

MV-CH310-10TM/TC

31 MP CMOS 10 GigE Area Scan Camera



GEN*i*CAM

10GiGE
VISION

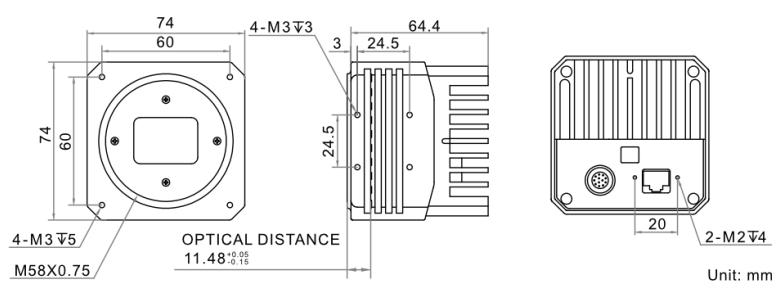
Introduction

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



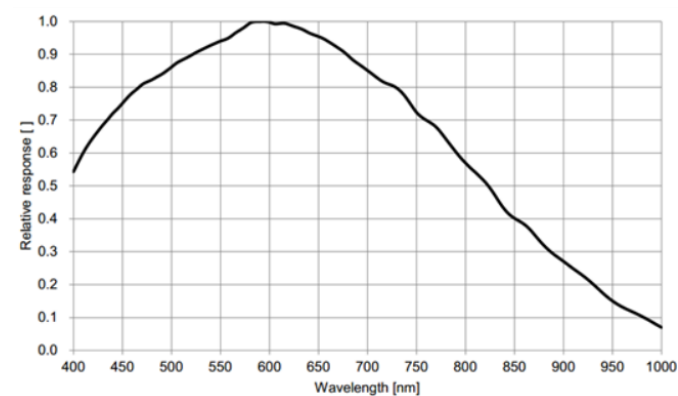
Available Model

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

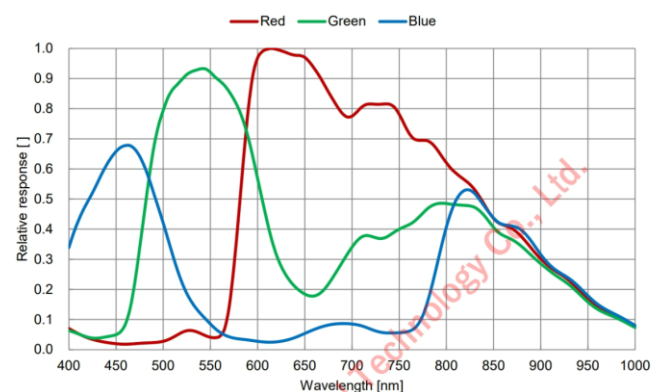
Applicable Industry

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

Sensor Quantum Efficiency



MV-CH310-10TM-M58S-NN



MV-CH310-10TC-M58S-NN

Specification

HIKROBOT

| 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, 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. 11.2 W@12 VDC | Typ. 11.4 W@12 VDC |
| Mechanical | | |
| Lens mount | M58*0.75, flange focal length 11.48 mm (0.5") | |
| 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% 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 | |
| Compatibility | GigE Vision V2.0, GenICam | |
| Certification | CE, FCC, RoHS, KC | |