CHUM-40M/C

0.4 MP 1/2.9" CMOS USB3.0 Camera





Introduction

CHUM-40M/C camera adopts Sony IMX 287 sensor to provide high-quality image. It uses USB3.0 interface to transmit non-compressed images in real time with max. frame rate reaching 523.5 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
- Up to 128 MB local memory for burst transmission and retransmission
- Compatible with USB3 Vision Protocol, GenlCam Standard, and the third-party software based on these protocol and standard

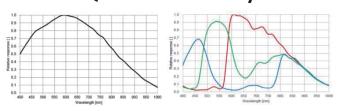
Available Model

Mono Camera: CHUM-40M Color Camera: CHUM-40C

Applicable Industry

Electronic semiconductor, factory automation, medicine package, etc.

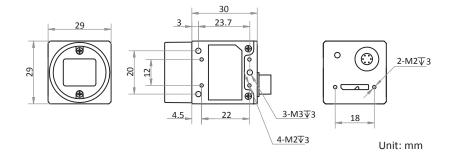
Sensor Quantum Efficiency



CHUM-40M

CHUM-40C

Dimension





Specification

Model	CHUM-40M	CHUM-40C
Camera	C110141-40141	CHOWI-40C
Sensor type	CMOS, global shutter	
Sensor model	Sony IMX287	
Pixel size	6.9 μm × 6.9 μm	
Sensor size	1/2.9"	
Resolution	720 × 540	
Max. frame rate	Mono8 523.5 fps @720 × 540	Bayer8 523.5 fps @720 × 540
Dynamic range	74 dB	Bayero 323.3 1p3 @ 720 × 3 10
SNR	41 dB	
Gain	0 dB to 20 dB	
Exposure time	1 μs to 10 s	
Shutter mode	Off/ Once /Continuous exposure mode	
Mono/color	Mono	Color
Pixel format		Mono 8/10/12, Bayer RG 8/10/10p/12/12p,
	Mono 8/10/10p/12/12p	YUV422Packed, YUV422_YUYV_Packed, RGB 8, BGR 8
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 supply and I/O, including opto-isolated input x 1 (Line	
	0), opto-isolated output x 1 (Line 1), and bi-directional non-isolated I/O x 1 (Line 2)	
Power supply	5 VDC to 15 VDC, supports USB3.0 power supply	
Power consumption	Approx. 3 W@12 VDC	
Structure		
Lens mount	C-Mount	
Dimension	29 mm × 29 mm × 30 mm (1.1" × 1.1" × 1.2")	
Weight	Approx. 80 g (0.2 lb.)	
Ingress protection	IP 30 (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 80% RH, without condensation	
General		
Client software	MVS or third-party software meeting with USB3 Vision Protocol	
Operating system	32/64-bit Windows XP/7/10 and 32/64-bit Linux	
Compatibility	USB3 Vision, GenlCam	
Certification	CE, FCC, RoHS, KC	

