

CHUM-1990M/C 20MP, 1" CMOS, USB 3.0 Camera

USBTM
VISION



CHUM-1990M/C 20 MP 1" CMOS USB 3.0 Camera is a high quality device that can be used in a variety of applications, including electronic semiconductor fabrication, factory automation, medical packaging.

Key Features

- Rolling shutter sensor, ideal image and high cost performance
- Supports auto/manual gain adjustment, exposure time, white balance, LUT, gamma correction and binning.
- Supports hardware trigger, software trigger and free run.
- Supports custom ROI to increase frame rate by reducing resolution, and supports Reverse X output.
- Multiple images can be saved on the 128MB on-board buffer for image transmission under Burst mode and resending data.
- The USB3.0 interface is tightly locked to prevent accidental unplugging and dropping.
- Compatible with USB 3.0 Vision and GenICam standard, can be compatible by third party software.

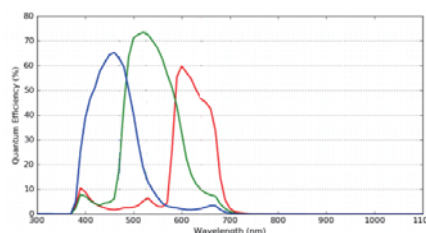
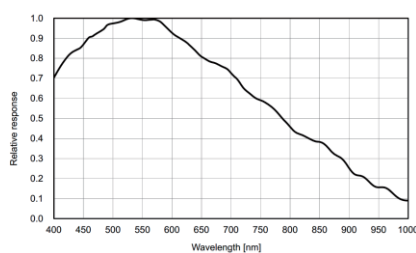
Application Scenarios

- Electronic semiconductor
- Factory automation
- Medical packaging

Order Models

Mono: CHUM-1990M
Color: CHUM-1990C

Spectral Response



CHUM-199M Quantum Efficiency CHUM-199C Quantum Efficiency

Specifications

Model	CHUM-1990M	CHUM-1990C
Parameters	20MP, 1" CMOS, USB 3.0 Camera	
Camera		
Sensor	IMX183	
Pixel Size	2.4μm×2.4μm	
Sensor Size	1"	
Resolution	5472×3648	
Frame Rate	14fps	
Dynamic Range	>65dB	
SNR	>40dB	
Gain Range	0-20dB	
Exposure Time	75μs-1sec	
Shutter Mode	Rolling shutter. Auto-exposure, Manual exposure, and One-key exposure	
Data Interface	USB 3.0	
General Purpose I/O	Opto-isolated input x1, Opto-isolated output x1, Bi-directional non-isolated I/O x1	
Buffer	128MB	
Data Format	Mono 8/10/10p/12/12p	Mono 8/10/12, Bayer GB 8/10/10p/12/12p, YUV 422 Packed, YUV 422_YUYV_Packed, RGB8
General		
Power	Approx. 2.83W@12VDC, Voltage 5-15VDC, USB 3.0 power supply supported	
Temperature	Working Temperature 0~50°C, Storage Temperature -30~70°C	
Humidity	20%-80% RH without condensation	
Dimension	44mm×29mm×60mm	
Weight	Approx. 90g	
Lens Interface	C-Mount	
Software	MVS or Third-Party Software supporting USB 3.0 Vision Protocol	
Operating System	Windows XP/7/10 32/64bits	
Compliance	USB 3.0 Vision V1.0	
Certification	CE, FCC, RoHS	

Recommended Accessories

- **Power:** 12VDC @1A power switch or adapter
- **Cable:** Micro USB 3.0 cable (B Type) recommended

Dimensions

