CHTGM-2500M

25 MP CMOS 10 GigE Area Scan Camera



Introduction

CHTGM-2500M camera adopts OnSemi PYTHON25K sensor and M58-mount with fan, Mono: provides high-quality image. It uses 10 GigE interface to transmit non- CHTGM-2500M-M58 compressed images in real time with max. frame rate reaching 40 F-mount with fan, Mono: fps under full resolution. CHTGM-2500M-F

Key Feature

- Resolution of 5120 × 5120 and pixel size of 4.5 μm × 4.5 μm
- Supports auto and manual adjustment for exposure control, Gamma correction, sharpness, etc.
- Adopts 10 GigE interface and compatible with Gigabit Ethernet
- Compact design with mounting holes on the up and bottom panels for flexible mounting

Applicable Industry

Available Model

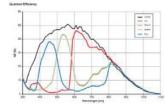
SMT/ PCB AOI, FPD, railway related applications, etc.

Sensor Quantum Efficiency

78.7

50.88

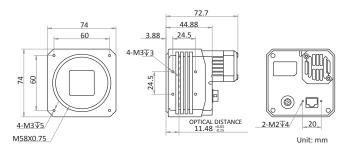
24.5



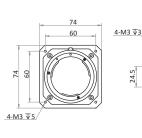
8 88

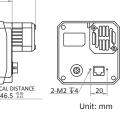
M58-mount with fan:

Dimension



F-mount with fan:







Specification

| Model | CHTGM-2500M |
|---------------------|---|
| Camera | |
| Sensor type | CMOS, global shutter |
| Sensor model | OnSemi PYTHON25K |
| Pixel size | 4.5 μm × 4.5 μm |
| Sensor size | 23 mm x 23 mm |
| Resolution | 5120× 5120 |
| Max. frame rate | 40 fps @5120× 5120 |
| Dynamic range | 58 dB |
| SNR | 40 dB |
| Gain | 0 dB to 15 dB |
| Exposure time | 45 μs to 10 s |
| Shutter mode | Off/Once/Continuous exposure mode |
| Mono/color | Mono |
| Pixel format | Mono 8/10/10p/12/12p |
| Binning | Supports 1 x 2, 2 x 1, 2 x 2 |
| Decimation | Supports 2 x 2 |
| Reverse image | Supports horizontal and vertical reverse image output |
| Image buffer | 1024 MB |
| Electrical features | |
| 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 x 1 (LineO), |
| | opto-isolated output x 1 (Line1), bi-directional non-isolated I/O x 1 (Line2), and RS-232 x 1 |
| Power supply | 12 VDC to 24 VDC |
| Power consumption | Approx. 14 W@12 VDC |
| Structure | |
| Lens mount | M58-mount, optical back focal length 11.48 mm (0.45") |
| | F-mount, optical back focal length 46.5 mm (1.8") |
| Dimension | M58-mount with fan: 74 mm × 74 mm × 72.7 mm (2.9" × 2.9" × 2.86") |
| | F-mount with fan: 74 mm × 74 mm × 78.7 mm (2.9" × 2.9" × 3.1") |
| Weight | M58-mount with fan: < 450 g (1.0 lb.), F-mount with fan: < 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, without condensation |
| General | |
| Client software | MVS or third-party software meeting with GigE Vision Protocol |
| Operating system | Windows XP/7/10 32/64-bit |
| Compatibility | GigE Vision V2.0, GenlCam |
| Certification | CE, FCC, RoHS, KC |

