MV-CH250-90TM/TC

25 MP 1.1" CMOS 10 GigE Area Scan Camera

Introduction

MV-CH250-90TM/TC camera adopts Gpixel GMAX0505 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 41.5 fps in full resolution.

Key Feature

- Resolution of 5120 × 5120, pixel size of 2.5 μm × 2.5 μm.
- Adopts 10 GigE interface providing maximum transmission distance of 100 meters.
- Supports adjustment for exposure time, gain, Look-Up Table (LUT), Gamma correction, etc.
- Mounting holes on panels for flexible installation.
- Compatible with GigE Vision Protocol V2.0, GenICam Standard, and third-party software based on protocols.

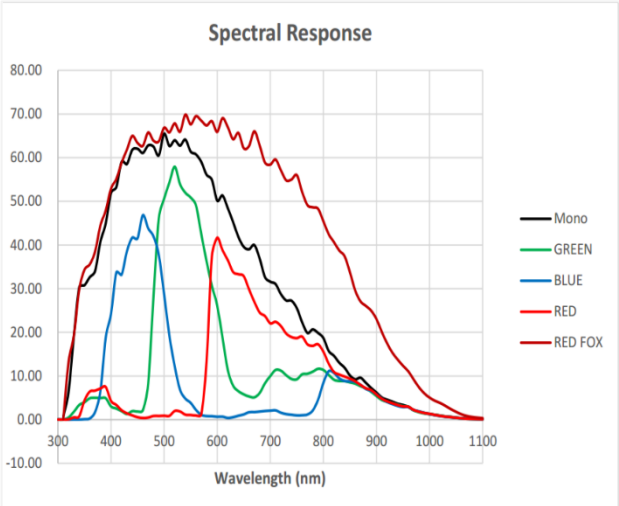
Applicable Industry

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

Available Model

- C-mount with fan, mono: MV-CH250-90TM-C-NF
- M58-mount with fan, mono: MV-CH250-90TM-M58S-NF
- C-mount with fan, color: MV-CH250-90TC-C-NF
- M58-mount with fan, color: MV-CH250-90TC-M58S-NF

Sensor Quantum Efficiency

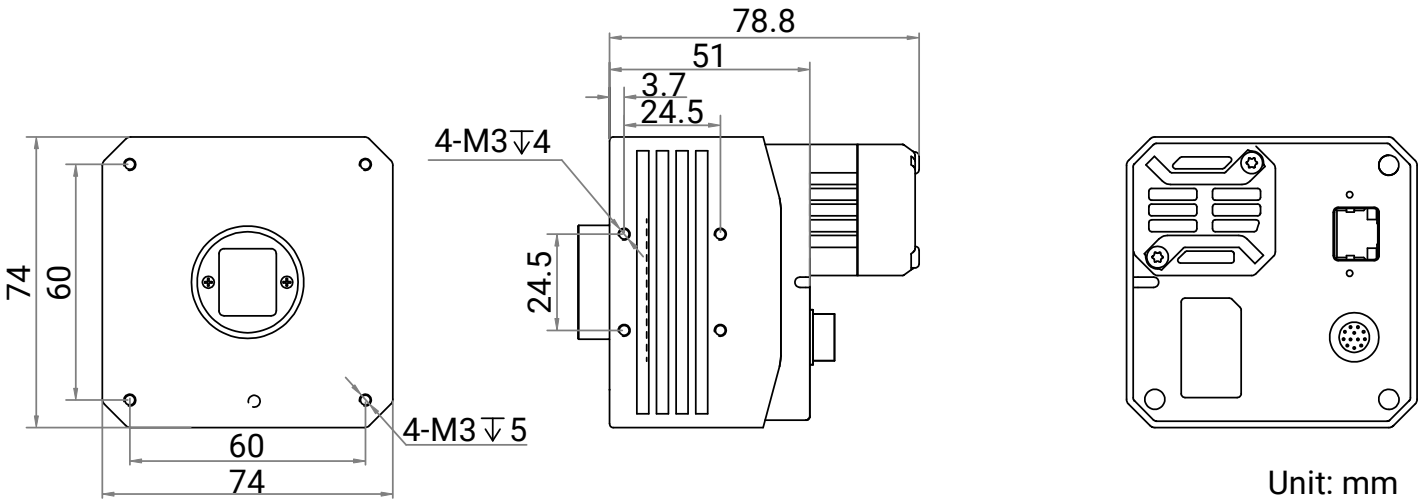


Specification

Model	MV-CH250-90TM	MV-CH250-90TC
Performance		
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	41.5 fps @ 5120 × 5120 Mono 8	41.5 fps @ 5120 × 5120 Bayer BG 8
Dynamic range	63 dB	
SNR	36 dB	
Gain	2.0x to 5.0x	
Exposure time	UltraShort exposure mode: 3 μs to 8 μs	
	Standard exposure mode: 9 μs to 10 sec	
Exposure mode	Off/Once/Continuous exposure mode	
Mono/color	Mono	Color
Pixel format	Mono 8/10/10Packed/12/12Packed	Mono 8/10/12, Bayer BG 8/10/10Packed/12/12Packed, YUV422Packed, YUV422_YUYV_Packed 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. 9.7 W @ 12 VDC	Typ. 10.0 W @ 12 VDC
Mechanical		
Lens mount	C-mount M58*0.75, flange back length 11.48 mm	
Dimension	74 mm × 74 mm × 78.8 mm (2.9" × 2.9" × 3.1")	
Weight	C-mount: Approx. 590 g (1.3 lb.) M58-mount: Approx. 550 g (1.2 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	

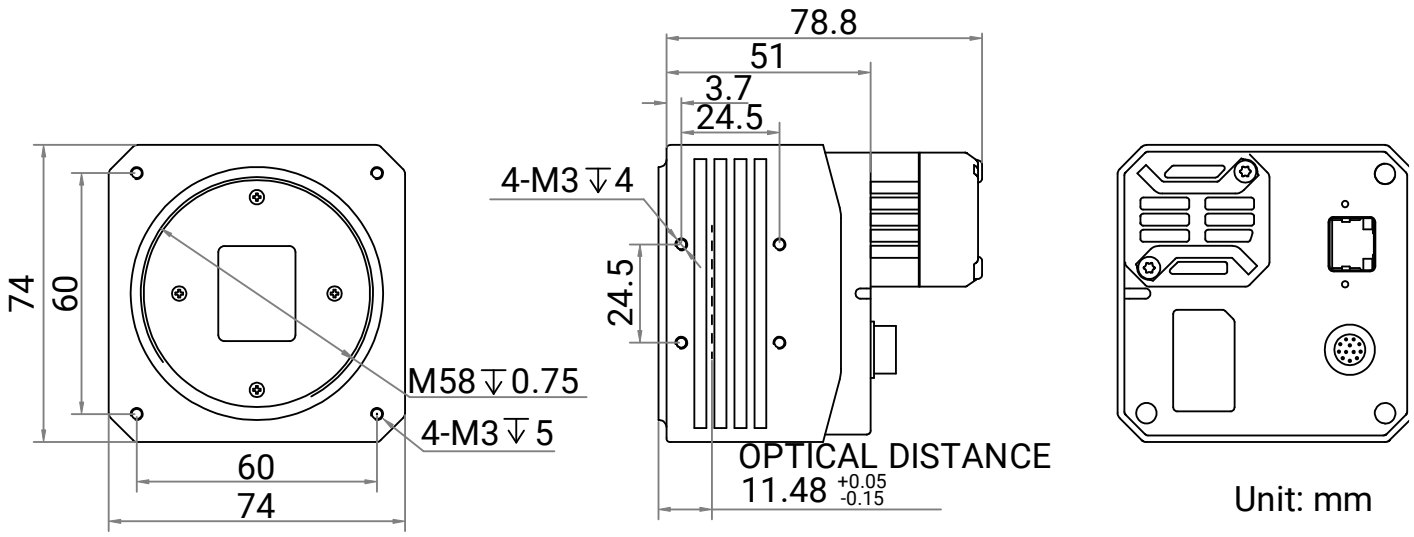
Dimension

C-mount camera:



Unit: mm

M58-mount camera:



Unit: mm