

# MV-CH650-90TM/TC

65 MP CMOS 10 GigE Area Scan Camera



**GEN*i*CAM**

**10GiGE VISION**

## Introduction

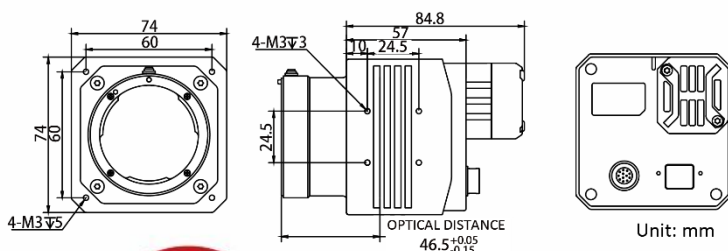
MV-CH650-90TM/TC camera adopts Gpixel GMAX3265 sensor to provide high-quality image. It uses 10 GigE interface to transmit non-compressed image in real time, and its max. frame rate can reach 15.5 fps in full resolution.

## 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:



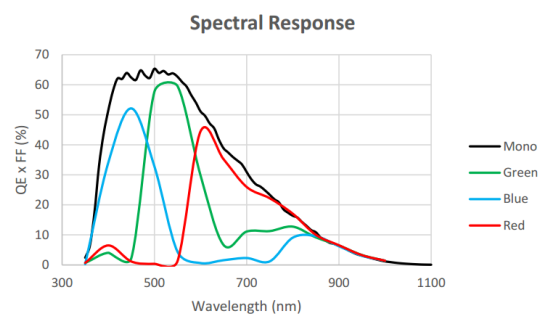
## Available Model

- 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

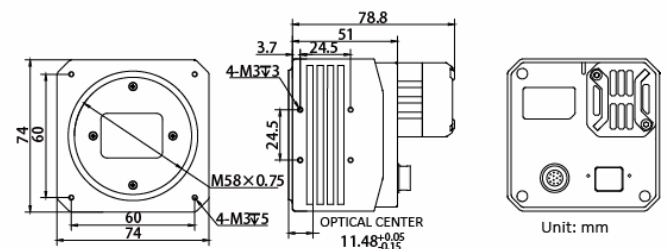
## Applicable Industry

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	

Distribution Partner:



**SCORPION  
VISION**