

MV-CH1030-90TM/TC

103 MP CMOS 10 GigE Area Scan Camera



GEN<i>i</i>CAM

10GiGE
VISION

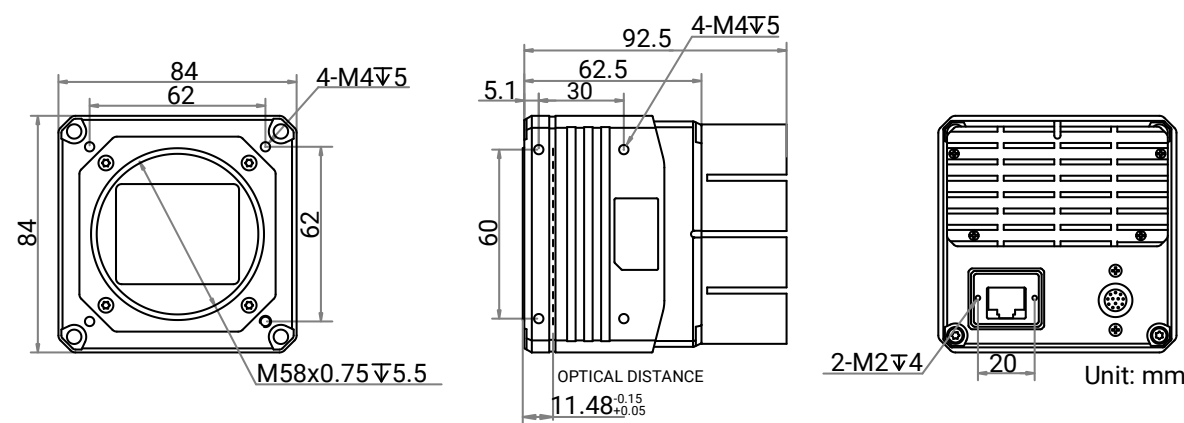
Introduction

MV-CH1030-90TM/TC camera adopts Gpixel GMAX32103 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 11 fps in full resolution.

Key Feature

- Resolution of 11276 × 9200, pixel size of 3.2 μm × 3.2 μm.
- Supports auto or manual adjustment of exposure time and white balance, and manual adjustment of gain, Gamma correction, LUT, etc.
- Adopts 10 GigE interface providing max. transmission distance of 100 meters without relay.
- Adopts installation holes for flexible installation.
- Compatible with GigE Vision Protocol V2.0, GenlCam Standard, and third-party software based on protocols.

Dimension



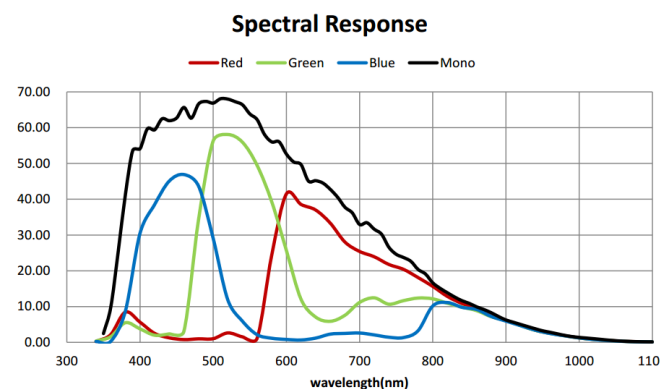
Available Model

- Mono: MV-CH1030-90TM-M58S-NN
- Color: MV-CH1030-90TC-M58S-NN

Applicable Industry

PCB AOI, FPD, railway related applications, PV, etc.

Sensor Quantum Efficiency



Specification

Model	MV-CH1030-90TM	MV-CH1030-90TC
Performance		
Sensor type	CMOS, global shutter	
Sensor model	Gpixel GMAX32103	
Pixel size	3.2 μm \times 3.2 μm	
Sensor size	46.6 mm	
Resolution	11264 \times 9200	
Max. frame rate	11 fps @ 11264 \times 9200 Mono 8	11 fps @ 11264 \times 9200 Bayer GB 8
Dynamic range	64.86 dB	
SNR	39.88 dB	
Gain	1.4 \times to 5.2 \times	
Exposure time	20 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 GB 8/10/10Packed/12/12Packed, YUV422Packed, YUV422_YUYV_Packed, RGB 8, BGR 8
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	12-pin P10 connector provides power and I/O, including opto-isolated input \times 1 (Line 0), opto-isolated output \times 1 (Line 1), bi-directional non-isolated I/O \times 1 (Line 2), and RS-232 \times 1	
Power supply	12 VDC to 24 VDC	
Power consumption	Typ. 12.6 W @ 12 VDC	Typ. 13.3 W @ 12 VDC
Mechanical		
Lens mount	M58*0.75, flange back length 11.48 mm	
Dimension	84 mm \times 84 mm \times 92.5 mm (3.3" \times 3.3" \times 3.6")	
Weight	Approx. 738 g (1.6 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 70 $^{\circ}\text{C}$ (-22 $^{\circ}\text{F}$ to 158 $^{\circ}\text{F}$)	
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 Window 11, and 32/64-bit Linux	
Compatibility	GigE Vision V2.0, GenICam	
Certification	CE, RoHS, KC	