

# MV-CH500-90TM/TC

### 50 MP CMOS 10 GigE Area Scan Camera









#### 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, GenlCam Standard, and third-party software based on the protocol and standard.

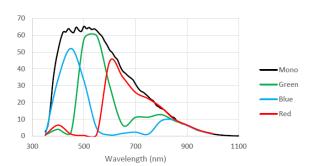
#### **Available Model**

- 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**

PCB AOI, FPD detection, photovoltaics, railway related application, etc.

## Sensor Quantum Efficiency







# Specification

Model	MV-CH500-90TM	MV-CH500-90TC
Performance	MIV-CH300-901M	MIV-CH300-301C
Sensor type Sensor model	CMOS, global shutter  Gpixel® GMAX	
Pixel size	'	
Sensor size	3.2 μm × 3.2 μm 22.4 mm × 22.4 mm	
Resolution	7008 × 7000	
Max. frame rate	15.5 fps @7008 × 7000 Mono 8	
Dynamic range	66 dB	
SNR	40 dB	
Gain	1.25 × to 6 ×	
Exposure time	15 µs to 10 sec	
Exposure mode	Off/Once/Continuous exposure mode	
Mono/Color	Mono	Color
Pixel format		Mono 8/10/12,
	Mono 8/10/10Packed/12/12Packed	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, compatible with Gigabit Ethernet	
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-mount: Flange back focal length 11.48 mm (0.5")	
	F-mount: Flange back focal length 46.5 mm (1.8")	
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% to 95% RH, non-condensing	
General		
Client software	MVS or third-party software meeting with GigE Vision Protocol	
Operating system	32/64-bit Windows XP/7/10, 64-bit Windows 11	
Compatibility	GigE Vision V2.0, GenlCam	
Certification	CE, RoHS, KC	
		Aremak Bilişim Teknolojileri



Aremak Bilişim Teknolojileri

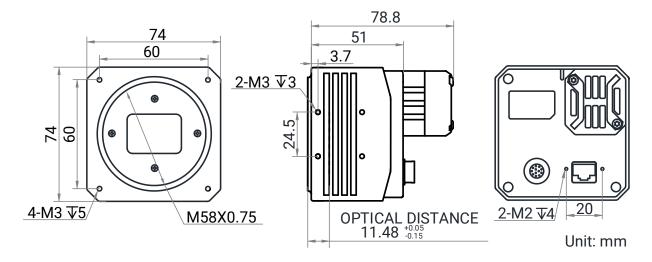
Endüstriyel Görüntü İşleme Çözümleri

Adres: ODTÜ Teknokent Bilişim ve İnovasyon Merkezi, Mustafa Kemal Mahallesi, Dumlupınar Bulvarı No:280G, İç Kapı No:1260, Çankaya, Ankara/Türkiye

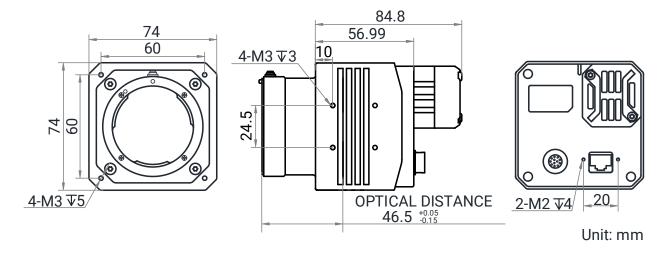
## **Dimension**



#### M58-mount with fan:



#### F-mount with fan:





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