MV-CH310-10GM/GC

31 MP CMOS GigE Area Scan Camera

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 3.9 fps 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.

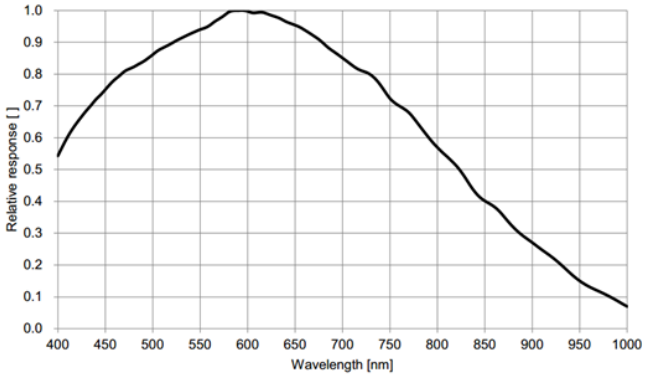
Available Model

- 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

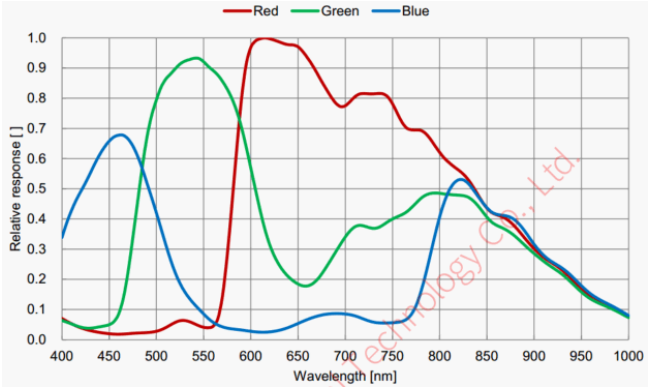
Applicable Industry

FPD, PCB AOI, aerial photography, railway applications, document scanning, etc.

Sensor Quantum Efficiency



MV-CH310-10GM



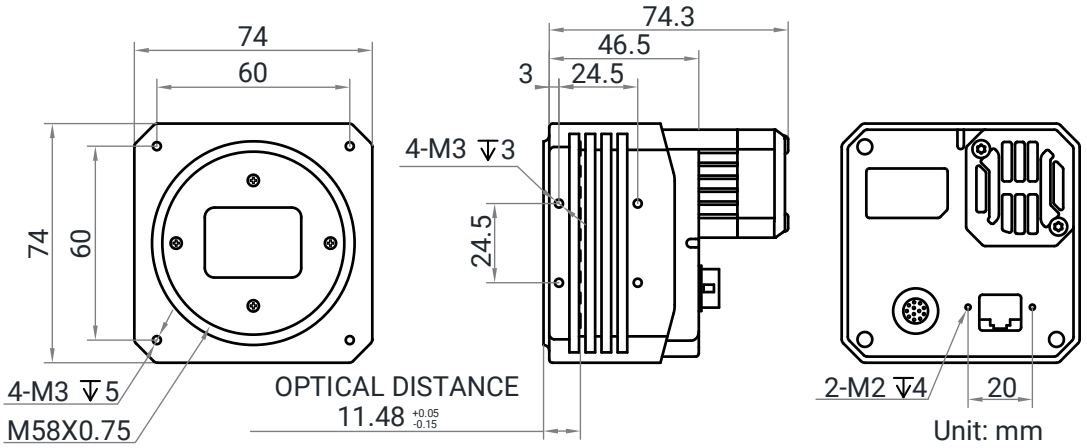
MV-CH310-10GC

Specification

Model	MV-CH310-10GM	MV-CH310-10GC
Performance		
Sensor type	CMOS, global shutter	
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	3.9 fps @6464 × 4852 Mono 8	3.9 fps @6464 × 4852 Bayer RG 8
Dynamic range	73 dB	
SNR	40 dB	
Gain	0 dB to 24 dB	
Exposure time	UltraShort exposure mode: 3 μs to 33 μs	
	Standard exposure mode: 36 μs to 2 sec	Standard exposure mode: 36 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, 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, compatible with Fast 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), and RS-232 × 1.	
Power supply	9 VDC to 24 VDC	
Power consumption	Typ. 9 W@12 VDC	
Mechanical		
Lens mount	M58-mount: Flange focal length 11.48 mm (0.5") F-mount: Flange focal length 46.5 mm (1.8")	
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% 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, 64-bit Windows 11, 32/64-bit Linux, and 64-bit MacOS	
Compatibility	GigE Vision V2.0, GenICam	
Certification	CE, RoHS, KC	

Dimension

M58-mount with fan:



F-mount with fan: