

MV-CH120-10TM/TC

12 MP 1.1" CMOS 10 GigE Area Scan Camera









Introduction

MV-CH120-10TM/TC camera adopts Sony® IMX253 sensor to provide high-quality images with high resolution and low noise. It uses 10 GigE interface to transmit non-compressed data in real time, and its max. • frame rate can reach 68 fps in full resolution.

Key Feature

- Resolution of 4096×3000 , and pixel size of $3.45 \, \mu \text{m} \times 3.45 \, \mu \text{m}$.
- Supports auto or manual adjustment for gain, exposure time, white balance, Gamma correction, LUT, etc.
- Adopts 10 GigE interface, compatible with GigE, and max. transmission distance of 100 meters.
- Compact design with mounting holes on panels for flexible mounting.
- Compatible with GigE Vision Protocol, GenlCam Standard, and third-party software based on the protocol and standard.

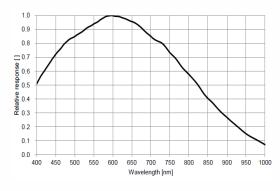
Available Model

- M58-mount with fan, mono: MV-CH120-10TM-M58S-NF
- F-mount with fan, mono: MV-CH120-10TM-F-NF
- M58-mount with fan, color: MV-CH120-10TC-M58S-NF
- F-mount with fan, color: MV-CH120-10TC-F-NF

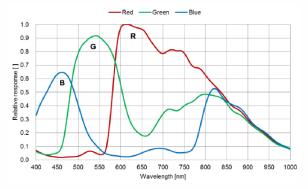
Applicable Industry

SMT/PCB AOI, FPD, railway related application, etc.

Sensor Quantum Efficiency



MV-CH120-10TM



MV-CH120-10TC



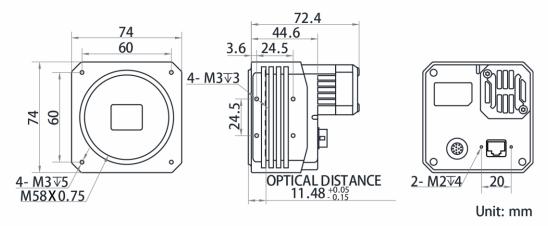


Specification

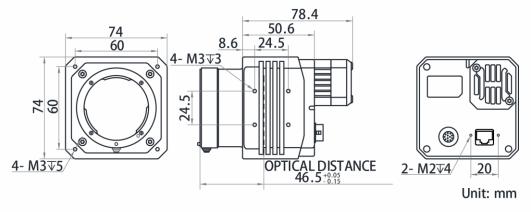
Model	MV-CH120-10TM	MV-CH120-10TC	
Camera			
Sensor type	CMOS, global shutter		
Sensor model	Sony® IMX253		
Pixel size	3.45 μm × 3.45 μm		
Sensor size	1.1"		
Resolution	4096 × 3000		
Max. frame rate	68 fps @4096 × 3000		
Dynamic range	71.6 dB		
SNR	39.7 dB		
Gain	0 dB to 15 dB		
Exposure time	2 μs to 10 sec	34 μs to 10 sec	
Exposure mode	Off/Once/Continuous exposure mode		
Mono/Color	Mono	Color	
Pixel format		Mono 8/10/12, Bayer RG 8/10/10p/12/12p,	
	Mono 8/10/10p/12/12p	YUV422Packed, YUV422_YUYV_Packed,	
		RGB 8, BGR 8	
Binning	Not support		
Decimation	Not support		
Reverse image	Supports horizontal and vertical reverse image output		
Electrical feature			
Data interface	10 Gigabit Ethernet, compatible with Gigabit Ethernet		
Digital I/O	12-pin Hirose connector provides power and I/O, including opto-isolated input × 1 (Line 0),		
	opto-isolated output \times 1 (Line 1), bi-directional non-isolated I/O \times 1 (Line 2), RS-232 \times 1		
Power supply	9 VDC to 24 VDC		
Power consumption	Typ. 11 W@12 VDC	Typ. 16.5 W@12 VDC	
Mechanical			
Lens mount	M58-mount: optical back focal length: 11.48 mm (0.5")		
	F-mount: optical back focal length: 46.5 mm (1.8")		
Dimension	M58-mount with fan: 74 mm \times 74 mm \times 72.4 mm (2.9" \times 2.9" \times 2.9")		
	F-mount with fan: 74 mm × 74 mm × 78.4 mi	m (2.9" × 2.9" × 3.1")	
Weight	M58-mount with fan: approx. 550 g (1.2 lb)		
	-mount with fan: approx. 600 g (1.3 lb)		
Ingress protection	IP40 (under proper lens installation and wiring)		
Temperature	Working temperature: 0 °C to 50 °C (32 °F to 122 °F)		
	Storage temperature: -30 °C to 70 °C (-22 °F to 158 °F)		
Humidity	20% to 95% RH, non-condensing		
General			
Client software	MVS or third-party software meeting with GigE Vision Protocol		
Operating system	32/64-bit Windows XP/7/10		
Compatibility	GigE Vision V1.2, GenICam		
Certification	CE, FCC, RoHS, KC		

Dimension

M58-mount with fan:



F-mount with fan:





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