

# HC-CH310-10GM/GC

## 31 MP CMOS GigE Area Scan Camera



GEN*i*CAM

**GigE**  
VISION

### Introduction

HC-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  $6464 \times 4852$ , and pixel size of  $3.45 \mu\text{m} \times 3.45 \mu\text{m}$ .
- 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.
- Compatible with GigE Vision V2.0 Protocol, GenICam Standard, and the third-party software based on the protocol and standard.

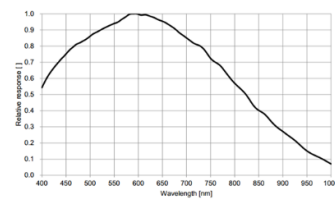
### Available Model

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

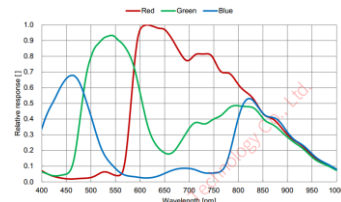
### Applicable Industry

SMT/ PCB AOI, FPD, railway applications, etc.

### Sensor Quantum Efficiency



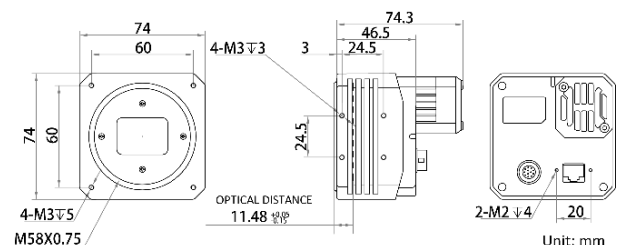
HC-CH310-10GM



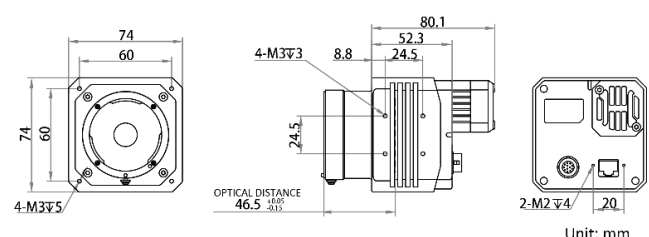
HC-CH310-10GC

### Dimension

M58-mount with fan:



F-mount with fan:



# Specification

Model	HC-CH310-10GM		HC-CH310-10GC
Camera			
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		
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 8/10/10p/12/12p	Mono 8/10/12, Bayer RG 8/10/10p/12/12p, 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		
Image buffer	512 MB		
Electrical features			
Data interface	Gigabit Ethernet, compatible with Fast Ethernet		
Digital I/O	12-pin Hirose 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, 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 × 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. 450 g (1.0 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, 32/64-bit Linux and 64-bit MacOS		
Compatibility	GigE Vision V2.0, GenICam		
Certification	CE, FCC, RoHS, KC		