



## **MV-CH120-10TM**

12 MP 1.1" CMOS 10 GigE Area Scan Camera

#### 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.





# GEN**<i>**CAM 10 GiG=

#### **Key Feature**

- Resolution of 12 megapixel and pixel size of 3.45 μm × 3.45 μm
- 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

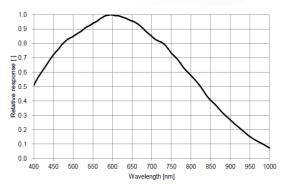
### **Applicable Industry**

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

### Available Model

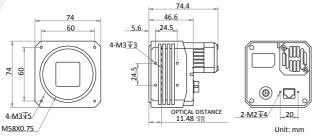
- M58-mount with fan, Mono: MV-CH120-10TM-M58S-NF
- F-mount with fan, Mono: MV-CH120-10TM-F-NF

#### Sensor Quantum Efficiency

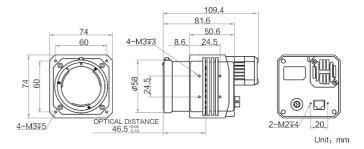


# Dimension

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 × 3.45 μm	
Sensor size	1.1"	
Resolution	4096 × 3000	
Frame rate	68 fps	
Dynamic range	70 dB	
SNR	40 dB	
Gain	0 dB to 15 dB	
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 x 1 (LineO), opto-isolated output x 1	
	(Line1), bi-directional non-isolated I/O x 1 (Line2), RS232 x 1	
Power supply	11 VDC to 25 VDC	
Power consumption	< 11 W@12 VDC	
Structure		
Lens mount	unt 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 x 74 mm x 74.4 mm (2.91" x 2.91" x 2.93")	
	F-mount with fan: 74 mm x 74 mm x 109.4 mm (2.91" x 2.91" x 4.3")	
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)	
TemperatureWorking temperature: 0 °C to 50 °C (32 °F to 122 °F)		122 °F)
	Storage temperature: -30 °C to 70 °C (-22 °F to 158 °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	<b>SEDEC</b>
Certification	CE, FCC, ROHS	
		Germany, Austria, Switzerland BeNeLux