

MV-CH650-90TM/TC

65MPCMOS10GigEAreaScanCamera



GEN*i*CAM

10GiGE
VISION

Introduction

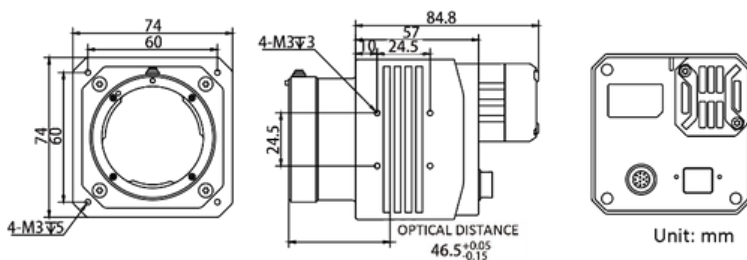
MV-CH650-90TM/TC camera adopts Gpixel GMAX3265 sensor to provide high-quality image. It uses 10 GigE interface to transmit non-compressed image in real time, and its max. frame rate can reach 17.2 fps in full resolution.

Key Feature

- Resolution of 9344×7000 , and pixel size of $3.2 \mu\text{m} \times 3.2 \mu\text{m}$.
- 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:



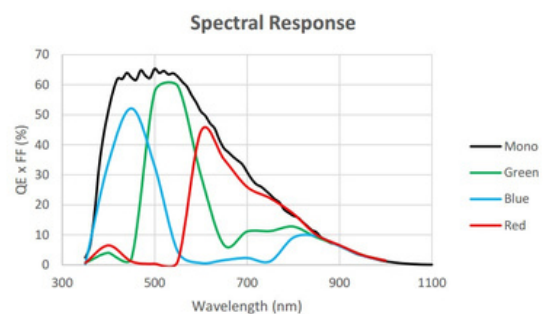
Available Model

- 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

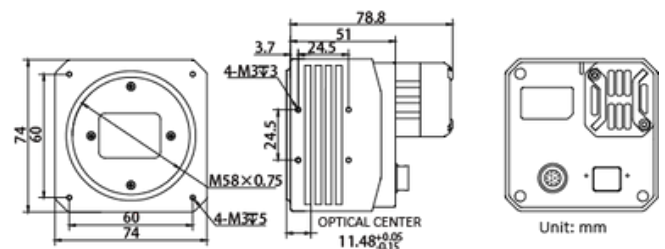
Applicable Industry

PCBA OI, FPD, railway related applications, PV, etc.

Sensor Quantum Efficiency



M58-mount with fan:



Specification

Model

Camera	MV-CH650-90TM	MV-CH650-90TC
Sensor type		
Sensor model	CMOS, global shutter Gpixel	
Pixel size	GMAX3265 3.2 μm × 3.2 μm 29.9 mm	
Sensor size	× 22.4 mm 9344 × 7000 17.2 fps @	
Resolution	9344 × 7000 Mono 8 66 dB 40 dB	
Max. frame rate	1.25× to 6× 18 μs to 10 sec	
Dynamic range	Off/Once/Continuous exposure mode	17.2 fps @ 9344 × 7000 Bayer BG 8
SNR	Mono Mono	
Gain	8/10/10Packed/12/12Packed	
Exposure time		
Exposure mode		
Mono/color		
Pixel format		Color
		Mono 8/10/12, Bayer 8/10/10p/12/12 Packed, YUV422 8, YUV422_8_YUYV, RGB 8, BGR 8
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 feature		
Data interface	10 Gigabit Ethernet (10000 Mbit/s), compatible with Gigabit Ethernet (1000 Mbit/s)	
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	
Power consumption	Typ. 10.2 W @ 12 VDC	Typ. 11.6 W @ 12 VDC
Mechanical		
Lens mount	M58*0.75, flange back length 11.48 mm F-mount, flange back length 46.5 mm	
Dimension	M58-mount with fan: 74 mm × 74 mm × 78.8 mm (2.9" × 2.9" × 3.1") F-mount with fan: 74 mm × 74 mm × 84.8 mm (2.9" × 2.9" × 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 °C to 50 °C (32 °F to 122 °F) Storage temperature: −30 °C to 70 °C (−22 °F to 158 °F)	
Humidity	20% RH to 95% RH (no condensation)	
General		
Client software	MVS or third-party software meeting with GigE Vision Protocol	
Operating system	32/64-bit Windows 7/10, 64-bit Windows 11, and 32/64-bit Linux	
Compatibility	GigE Vision V2.0, GenICam	
Certification	CE, RoHS, KC	