

MAX Series TE-Cooling M52/C-mount USB3.0 CMOS Camera



Standard C-Mount camera with SONY Exmor or GSENSE CMOS sensors from 4.2M to 62M;

Big pixels or full-frame CMOS sensor;

Two-stage TE-cooling with controllable electric fan;

Sensor chip cooling up to -40°C below ambient temperature;

Working temperature can be regulated to specified temperature in 5 minutes;

Smart structure to assure the heat radiation efficiency and avoid the moisture problem;

IR-CUT/AR coated windows(Optional);

M52 x0.75 or C-mount;

USB3.0 5Gbit/second interface ensuring high speed data transmission;

Up to 1000 seconds long time exposure;

Embedded up to 16bit hardware ISP module;

Including 2-D denoising and sharpening;

Ultra-Fine™ color engine with perfect color reproduction capability;

Support the capture of video and image in software / hardware trigger mode;

With advanced video & image processing application ToupView;

Support both video and trigger modes;

Specification

MAX Series TE-Cooling M52/C-mount USB3.0 CMOS Camera(6)

MAX camera adopts SONY Exmor or GSENSE with big pixel size or full-frame CMOS sensor as the image-picking device and USB3.0 is used as the transfer interface to increase the frame rate.

With the two-stage peltier cooling sensor chip to -40°C below ambient temperature. This will greatly increase the signal to noise ratio and decrease the image noise. Smart structure is designed to assure the heat radiation efficiency and avoid the moisture problem. Electric fan is used to increase the heat radiation speed.

MAX comes with advanced video & image processing application ToupView; Providing Windows/Linux/OSX multiple platform SDK; Native C/C++, C#/VB.NET, DirectShow, Twain Control API;

The MAX can be widely used in low light environment and microscope fluorescence image capture and analysis, as well as the astronomy deep sky application.

Order Code	Sensor & Size(mm)	Pixel(μm)	G Sensitivity Dark Signal	FPS/Resolution	Binning	Exposure
MAX62AM MM1062A	61M/IMX455(M) 2.7"(35.98x23.99) Full Frame	3.76x3.76	871mv with 1/30s 0.039mv with 1/30s 88.3dB/47.1dB	6.1@9568x6380(16bit) 19.1@4784x3190 55.6@3184x2124 191@1040x706	1x1 2x2 3x3 9x9	0.1ms~1000s
MAX62AC MP1062AC	61M/IMX455(C) 2.7"(35.98x23.99) Full Frame	3.76x3.76	484.5mv with 1/30s 0.039mv with 1/30s 85.8dB/47.0dB	6.1@9568x6380(16bit) 19.1@4784x3190 55.6@3184x2124 191@1040x706	1x1 2x2 3x3 9x9	0.1ms~1000s
MAX24AC	24M/IMX410(C)	5.94x5.94	573mv with 1/30s	15.3@6064x4040(14bit)	1x1	0.1ms~1000s

MP1024A	2.7"(36.02x24.00) Full Frame		0.037mv with 1/30s 87.3dB/50.2dB	41@3024x2012 114@2016x1342	2x2 3x3	
MAX04AM MM1004A	4.2M/GSENSE2020e(M) 1.2"(13.31x13.31)	6.5x 6.5	8.1x107 (e-/((W/m2).s)) Peak QE 64.2% @595nm 13(e-/s/pix) 66.6dB/46dB	44.5@2048x2048 44.5@1024 x 1022	1x1 2x2	0.1ms~ 1000s
MAX04BM MM1004B	4.2M/GSENSE2020BSI(M, UV) 1.2"(13.31x13.31)	6.5x 6.5	1.1x108 (e-/((W/m2).s)) Peak QE 93.7% @550nm 80(e-/s/pix) 65.8dB/47dB	43.5@2048 x2048 43.5@1024 x1024	1x1 2x2	0.1ms~ 1000s
MAX04CM MM1004C	4.2M/GSENSE400BSI(M, UV) 2.0"(22.53x22.53)	11 x 11	3.25x108 (e-/((W/m2).s)) Peak QE 95.3% @560nm 345(e-/s/pix) 68.5dB/50dB	37@2048 x2048 37@1024 x1024	1x1 2x2	0.1ms~ 1000s

OTHER HARDWARE CONFIGURATION

Spectral Range	200-1000nm (The spectral response range of each model is different. Please refer to the product manual of each model for detailed parameters)
White Balance	ROI White Balance/ Manual Temp-Tint Adjustment/NA for Monochromatic Sensor
Color Rendering Technique	Ultra Fine Color Engine/NA for Monochromatic Sensor
Capture/Control SDK	Windows/Linux/macOS/Android Multiple Platform SDK(Native C/C++, C#/VB.NET, Python, Java, DirectShow, Twain, etc)
Recording System	Still Picture and Movie(Free running mode or trigger mode)
Cooling System*	Two-stage TE-cooling System -40 °C below Camera Body Temperature

OPERATING ENVIRONMENT

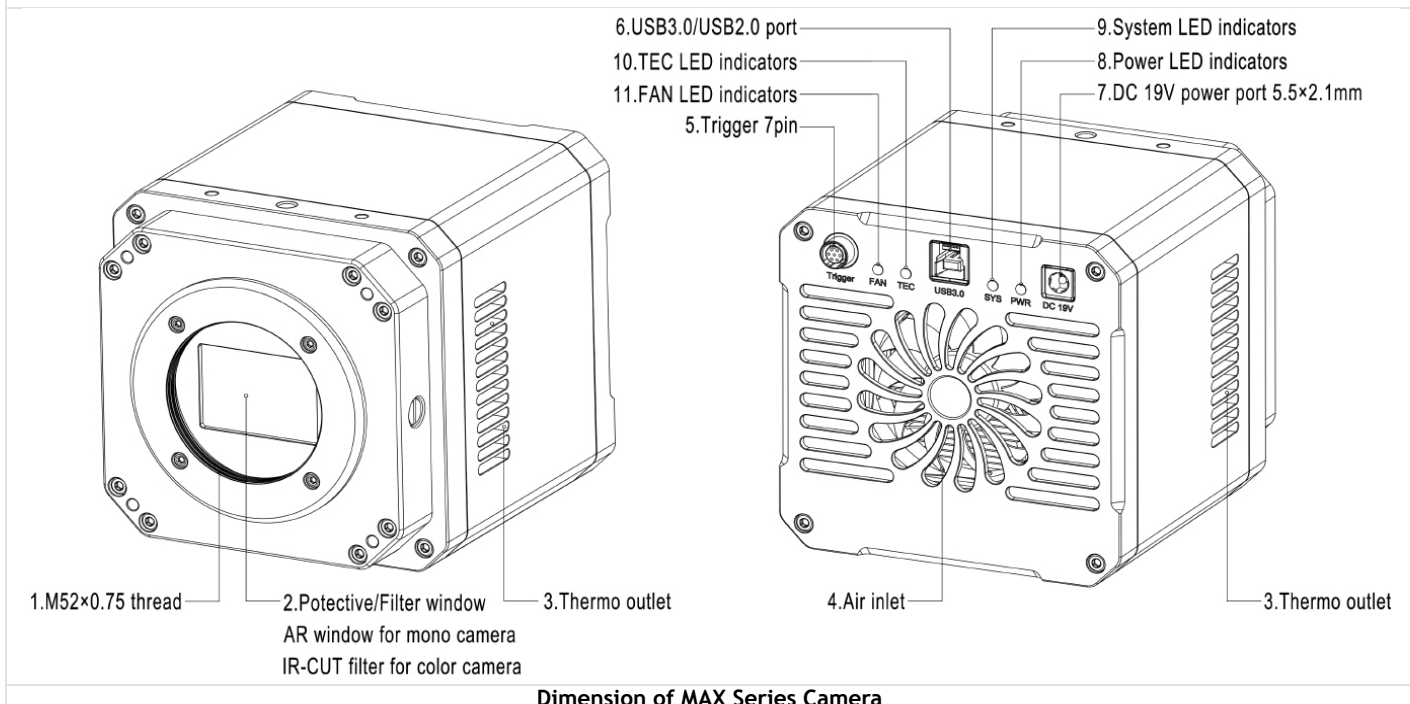
Operating Temperature	-10 °C~ 50 °C
Storage Temperature	-20 °C~ 60 °C
Operating Humidity	30~80%RH
Storage Humidity	10~60%RH
Power Supply	DC 5V over PC USB Port External Power Adapter for Cooling System, DC12V,3A

SOFTWARE ENVIRONMENT

Operating System	Support Microsoft Windows XP / Vista / 7 / 8 / 10(32 & 64 bit) OS X (Mac OS X), Linux
PC Requirements	CPU: Equal to Intel Core2 2.8GHz or Higher
	Memory: 2GB or More
	USB port: USB2.0 High-speed Port
	Display: 17" or Larger CD-ROM

Dimension of MAX Series Camera

The MAX body, made from tough, alloy with CNC technique, ensures a heavy duty, workhorse solution. The camera is designed with a high quality IR-CUT or AR to block the IR light or protect the camera sensor. The fan's vibration is minimized to the low level to eliminate the vibration caused imaging blur. This design ensures a rugged, robust solution with an increased lifespan when compared to the other industrial camera solutions.



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