# CHGM-2500M/C

25 MP CMOS GigE Area Scan Camera



GEN**<i>**CAM



### Introduction

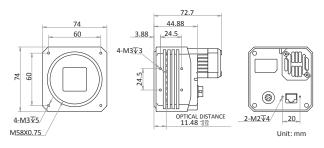
CHGM-2500M/C camera adopts OnSemi PYTHON25K sensor to provide high-quality image. It uses GigE interface to transmit non-compressed images in real time with max. frame rate reaching 4.64 fps.

### **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, GenlCam Standard, and the third-party software based on these protocol and standard

## Dimension

#### M58-mount with fan:



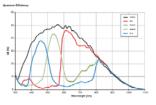
## **Available Model**

- 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

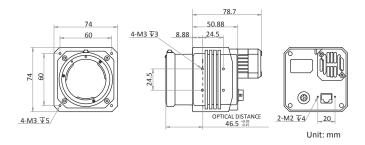
# **Applicable Industry**

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

# Sensor Quantum Efficiency



F-mount with fan:





# Specification

Mono 8/10/10p/12/12p YUV422Packed, YUV422_YUYV_Packed   Binning Supports 2 × 2, 4 × 4 Not support   Decimation Supports 2 × 2 Supports 2 × 2   Reverse image Supports horizontal and vertical reverse image output   Electrical features Supports 2 × 2   Data interface Gigabit Ethernet	Model	CHGM-2500M	CHGM-2500C	
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   4.64 fps @5120 × 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     Pixel format   Mono 8/10/10p/12/12p     Mono 8/10/10p/12/12p   Mono 8/10/12, Bayer RG 8/10/10p/12/12     YUV422Packed, YUV422_YUYV_Packed   Binning     Supports 2 × 2, 4 × 4   Not support     Decimation   Supports 2 × 2     Reverse image   Supports 1 × 2     Bat interface   Gigabit Ethernet	Camera		•	
Pixel size4.5 μm × 4.5 μmSensor size23 mm × 23 mmResolution5120 × 5120Max. frame rate4.64 fps @5120 × 5120Dynamic range58 dBSNR41 dBGain0 dB to 15 dBExposure time80 μs to 10 sShutter modeOff/Once/Continuous exposure modeMono/colorMonoPixel formatMono 8/10/10p/12/12pBinningSupports 2 × 2, 4 × 4BinningSupports 2 × 2Reverse imageSupports 2 × 2Reverse imageSupports brizontal and vertical reverse image outputElectrical featuresGigabit Ethernet	jensor type	CMOS, global shutter		
Sensor size   23 mm x 23 mm     Resolution   5120 × 5120     Max. frame rate   4.64 fps @5120 × 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     Pixel format   Mono 8/10/10p/12/12p     Binning   Supports 2 × 2, 4 × 4     Supports 2 × 2   Not support     Pecimation   Supports 2 × 2     Reverse image   Supports horizontal and vertical reverse image output     Electrical features   Gigabit Ethernet	iensor model			
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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/12/12     Binning   Supports 2 × 2, 4 × 4   Not support     Decimation   Supports 2 × 2   Reverse image   Supports horizontal and vertical reverse image output     Electrical features   Gigabit Ethernet   Gigabit Ethernet	ain	0 dB to 15 dB		
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Reverse image Supports horizontal and vertical reverse image output   Electrical features Gigabit Ethernet				
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Data interface Gigabit Ethernet	-			
		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		
	ower supply	9 VDC to 13 VDC		
Power consumption     < 6.7 W@12 VDC			< 7.8 W@12 VDC	
Structure	-			
		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.)	Veight			
Ingress protection IP40 (under proper lens installation and wiring)	ngress protection	IP40 (under proper lens installation and wiring)		
Temperature   Working temperature: 0 °C to 50 °C (32 °F to 122 °F)	emperature	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	lumidity	20% to 95% RH, without condensation		
General				
Client software MVS or third-party software meeting with GigE Vision Protocol	lient 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	Operating system	32/64-bit Windows XP/7/10, 32/64-bit Linux and 64-bit MacOS		
Compatibility GigE Vision V2.0, GenlCam		GigE Vision V2.0, GenlCam		
Certification CE, FCC, RoHS, KC	Compatibility	dige vision v2.0, denicani		

