

MV-CH120-10TM

12 MP 1.1" CMOS 10 GigE Area Scan Camera



GEN<i>i</i>CAM

10GigE
VISION

Introduction

MV-CH120-10TM camera adopts Sony IMX253 sensor to provide high-quality image with high resolution and low noise. It uses 10 Gigabit Ethernet interface to transmit uncompressed data in real time with max. frame rate reaching 68 fps at full resolution.

Key Feature

- Resolution of 12 megapixel and pixel size of $3.45 \mu\text{m} \times 3.45 \mu\text{m}$
- Adopts 10 Gigabit Ethernet interface, compatible with Gigabit Ethernet, and max. transmission distance of 100 meters without delay
- Up to 1024 MB local memory for burst transmission and retransmission
- Compact design with mounting holes on the up and bottom panels for flexible mounting

Available Model

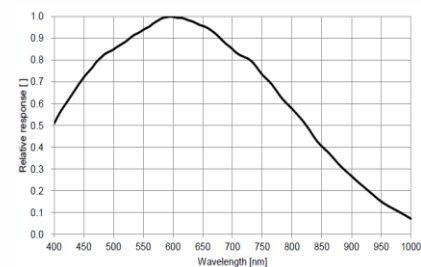
M58-mount with fan, Mono: MV-CH120-10TM-M58S-NF

F-mount with fan, Mono: MV-CH120-10TM-F-NF

Applicable Industry

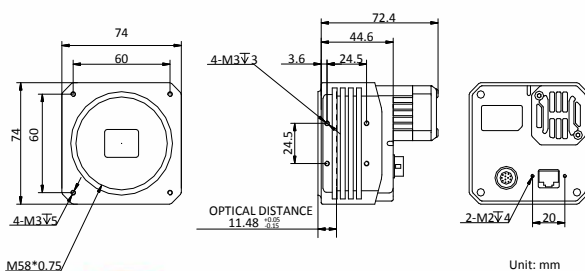
SMT automatic optical detection, PCB AOI, FPD, railway related application, etc.

Sensor Quantum Efficiency

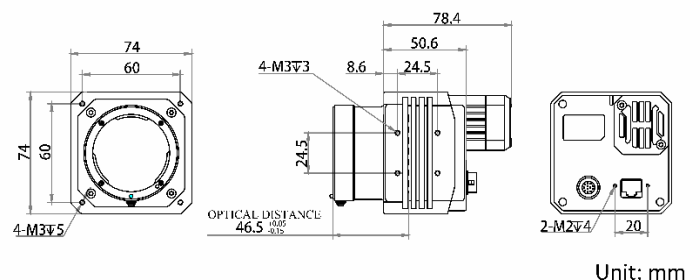


Dimension

M58-mount with fan:



F-mount with fan:



Specification

Model	MV-CH120-10TM
Camera	
Sensor type	CMOS, global shutter
Sensor model	Sony IMX253
Pixel size	3.45 μm \times 3.45 μm
Sensor size	1.1"
Resolution	4096 \times 3000
Max. frame rate	68 fps @4096 \times 3000
Dynamic range	70 dB
SNR	40 dB
Gain	0 dB to 15 dB \times
Exposure time	2 μs to 10 s
Shutter mode	Off/Once/Continuous exposure mode
Mono/Color	Mono
Pixel format	Mono 8/10/10p/12/12p
Acquisition mode	Continuous mode and SingleFrame mode
Reverse image	Supports horizontal and vertical reverse image output
Image buffer	1024 MB
Electrical features	
Data interface	10 Gigabit Ethernet
Digital I/O	12-pin I/O, including opto-isolated input \times 1 (Line0), opto-isolated output \times 1 (Line1), bi-directional non-isolated I/O \times 1 (Line2), RS232 \times 1
Power supply	12 VDC to 24 VDC
Power consumption	Approx. 11 W@12 VDC
Structure	
Lens mount	M58-mount, optical back focal length: 11.48 mm (0.45") F-Mount, optical back focal length: 46.5 mm (1.83")
Dimension	M58-mount with fan: 74 mm \times 74 mm \times 72.4 mm (2.91" \times 2.91" \times 2.85") F-mount with fan: 74 mm \times 74 mm \times 78.4 mm (2.91" \times 2.91" \times 3.09")
Weight	M58-Mount with fan: < 450 g (1.0 lb) F-Mount with fan: < 600 g (1.3 lb)
Ingress protection	IP30 (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% to 95% RH, without condensation
General	
Client software	MVS or third-party software meeting with GigE Vision Protocol
Operating system	Windows XP/7/10 32/64-bit
Compatibility	GigE Vision, GenICam
Certification	CE, FCC, RoHS

HIKROBOT

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