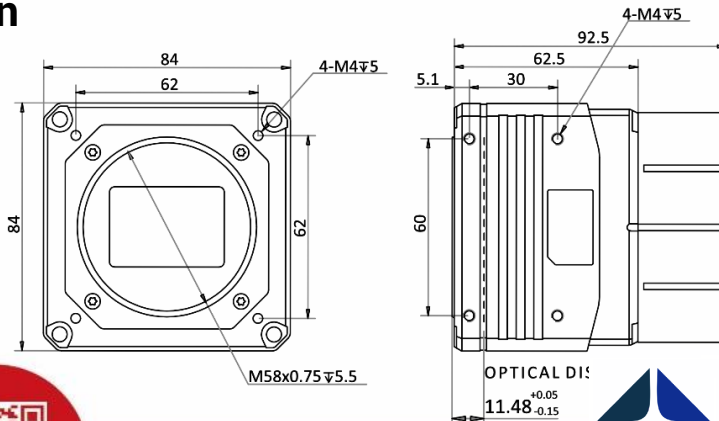
## Introduction

MV-CH650-90YM/YC camera adopts Gpixel GMAX3265 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 71 fps in full resolution.

## Key Feature

- Resolution of 9344 × 7000, pixel size of 3.2 μm × 3.2 μm.
- Adopts global shutter CMOS to provide high dynamic range, SNR, and high-quality images.
- Supports LSC sequencer polling function.
- Adopts CXP-12 interface to transmit data.
- Supports the flat field correction.
- Compatible with CoaXPress Protocol, GenICam Standard, and third-party software based on the protocol and standard.

## Dimension



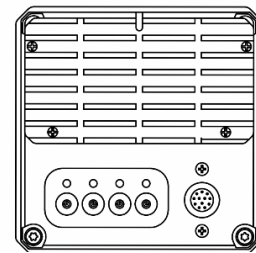
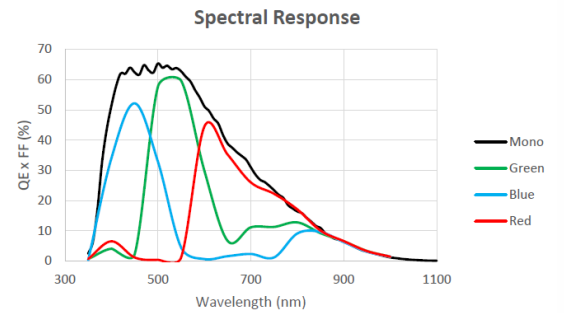
## Available Model

- Mono camera: MV-CH650-90YM-M58S-NN
- Color camera: MV-CH650-90YC-M58S-NN

## Applicable Industry

PCB AOI, FPD, high-accuracy measurement, etc.

## Sensor Quantum Efficiency



**Aremaç Biliřim Teknolojileri**  
Endüstriyel Görüntü İřleme Çözümleri

Adres: ODTÜ Teknokent Biliřim ve İnovasyon Merkezi,  
Mustafa Kemal Mahallesi, Dumlupınar Bulvarı No:280G,  
İç Kapı No:1260, Çankaya, Ankara/Türkiye

W: [www.aremak.com.tr](http://www.aremak.com.tr)  
E: [shop@aremak.com.tr](mailto:shop@aremak.com.tr)  
T: +908502551506



[en.hikrobotics.com](http://en.hikrobotics.com)

# Specification

| Model               | MV-CH650-90YM                                                                                                                                                                             | MV-CH650-90YC      |
|---------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|
| Camera              |                                                                                                                                                                                           |                    |
| Sensor type         | CMOS, global shutter                                                                                                                                                                      |                    |
| Sensor model        | Gpixel GMAX3265                                                                                                                                                                           |                    |
| Pixel size          | 3.2 μm × 3.2 μm                                                                                                                                                                           |                    |
| Sensor size         | 29.9 mm × 22.4 mm                                                                                                                                                                         |                    |
| Resolution          | 9344 × 7000                                                                                                                                                                               |                    |
| Max. frame rate     | 71 fps @9344 × 7000                                                                                                                                                                       |                    |
| Dynamic range       | 66 dB                                                                                                                                                                                     |                    |
| SNR                 | 40 dB                                                                                                                                                                                     |                    |
| Gain                | 1.25x                                                                                                                                                                                     |                    |
| Exposure time       | 15 μs to 10 sec                                                                                                                                                                           |                    |
| Exposure mode       | Off/Once/Continuous exposure mode                                                                                                                                                         |                    |
| Mono/color          | Mono                                                                                                                                                                                      | Color              |
| Pixel format        | Mono 8/10/12                                                                                                                                                                              | Bayer BG 8/10/12   |
| 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 features |                                                                                                                                                                                           |                    |
| Data interface      | CoaXPress with Micro-BNC 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        | 24 VDC, CXP-1 and CXP-2 connectors support PoCXP                                                                                                                                          |                    |
| Power consumption   | Typ. 13.0 W@24 VDC                                                                                                                                                                        | Typ. 13.2 W@24 VDC |
| Mechanical          |                                                                                                                                                                                           |                    |
| Lens mount          | M58*0.75, optical back focal length 11.48 mm (0.5")                                                                                                                                       |                    |
| Dimension           | 84 mm × 84 mm × 62.5 mm (3.3" × 3.3" × 2.5")                                                                                                                                              |                    |
| Weight              | Approx. 650 g (1.4 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% to 95% RH, non-condensing                                                                                                                                                             |                    |
| General             |                                                                                                                                                                                           |                    |
| Client software     | MVS or frame grabber software meeting with CoaXPress Protocol                                                                                                                             |                    |
| Operating system    | 32/64-bit Windows 7/10 with 8 GB memory or above                                                                                                                                          |                    |
| Compatibility       | CoaXPress, GenICam                                                                                                                                                                        |                    |
| Certification       | CE, RoHS, KC                                                                                                                                                                              |                    |

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Hangzhou Hikrobot Co., Ltd.  
en.hikrobotics.com

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