CHTGM-2500C

25 MP CMOS 10 GigE Camera

GEN<i>CAM

10 GiGE VISION

## Introduction

CHTGM-2500C camera adopts OnSemi PYTHON25K sensor to provide high-quality image. It uses 10 GigE interface to transmit non-compressed image in real-time with max. frame rate reaching 40 fps.

Key Feature

- Resolution of 5120 × 5120 and pixel size of 4.5 μm × 4.5 μm
- Adopts 10 GigE interface providing max. transmission distance of 100 meters without relay
- Up to 1024 MB local memory for burst transmission and retransmission
- Compatible with GigE Vision Protocol V2.0, GenlCam Standard, and third-party software based on these protocol and standard
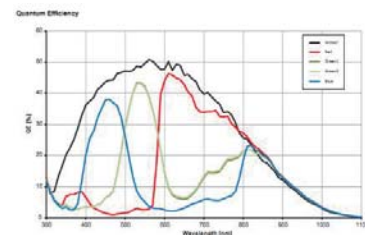
Available Model
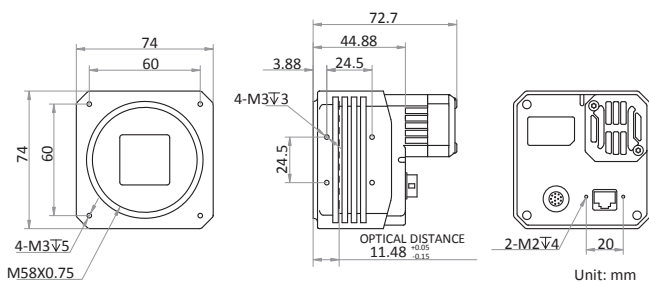
M58-mount with fan, color camera: CHTGM-2500C-M58

F-mount with fan, color camera: CHTGM-2500C-F

Applicable Industry

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

Sensor Quantum Efficiency

Dimension

M58-mount with fan:

F-mount with fan:
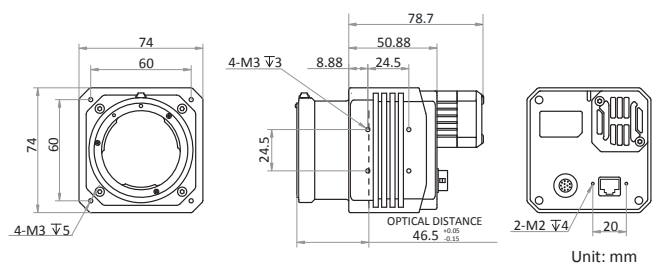
Specification

Model	CHTGM-2500C
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	41 dB
Gain	0 dB to 15 dB
Exposure time	45 μs to 10 s
Shutter mode	Off/Once/Continuous exposure mode
Mono/color	Color
Pixel format	Mono 8/10/12, Bayer RG 8/10/10p/12/12p, YUV422Packed, YUV422_YUYV_Packed, RGB 8, BGR 8
Binning	Not support
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
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), and RS232 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" × 2.9")
	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	32/64-bit Windows XP/7/10
Compatibility	GigE Vision V2.0, GenlCam
Certification	CE, FCC, RoHS, KC