

# CHCPM-4300M

## 43 MP CMOS CoaXPress Area Scan Camera



GEN*i*CAM

CoaXPress®

### Introduction

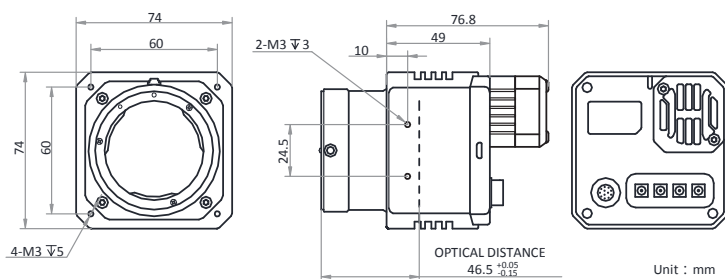
CHCPM-4300M camera adopts GMAX0806 sensor to provide high-quality image. It uses CoaXPress interface to transmit non-compressed images in real time. With high dynamic range and signal-noise ratio, the camera is an ideal selection for detecting boards.

### Key Feature

- Resolution of 7904 × 5432, and pixel size of 2.8 μm × 2.8 μm
- Adopts global shutter CMOS to provide high dynamic range, SNR, and high-quality image.
- Supports PRNU and FPN.
- Adopts CXP-6 interface to transmit data.
- Compatible with CoaXPress Protocol and GenICam Standard.

### Dimension

F-mount with fan:



### Available Model

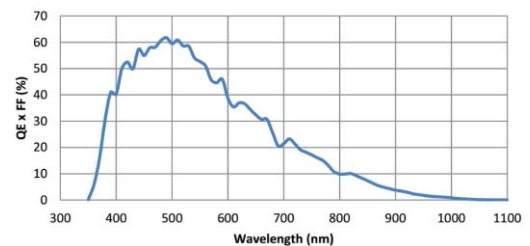
M58-mount with fan, mono camera:  
CHCPM-4300M-M58

F-mount with fan, mono camera:  
CHCPM-4300M-F

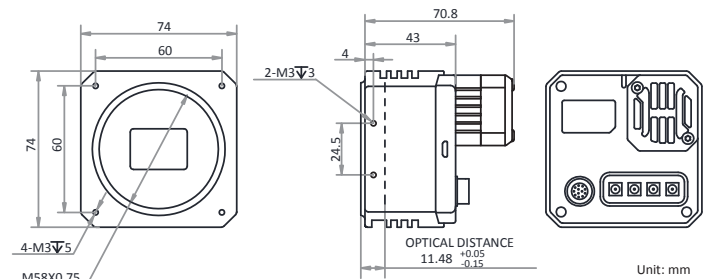
### Applicable Industry

PCB AOI, FPD, high-accuracy measurement, railway related application, etc.

### Sensor Quantum Efficiency



M58-mount with fan:



## Specification

<b>Model</b>	<b>CHCPM-4300M</b>
<b>Camera</b>	
<b>Sensor type</b>	Global shutter CMOS
<b>Sensor model</b>	GMAX0806
<b>Pixel size</b>	2.8 $\mu\text{m}$ $\times$ 2.8 $\mu\text{m}$
<b>Sensor size</b>	22.16 mm $\times$ 15.22 mm
<b>Resolution</b>	7904 $\times$ 5432
<b>Max. frame rate</b>	4 CH (6.25 Gbps): 16.4 fps @7904 $\times$ 5432 2 CH (6.25 Gbps): 16.4 fps @7904 $\times$ 5432 1 CH (6.25 Gbps): 13 fps @7904 $\times$ 5432
<b>Mono/color</b>	Mono
<b>Pixel format</b>	Mono 8/10/12
<b>Dynamic range</b>	69 dB
<b>SNR</b>	39 dB
<b>Gain</b>	2.0 x to 6.0 x
<b>Exposure time</b>	12 $\mu\text{s}$ to 2 s
<b>Shutter mode</b>	Off/Once/Continuous exposure mode
<b>Acquisition mode</b>	Continuous mode, single frame mode
<b>Reverse image</b>	Supports horizontal and vertical reverse image output
<b>Electrical features</b>	
<b>Data interface</b>	CoaXPress (DIN interface)
<b>Digital I/O</b>	12-pin Hirose connector provides I/O, including opto-isolated input x 1 (Line 0), opto-isolated output x 1 (Line 1), bi-directional non-isolated I/O x 1 (Line 2), RS232 x 1.
<b>Power supply</b>	9 VDC to 24 VDC
<b>Power consumption</b>	< 7.2 W@12 VDC
<b>Structure</b>	
<b>Lens mount</b>	F-Mount: optical back focal length 46.5 mm (1.8") M58-Mount: optical back focal length 11.48 mm (0.5")
<b>Dimension</b>	F-Mount: 74 mm $\times$ 74 mm $\times$ 76.8 mm (2.9" $\times$ 2.9" $\times$ 3.0") M58-Mount: 74 mm $\times$ 74 mm $\times$ 70.8 mm (2.9" $\times$ 2.9" $\times$ 2.8")
<b>Weight</b>	F-Mount: Approx. 650 g (1.4 lb.) M58-Mount: Approx. 540 g (1.2 lb.)
<b>Ingress protection</b>	IP40 (under proper lens installation and wiring)
<b>Temperature</b>	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 $^{\circ}\text{F}$ )
<b>Humidity</b>	20% to 95% RH, without condensation
<b>General</b>	
<b>Client software</b>	Frame grabber software meeting with CoaXPress Protocol
<b>Operating system</b>	32/64-bit Windows 7/10 with 8 GB memory or above
<b>Compatibility</b>	CoaXPress, GenICam