

MV-CH120-90TM

12 MP 1.1" CMOS 10 GigE Area Scan Camera



GEN*i*CAM

10GigE
VISION

Introduction

MV-CH120-90TM camera adopts Gpixel GMAX3412 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 65 fps in full resolution.

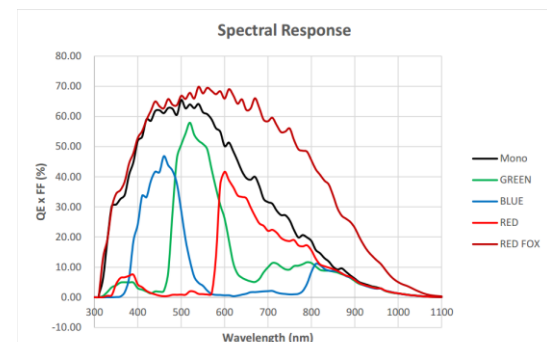
Key Features

- Resolution of 4096 × 3000, pixel size of 3.4 μm × 3.4 μm.
- Compatible with C-mount lens.
- Adopts 10 GigE interface providing maximum transmission distance of 100 meters.
- Provides mounting holes on panels for flexible installation.
- Compatible with GigE Vision Protocol V2.0, GenlCam Standard, and third-party software based on protocols.

Available Model

MV-CH120-90TM-C-NF

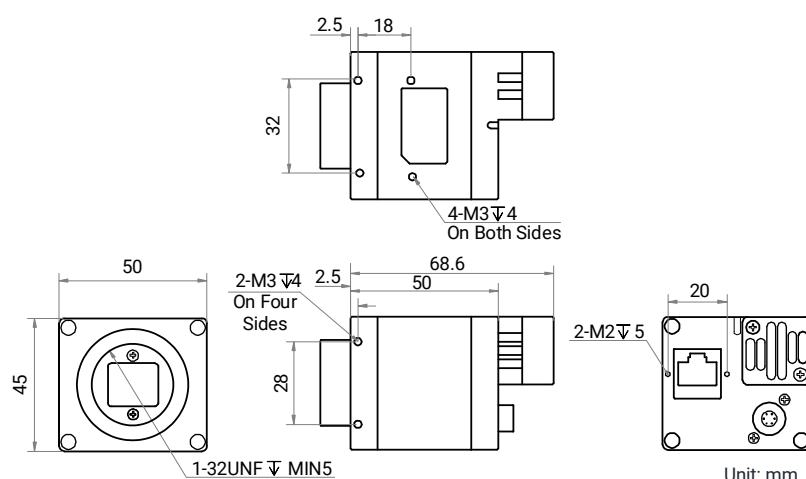
Sensor Quantum Efficiency



Applicable Industry

SMT/PCB AOI, FPD, railway industry, lithium battery, photovoltaics, etc.

Dimension



Specification

Model	MV-CH120-90TM
Performance	
Sensor type	CMOS, global shutter
Sensor model	Gpixel GMAX3412
Pixel size	3.4 μm \times 3.4 μm
Sensor size	1.1"
Resolution	4096 \times 3000
Max. frame rate	65 fps @ 4096 \times 3000 Mono 8
Dynamic range	60.1 dB
SNR	39 dB
Gain	0 dB to 6.1 dB
Exposure time	6 μs to 10 sec
Exposure mode	Off/Once/Continuous exposure mode
Mono/color	Mono
Pixel format	Mono 8/10/10Packed/12/12Packed
Binning	Supports 1 \times 1, 1 \times 2, 1 \times 4, 2 \times 1, 2 \times 2, 2 \times 4, 4 \times 1, 4 \times 2, 4 \times 4
Decimation	Supports 1 \times 1, 1 \times 2, 1 \times 4, 2 \times 1, 2 \times 2, 2 \times 4, 4 \times 1, 4 \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	10.2 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 XP/7/10, 32/64-bit Linux
Compatibility	GigE Vision V2.0, GenICam
Certification	CE, RoHS, KC