MV-CH120-15TM/TC

12 MP 1.1" CMOS 10 GigE Area Scan Camera

GEN‹i›CAM

10 GIGE VISION

Introduction

MV-CH120-15TM/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 68.3 fps in full resolution.
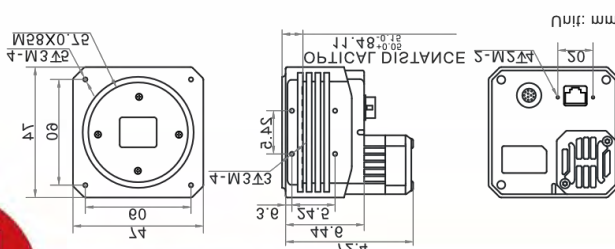
Key Feature

- Resolution of 4096 × 3000, and pixel size of 3.45 μm × 3.45 μm.
- Supports auto or manual adjustment for gain, exposure time, 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, GenICam Standard, and third-party software based on the protocol and standard.

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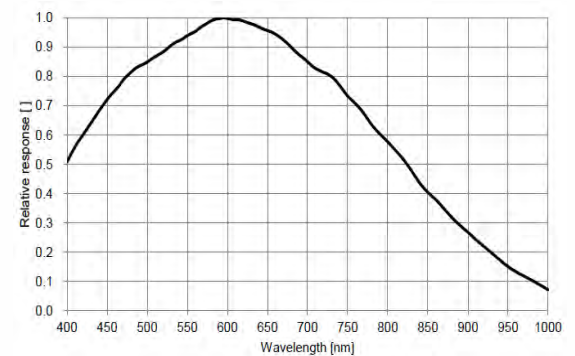
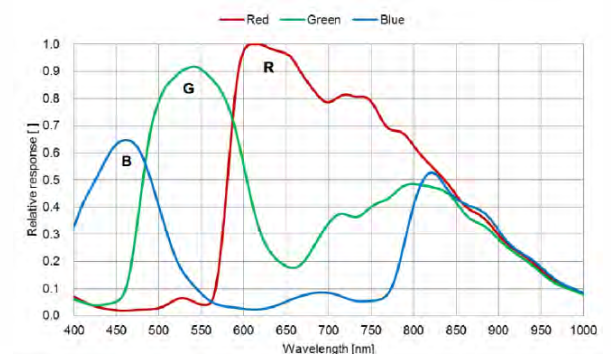SMT/PCB AOI, FPD, railway related application, etc.

Dimension

Available Model

- M58-mount with fan, mono: MV-CH120-15TM-M58S-NF
- M58-mount with fan, color: MV-CH120-15TC-M58S-NF

Sensor Quantum Efficiency

MV-CH120-15TM

MV-CH120-15TC

Specification

Model	MV-CH120-15TM	MV-CH120-15TC
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	68.3 fps @4096 × 3000	
Dynamic range	71.6 dB	
SNR	39.7 dB	
Gain	0 dB to 18 dB	
Exposure time	UltraShort exposure mode: 2 μs to 14 μs	
	Standard exposure mode: 15 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, Bayer RG 8, YUV422Packed, YUV422_YUYV_Packed, RGB 8, BGR 8
Binning	Supports 1 × 1, 1 × 2, 1 × 4, 2 × 1, 2 × 2, 2 × 4, 4 × 1, 4 × 2, 4 × 4	
Decimation	Supports 1 × 1, 1 × 2, 1 × 4, 2 × 1, 2 × 2, 2 × 4, 4 × 1, 4 × 2, 4 × 4	
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 P10 connector provides power and I/O, including opto-isolated input × 1 (Line 0), opto-isolated output × 1 (Line 1), bi-directional non-isolated I/O × 1 (Line 2), RS-232 × 1	
Power supply	9 VDC to 24 VDC	
Power consumption	Typ. 9.6 W@24 VDC	Typ. 10.1 W@24 VDC
Mechanical		
Lens mount	M58-mount, optical back focal length: 11.48 mm (0.5")	
Dimension	74 mm × 74 mm × 72.4 mm (2.9" × 2.9" × 2.9")	
Weight	Approx. 550 g (1.2 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 V2.0, GenICam	
Certification	CE, RoHS, KC	