

MV-CH310-10TM/TC

31 MP CMOS 10 GigE Area Scan Camera



GEN*i*CAM

10GiGE VISION

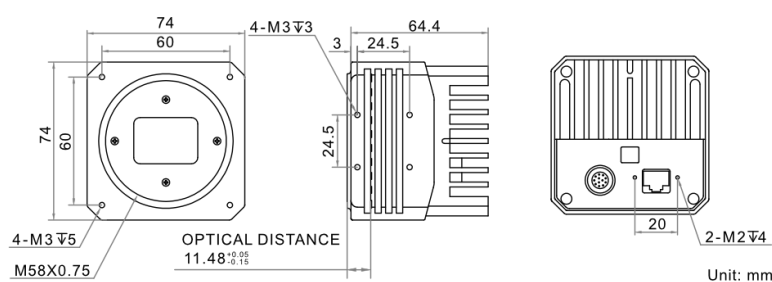
Introduction

MV-CH310-10TM/TC camera adopts Sony® IMX342 sensor to provide high-quality images with high resolution and low noise. It uses 10 GigE interface to transmit non-compressed images in real time, and its max. frame rate can reach 17.2 fps in full resolution.

Key Feature

- 31 MP resolution, and pixel size of $3.45 \mu\text{m} \times 3.45 \mu\text{m}$.
- Supports auto or manual adjustment of gain and exposure time, and manual adjustment of LUT and Gamma correction.
- Adopts design without fan to ensure stability of high-speed image acquisition.
- Adopts low power consumption design.
- Adopts 10 GigE interface, compatible with GigE, and max. transmission distance of 100 meters without relay.
- Compatible with GigE Vision V2.0 Protocol, GeniCam Standard, and third-party software based on the protocol and standard.

Dimension



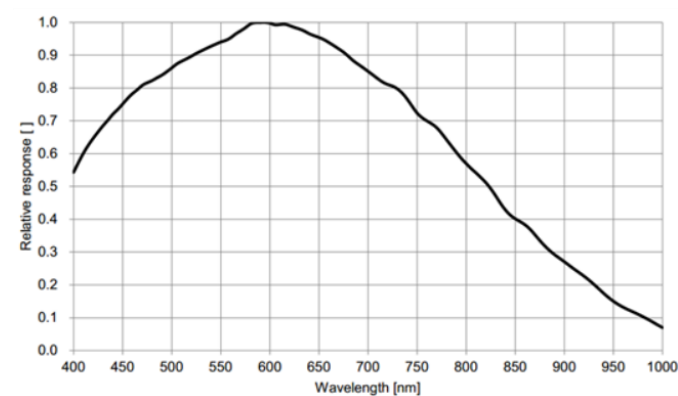
Available Model

- Mono camera: MV-CH310-10TM-M58S-NN
- Color camera: MV-CH310-10TC-M58S-NN

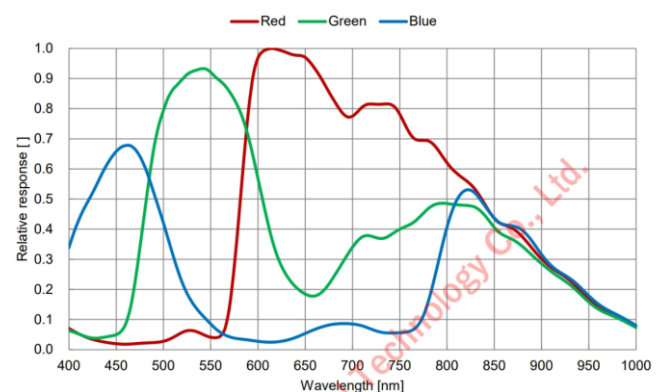
Applicable Industry

FPD detection, PCB AOI, aerial photography, railway related application, etc.

Sensor Quantum Efficiency



MV-CH310-10TM-M58S-NN



MV-CH310-10TC-M58S-NN

Model	MV-CH310-10TM	MV-CH310-10TC
Performance		
Sensor type	CMOS, global shutter	
Sensor model	Sony® IMX342	
Pixel size	3.45 μm × 3.45 μm	
Sensor size	22.3 mm × 16.7 mm	
Resolution	6464 × 4852	
Max. frame rate	17.2 fps @ 6464 × 4852 Mono 8	17.2 fps @ 6464 × 4852 Bayer RG 8
Dynamic range	73 dB	
SNR	40 dB	
Gain	0 dB to 24 dB	
Exposure time	4 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 RG 8/10/10Packed/12/12Packed, 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 (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 × 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. 11.2 W @ 12 VDC	Typ. 11.4 W @ 12 VDC
Mechanical		
Lens mount	M58*0.75, flange back length 11.48 mm	
Dimension	74 mm × 74 mm × 64.4 mm (2.9" × 2.9" × 2.5")	
Weight	Approx. 560 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% 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 Windows 11, and 32/64-bit Linux	
Compatibility	GigE Vision V2.0, GenICam	
Certification	CE, RoHS, KC	