

# MV-CH650-90TM/TC

65 MP CMOS 10 GigE Area Scan Camera



GEN*i*CAM

10GiGE  
VISION

## Introduction

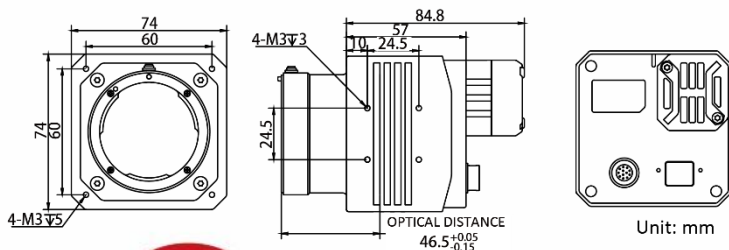
MV-CH650-90TM/TC camera adopts Gpixel GMAX3265 sensor to provide high-quality image. It uses 10 GigE interface to transmit non-compressed image in real time, and its max. frame rate can reach 15.5 fps in full resolution.

## Key Feature

- Resolution of 9344 × 7000, and pixel size of 3.2 μm × 3.2 μm.
- Adopts 10 GigE interface providing max. transmission distance of 100 meters without relay.
- Supports auto or manual adjustment for gain, exposure time, and manual adjustment for Look-Up Table (LUT), Gamma correction, etc.
- Compatible with GigE Vision Protocol V2.0, GenICam Standard, and third-party software based on protocols.

## Dimension

F-mount with fan:



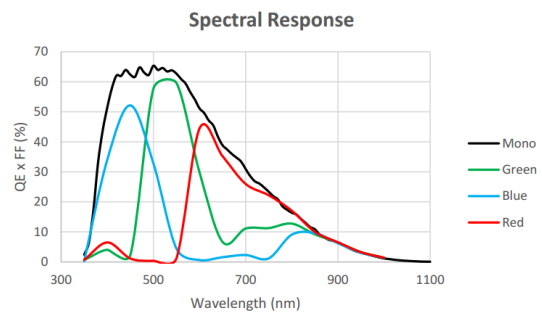
## Available Model

- M58-mount with fan, mono: MV-CH650-90TM-M58S-NF
- F-mount with fan, mono: MV-CH650-90TM-F-NF
- M58-mount with fan, color: MV-CH650-90TC-M58S-NF
- F-mount with fan, color: MV-CH650-90TC-F-NF

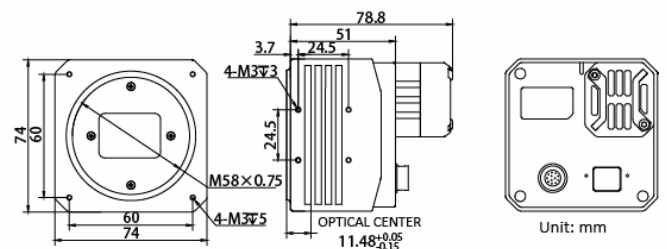
## Applicable Industry

PCB AOI, FPD, railway related applications, PV, etc.

## Sensor Quantum Efficiency



M58-mount with fan:



# Specification

Model	MV-CH650-90TM	MV-CH650-90TC
<b>Camera</b>		
Sensor type	CMOS, global shutter	
Sensor model	Gpixel GMAX3265	
Pixel size	3.2 $\mu\text{m}$ $\times$ 3.2 $\mu\text{m}$	
Sensor size	29.9 mm $\times$ 22.4 mm	
Resolution	9344 $\times$ 7000	
Max. frame rate	15.5 fps @9344 $\times$ 7000	
Dynamic range	66 dB	
SNR	40 dB	
Gain	1.25X to 6X	
Exposure time	15 $\mu\text{s}$ to 10 sec	
Exposure mode	Off/Once/Continuous exposure mode	
Mono/color	Mono	Color
Pixel format	Mono 8/10/10p/12/12p	Mono 8/10/12, Bayer 8/10/10p/12/12p, YUV422 8, YUV422_8_YUYV, RGB 8, BGR 8
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 feature</b>		
Data interface	10 Gigabit Ethernet, compatible with Gigabit Ethernet	
Digital I/O	12-pin Hirose 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	9 VDC to 24 VDC	
Power consumption	Typ. 11 W@12 VDC	Typ. 12 W@12 VDC
<b>Mechanical</b>		
Lens mount	M58-mount, optical back focal length 11.48 mm (0.5") F-mount, optical back focal length 46.5 mm (1.8")	
Dimension	M58-mount with fan: 74 mm $\times$ 74 mm $\times$ 78.8 mm (2.9" $\times$ 2.9" $\times$ 3.1") F-mount with fan: 74 mm $\times$ 74 mm $\times$ 84.8 mm (2.9" $\times$ 2.9" $\times$ 3.3")	
Weight	M58-mount with fan: approx. 550 g (1.2 lb.) F-mount with fan: approx. 600 g (1.3 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% to 95% RH, non-condensing	
<b>General</b>		
Client software	MVS or third-party software meeting with GigE Vision Protocol	
Operating system	32/64-bit Windows XP/7/10	
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

## MaxxVision®

Sigmaringer Str. 121  
70567 Stuttgart  
Tel.: 0711 997 996 3  
www.maxxvision.com

Copyright Hikrobot

Hangzhou Hikrobot Technology Co., Ltd. All Rights Reserved. Hangzhou Hikrobot Technology does not tolerate any infringement. Any organization or individual may not imitate or reproduce in whole or in part of the content. The data herein is based on Hikrobot's internal evaluation. Actual data may vary depending on specific configuration and operating condition. The information herein is subject to change without notice. All the content has been checked conscientiously. Nevertheless, Hikrobot shall not be liable to damages resulting from errors, inconsistencies or omissions.