

CHUM-2000M/C

20 MP 1" CMOS USB3.0 Area Scan Camera



GEN*i*CAM

USBTM
VISION

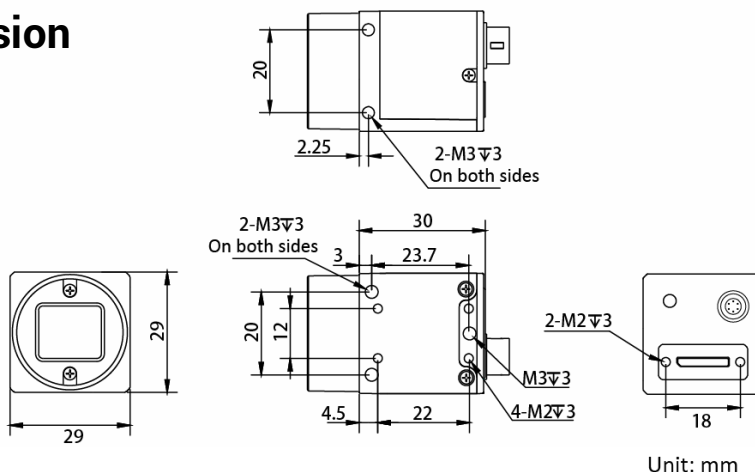
Introduction

CHUM-2000M/C camera adopts Sony® IMX183 sensor to provide high-quality images. It uses USB3.0 interface to transmit non-compressed images in real time, and its max. frame rate can reach 19.2 fps in full resolution.

Key Feature

- Adopts brand new design to reduce power consumption.
- Compact design with mounting holes on panels for flexible mounting from 4 sides.
- Provides high sensitivity, wide dynamic range, and low noise.
- Compatible with USB3 Vision Protocol, GenICam Standard, and the third-party software based on the protocol and standard.

Dimension



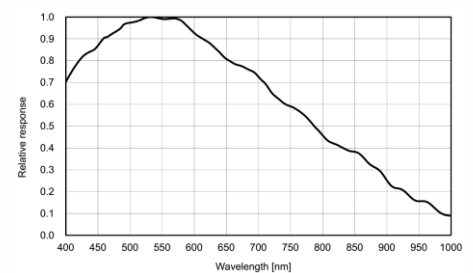
Available Model

- Mono camera: CHUM-2000M
- Color camera: CHUM-2000C

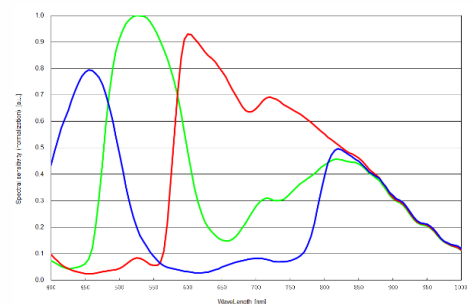
Applicable Industry

Electronic semiconductor, factory automation, medical packaging, etc.

Sensor Quantum Efficiency



CHUM-2000M



CHUM-2000C

Specification

Model	CHUM-2000M	CHUM-2000C
Camera		
Sensor type	CMOS, rolling shutter	
Sensor model	Sony® IMX183	
Pixel size	2.4 μm × 2.4 μm	
Sensor size	1"	
Resolution	5472 × 3648	
Max. frame rate	19.2 fps @5472 × 3648 Mono 8	19.2 fps @5472 × 3648 Bayer GB 8
Dynamic range	65.5 dB	
SNR	41.5 dB	
Gain	0 dB to 24 dB	
Exposure time	44 μs to 0.83 sec	
Exposure mode	Off/Once/Continuous exposure mode, supports Global Reset and Rolling	
Mono/color	Mono	Color
Pixel format	Mono 8/10/10Packed/12/12Packed	Mono 8/10/12, Bayer GB 8/10/10Packed /12/12Packed , YUV422_YUYV_Packed, YUV 422 Packed, RGB 8, BGR 8
Binning	Supports 1 × 1, 2 × 2, 4 × 4	
Decimation	Supports 1 × 1, 2 × 2, 4 × 4	
Reverse image	Supports horizontal and vertical reverse image output	
Electrical feature		
Data interface	USB3.0, compatible with USB2.0	
Digital I/O	6-pin P7 connector provides power and I/O, including opto-isolated input × 1 (Line 0), opto-isolated output × 1(Line 1), bi-directional non-isolated I/O × 1 (Line 2)	
Power supply	9 VDC to 24 VDC, supports USB3.0 power supply	
Power consumption	Typ. 2.3 W @5 VDC (USB3.0 provides power supply)	
Mechanical		
Lens mount	C-Mount	
Dimension	29 mm × 29 mm × 30 mm (1.1" × 1.1" × 1.2")	
Weight	Approx. 80 g (0.18 lb.)	
Ingress protection	IP40 (under proper lens installation and wiring)	
Temperature	Working temperature: -30 °C to 60 °C (-22 °F to 140 °F) Storage temperature: -30 °C to 70 °C (-22 °F to 158 °F)	
Humidity	20% to 95% RH, non-condensing	
General		
Client software	MVS or third-party software meeting with USB3.0 Vision Protocol	
Operating system	32/64-bit Windows XP/7/10, 32/64-bit Linux and 64-bit MacOS	
Compatibility	USB3 Vision, GenICam	
Certification	CE, FCC, RoHS, KC	