CHUM-501M/C

5.0 MP 2/3" CMOS USB3.0 Area Scan Camera

USB 3

PWR

GEN<i>CAM

US3
VISION

Introduction

CHUM-501M/C camera adopts Sony IMX264 sensor to provide high-quality image. It uses USB3.0 interface to transmit non-compressed images in real time with max. frame rate reaching 35 fps.

Key Feature

- Supports auto and manual adjustment for gain, exposure control, white balance, LUT, Gamma correction, etc.
- Supports hardware triggering, software triggering and free run mode
- Adopts M2 screw holes for securing cable that connects USB3.0 interface
- Compatible with USB3 Vision Protocol, GenlCam Standard, and the third-party software based on these protocol and standard
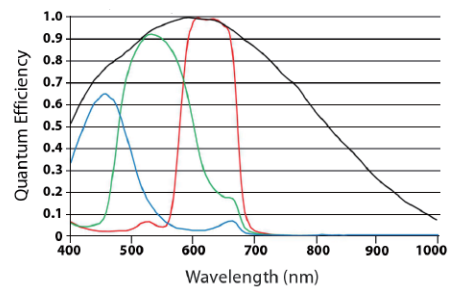
Available Model

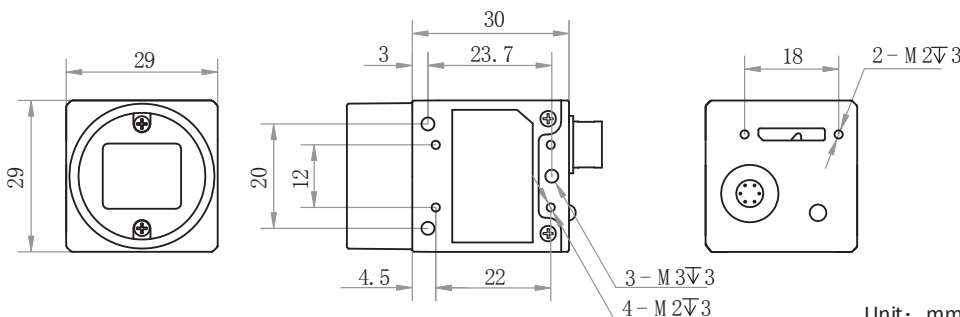Mono camera: CHUM-501M
Color camera: CHUM-501C

Applicable Industry

Electronic semiconductor, factory automation, logistics, liquor and beverage, medicine packing, etc.

Sensor Quantum Efficiency

Dimension

Unit：mm

Specification

Model	CHUM-501M	CHUM-501C
Camera		
Sensor type	CMOS, global shutter	
Sensor model	Sony IMX264	
Pixel size	3.45 μm × 3.45 μm	
Sensor size	2/3"	
Resolution	2448 × 2048	
Max. frame rate	35 fps @2448 × 2048	
Dynamic range	72 dB	
SNR	40.2 dB	
Gain	0 dB to 15 dB	0 dB to 17 dB
Exposure time	50 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 GB 8/10/10p/12/12p, YUV422Packed, YUV422_YUYV_Packed, RGB8
Acquisition mode	Continuous mode and Single Frame mode	
Binning	Not support	
Decimation	Not support	
Reverse image	Supports horizontal and vertical reverse image output	
Image buffer	128 MB	
Electrical features		
Data interface	USB3.0	
Digital I/O	6-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)	
Power supply	5 VDC to 15 VDC, supports USB3.0 power supply	
Power consumption	< 2.8 W @5 VDC	
Structure		
Lens mount	C-Mount	
Dimension	29 mm × 29 mm × 30 mm (1.1" × 1.1" × 1.2")	
Weight	Approx. 56 g (0.12 lb.)	
Ingress protection	IP30 (under correct 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 80% RH, without condensation	
General		
Client software	MVS or third-party software meeting with USB3 Vision Protocol	
Operation system	32/64-bit Windows XP/7/10, 32/64-bit Linux	
Compatibility	USB3 Vision, GenlCam	
Certifications	CE, FCC, RoHS, KC	