

MV-CH050-90TM/TC

5 MP 10 GigE Area Scan Camera



GEN*i*CAM

10GigE
VISION

Introduction

MV-CH050-90TM/TC camera adopts Gpixel GMAX3405 CMOS 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 163.4 fps in full resolution.

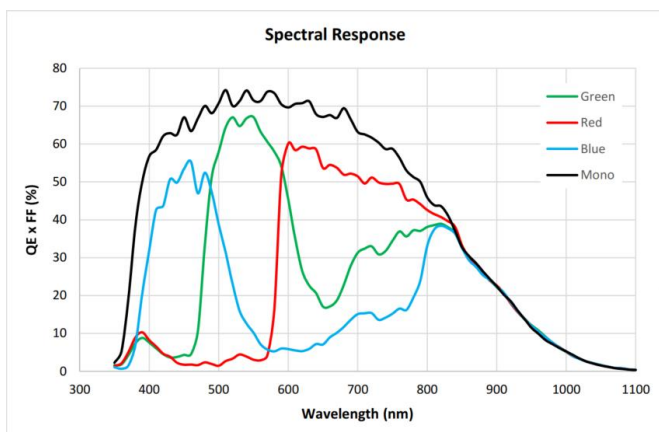
Available Model

- Mono camera: MV-CH050-90TM-C-NF
- Color camera: MV-CH050-90TC-C-NF

Applicable Industry

SMT / PCB AOI, FPD, railway-related applications, lithium battery, PV, etc.

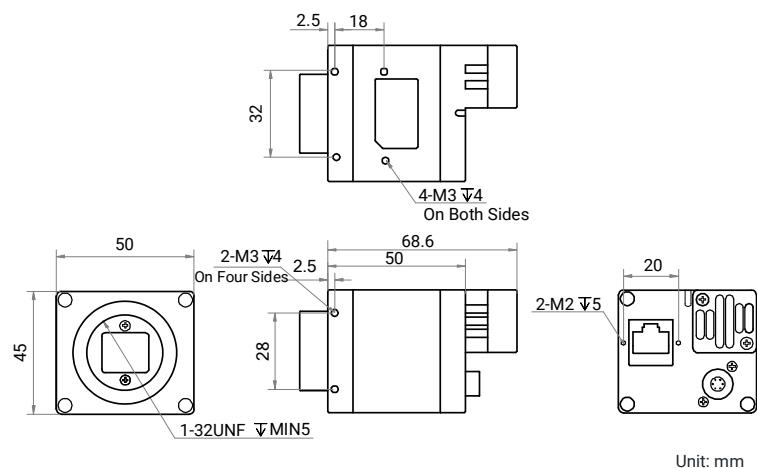
Sensor Quantum Efficiency



Key Features

- Resolution of 2448 × 2048, and pixel size of 3.4 μm × 3.4 μm.
- Compatible with C-mount lens.
- Adopts 10 GigE interface, compatible with GigE, and max. transmission distance of 100 meters.
- Provides mounting holes on panels for flexible mounting.
- Compatible with GigE Vision Protocol V2.0, GenICam Standard, and third-party software based on protocols.

Dimension



Specification

Model	MV-CH050-90TM	MV-CH050-90TC
Performance		
Sensor type	CMOS, global shutter	
Sensor model	Gpixel GMAX3405	
Pixel size	3.4 μm \times 3.4 μm	
Sensor size	2/3"	
Resolution	2448 \times 2048	
Max. frame rate	163.4 fps @ 2448 \times 2048 Mono 8	163.4 fps @ 2448 \times 2048 Bayer GB 8
Dynamic range	64.6 dB	66.1 dB
SNR	39.0 dB	39.2 dB
Gain	0 dB to 6.1 dB	
Exposure time	2 μs to 10 sec	
Exposure mode	Off/Once/Continuous exposure mode, supports Trigger Width	
Mono/color	Mono	Color
Pixel format	Mono 8/10/10Packed/12/12Packed	Bayer GB 8/10/10Packed/12/12Packed
Binning	Supports 1 \times 1, 2 \times 2, 4 \times 4	
Decimation	Supports 1 \times 1, 2 \times 2, 4 \times 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	6-pin P7 connector provides power and I/O, including opto-isolated input \times 1 (Line 0), opto-isolated output \times 1 (Line 1), and bi-directional non-isolated I/O \times 1 (Line 2).	
Power supply	9 VDC to 24 VDC	
Power consumption	Typ. 8.0 W @ 12 VDC	Typ. 8.4 W @ 12 VDC
Mechanical		
Lens mount	C-mount	
Dimension	50 mm \times 45 mm \times 68.6 mm (2.0" \times 1.8" \times 2.7")	
Weight	Approx. 212 g (0.5 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 80 $^{\circ}\text{C}$ (-22 $^{\circ}\text{F}$ to 176 $^{\circ}\text{F}$)	
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, 32/64-bit Linux	
Compatibility	GigE Vision V2.0, GenICam	
Certification	CE, RoHS, KC	