

CHGM-2500M/C

25 MP CMOS GigE Area Scan Camera



GEN*i*CAM

GIG*E*
VISION

Introduction

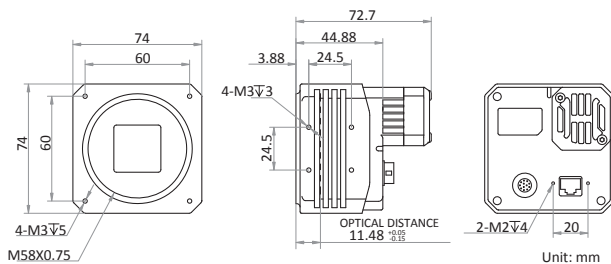
CHGM-2500M/C camera adopts OnSemi PYTHON25K sensor to provide high-quality image. It uses GigE interface to transmit non-compressed images in real time with max. frame rate reaching 4.64 fps.

Key Feature

- Resolution of 5120 × 5120 and pixel size of 4.5 μm × 4.5 μm
- Adopts GigE interface providing max. transmission distance of 100 meters without relay
- Adopts local memory for burst transmission and retransmission
- Compact design with mounting holes on the up and bottom panels for flexible mounting
- Compatible with GigE Vision V2.0 Protocol, GeniCam Standard, and the third-party software based on these protocol and standard

Dimension

M58-mount with fan:



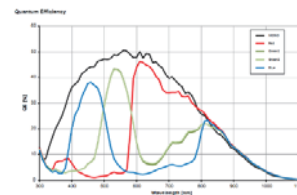
Available Model

- M58-mount with fan, mono camera: CHGM-2500M-M58
- F-mount with fan, mono camera: CHGM-2500M-F
- M58-mount with fan, color camera: CHGM-2500C-M58
- F-mount with fan, color camera: CHGM-2500C-F

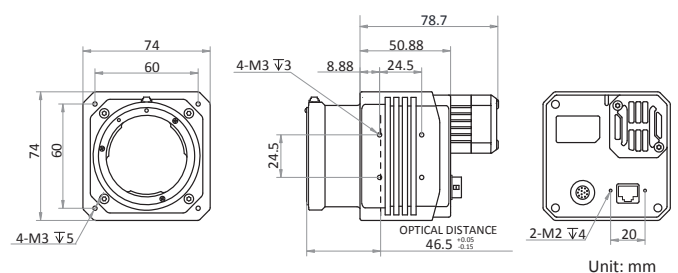
Applicable Industry

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

Sensor Quantum Efficiency



F-mount with fan:



Specification

Model	CHGM-2500M	CHGM-2500C
Camera		
Sensor type	CMOS, global shutter	
Sensor model	OnSemi PYTHON25K	
Pixel size	4.5 μm \times 4.5 μm	
Sensor size	23 mm \times 23 mm	
Resolution	5120 \times 5120	
Max. frame rate	4.64 fps @5120 \times 5120	
Dynamic range	58 dB	
SNR	41 dB	
Gain	0 dB to 15 dB	
Exposure time	80 μs to 10 s	
Shutter 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
Binning	Supports 2 \times 2, 4 \times 4	Not support
Decimation	Supports 2 \times 2	
Reverse image	Supports horizontal and vertical reverse image output	
Electrical features		
Data interface	Gigabit Ethernet	
Digital I/O	12-pin Hirose connector provides power and I/O, including opto-isolated input x 1 (Line0), opto-isolated output x 1 (Line1), bi-directional non-isolated I/O x 1 (Line2), RS232 x 1, and full-duplex RS485 x 1	
Power supply	9 VDC to 13 VDC	
Power consumption	< 6.7 W@12 VDC	< 7.8 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 \times 74 mm \times 72.7 mm (2.9" \times 2.9" \times 2.86") F-mount with fan: 74 mm \times 74 mm \times 78.7 mm (2.9" \times 2.9" \times 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 $^{\circ}\text{C}$ to 50 $^{\circ}\text{C}$ (32 $^{\circ}\text{F}$ to 122 $^{\circ}\text{F}$) Storage temperature: -30 $^{\circ}\text{C}$ to 70 $^{\circ}\text{C}$ (-22 $^{\circ}\text{F}$ to 158 $^{\circ}\text{F}$)	
Humidity	20% to 95% RH, without condensation	
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	