

MV-CH310-10GM/GC

31 MP CMOS GigE Area Scan Camera



GEN< i >CAM

GigE
VISION

Introduction

MV-CH310-10GM/GC camera adopts Sony® IMX342 sensor to provide high-quality image. It uses GigE interface to transmit non-compressed images in real time with max. frame rate reaching 3.9fps in full resolution.

Key Feature

- Resolution of 6464 × 4852, pixel size of 3.45 μm × 3.45 μm.
- Supports auto and manual adjustment for gain, exposure control, LUT, Gamma correction, etc. Adopts GigE interface providing max. transmission distance of 100 meters without relay. Compact design with mounting holes on panels for flexible mounting.

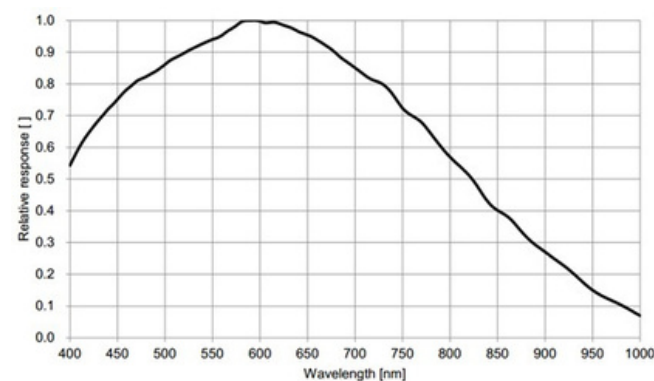
Available Model

- M58-mount with fan, mono: MV-CH310-10GM-M58S-NF
- F-mount with fan, mono: MV-CH310-10GM-F-NF
- M58-mount with fan, color: MV-CH310-10GC-M58S-NF
- F-mount with fan, color: MV-CH310-10GC-F-NF

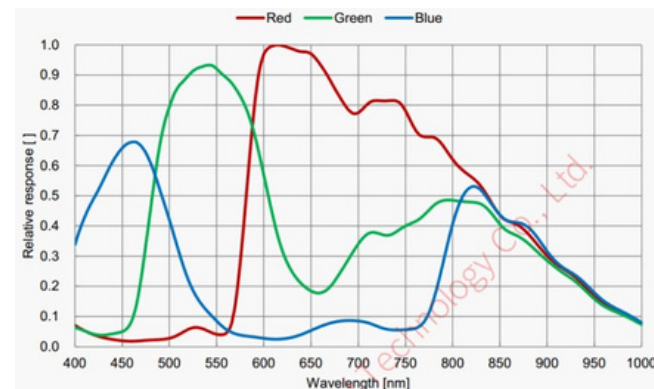
Applicable Industry

FPD, PCBAOI, aerial photography, railway applications, document scanning, etc.

Sensor Quantum Efficiency



MV-CH310-10GM



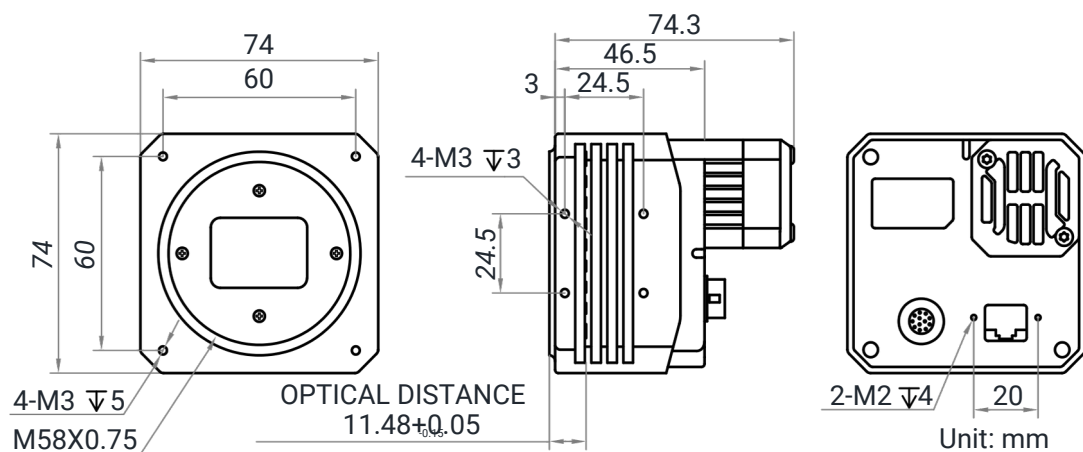
MV-CH310-10GC

Specification

Model	MV-CH310-10GM	MV-CH310-10GC
Performance		
Sensor type	CMOS, global shutter Sony® IMX342	
Sensor model	3.45 μm × 3.45 μm 22.3 mm × 16.7 mm	
Pixel size	6464 × 4852 3.9 fps @ 6464 × 4852	
Sensor size	Mono 8 73 dB 40 dB 0 dB to 24 dB	
Resolution Max.	UltraShort exposure mode: 3 μs to 33 μs	
frame rate	Standard exposure mode: 36 μs to 2 sec	3.9 fps @ 6464 × 4852 Bayer RG 8
Dynamic range	Off/Once/Continuous exposure mode	
SNR Gain	Mono	
Exposure time		
		Standard exposure mode: 36 μs to 10 sec
Exposure mode		
Mono/color		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, 2 × 2	Supports 1 × 1, 2 × 2, 4 × 4
Decimation	Supports 1 × 1, 2 × 2	Supports 1 × 1, 2 × 2, 4 × 4
Reverse image	Supports horizontal and vertical reverse image output	
Electrical feature		
Data interface	Gigabit Ethernet (1000 Mbit/s), compatible with Fast Ethernet (100 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), and RS-232 × 1.	
Power supply	9 VDC to 24 VDC	
Power consumption	Typ. 9 W @ 12 VDC	
Mechanical		
Lens mount	M58*0.75, flange back length 11.48 mm F-mount, flange back length 46.5 mm	
Dimension	M58-mount with fan: 74 mm × 74 mm × 74.3 mm (2.9" × 2.9" × 2.9") F-mount with fan: 74 mm × 74 mm × 80.1 mm (2.9" × 2.9" × 3.2")	
Weight	M58-mount with fan: Approx. 550 g (1.2 lb.) F-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% 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, 32/64-bit Linux	
Compatibility	GigE Vision V2.0, GenICam	
Certification	CE, RoHS, KC	

Dimension

M58-mountwithfan:



F-mount with fan:

