



GEN*i*CAM

10GiGE
VISION

Introduction

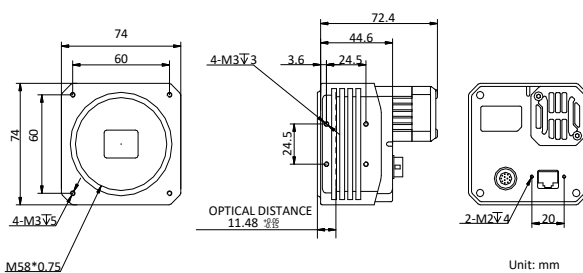
MV-CH120-10TM camera adopts Sony® IMX253 sensor to provide high-quality image with high resolution and low noise. It uses 10 Gigabit Ethernet interface to transmit uncompressed data in real time with max. frame rate reaching 68 fps at full resolution.

Key Feature

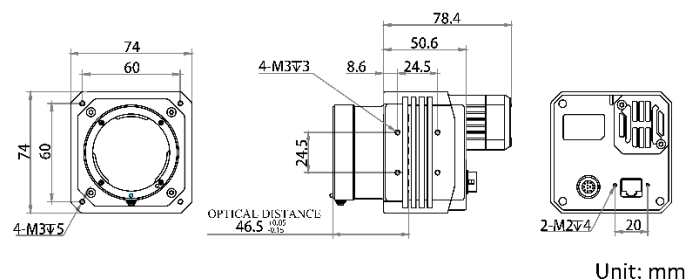
- Resolution of 12 megapixel and pixel size of 3.45 μm × 3.45 μm.
- Adopts 10 Gigabit Ethernet interface, compatible with Gigabit Ethernet, and max. transmission distance of 100 meters without delay.
- Compact design with mounting holes on the up and bottom panels for flexible mounting.
- Compatible with GigE Vision Protocol, GenICam Standard, and third-party software based on these protocol and standard.

Dimension

M58-mount with fan:



F-mount with fan:



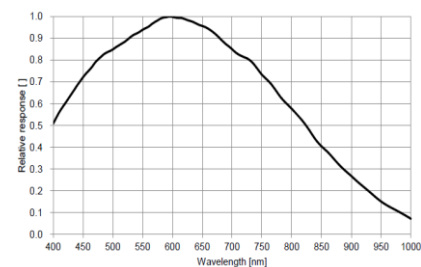
Available Model

- M58-mount with fan, Mono: MV-CH120-10TM-M58S-NF
- F-mount with fan, Mono: MV-CH120-10TM-F-NF

Applicable Industry

SMT automatic optical detection, PCB AOI, FPD, railway related application, etc.

Sensor Quantum Efficiency



Specification

| | |
|---------------------------|---|
| Model | MV-CH120-10TM |
| Camera | |
| Sensor type | CMOS, global shutter |
| Sensor model | Sony® IMX253 |
| Pixel size | 3.45 μm × 3.45 μm |
| Sensor size | 1.1" |
| Resolution | 4096 × 3000 |
| Max. frame rate | 68 fps @4096 × 3000 |
| Dynamic range | 71.6 dB |
| SNR | 39.7 dB |
| Gain | 0 dB to 15 dB |
| Exposure time | 2 μs to 10 sec |
| Exposure mode | Off/Once/Continuous exposure mode |
| Mono/Color | Mono |
| Pixel format | Mono 8/10/10p/12/12p |
| Binning | Not support |
| Decimation | Not support |
| 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 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), RS-232 × 1 |
| Power supply | 9 VDC to 24 VDC |
| Power consumption | Typ. 11 W@12 VDC |
| Mechanical | |
| Lens mount | M58-mount, optical back focal length: 11.48 mm (0.45") F-Mount, optical back focal length: 46.5 mm (1.83") |
| Dimension | M58-mount with fan: 74 mm × 74 mm × 72.4 mm (2.91" × 2.91" × 2.85") F-mount with fan: 74 mm × 74 mm × 78.4 mm (2.91" × 2.91" × 3.09") |
| Weight | M58-Mount with fan: approx. 450 g (1.0 lb) F-Mount with fan: approx. 600 g (1.3 lb) |
| Ingress protection | IP30 (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 |
| Compatibility | GigE Vision V1.2, GenICam |
| Certification | CE, FCC, RoHS, KC |