

MV-CH500-90TM/TC

50MPCMOs10GigEAreaScanCamera



GEN<I>CAM

10GiGE
VISION

Introduction

MV-CH500-90TM/TC camera adopts Gpixel® GMAX sensor to provide high-quality images with high resolution and low noise. It uses 10 GigE interface to transmit non-compressed data in real time, and its max. frame rate can reach 15.5 fps in full resolution.

Key Feature

- Resolution of 7008 × 7000, pixel size of 3.2 μm × 3.2 μm.
- Supports auto or manual adjustment of gain, exposure time, and manual adjustment of Gamma correction, LUT, etc. Adopts 10 GigE interface, compatible with GigE, and max. transmission distance of 100 meters. Compact design with mounting holes on panels for flexible mounting. Compatible with GigE Vision V2.0 Protocol, GenICam Standard, and third-party software based on the protocol and standard.

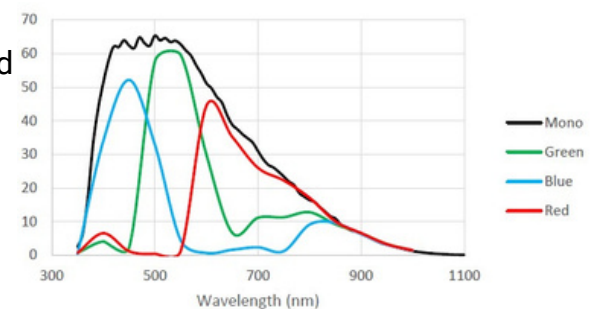
Available Model

- M58-mount with fan, mono: MV-CH500-90TM-M58S-NF
- M58-mount with fan, color: MV-CH500-90TC-M58S-NF
- F-mount with fan, mono: MV-CH500-90TM-F-NF

Applicable Industry

PCBAOI, FPD detection, photovoltaics, railway related application, etc.

Sensor Quantum Efficiency

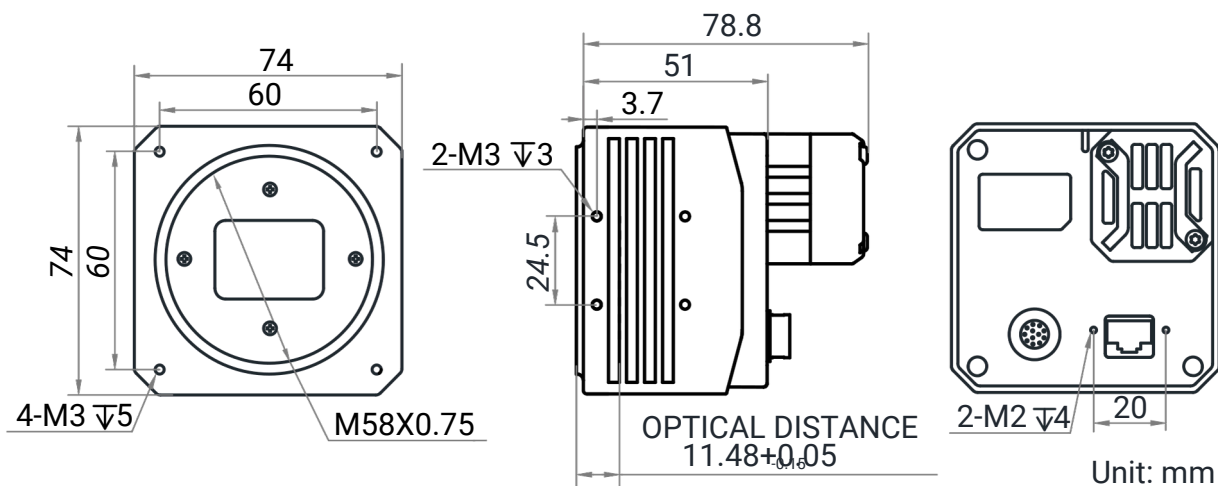


Specification

Model	MV-CH500-90TM	MV-CH500-90TC
Performance		
Sensor type	CMOS, global shutter Gpixel® GMAX	
Sensor model	3.2 μm × 3.2 μm 22.4 mm × 22.4 mm	
Pixel size	7008 × 7000 15.5 fps @ 7008 × 7000	
Sensor size	Mono 8 66 dB 40 dB 1.25 × to 6 × 15	
Resolution	μs to 10 sec Off/Once/Continuous	
Max. frame rate	exposure mode Mono	15.5 fps @ 7008 × 7000 Bayer BG 8
Dynamic range		
SNR		
Gain		
Exposure time		
Exposure mode		
Mono/Color		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), RS-232 × 1	
Power supply	9 VDC to 24 VDC	
Power consumption	Typ. 11 W @ 12 VDC	Typ. 12 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	

Dimension

M58-mountwithfan:



F-mount with fan:

