LC-507MDGM

The transmission speed of USB 3.0 is significantly improved compared to USB 2.0 and GigE cameras. With a transmission bandwidth of 5Gbps and high-speed sensors, a minimum transmission time of 1.2 milliseconds can be achieved for a 300000 pixel camera with 800FPS, and a 20 million pixel camera can also achieve up to 18FPS; Due to sufficient transmission bandwidth, a computer can be compatible with multiple cameras while ensuring high frame rates; The USB 3.0 series has low CPU usage, uses DMA transfer, and the 5Gbps data transfer part hardly occupies CPU resources.

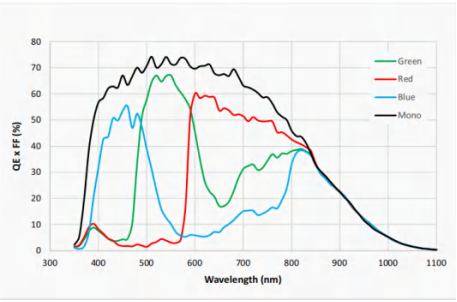
Application Industry:

Suitable for electronic 3C, automated semiconductors, logistics scanning, intelligent transportation, biomedicine, packaging printing.

Product features:

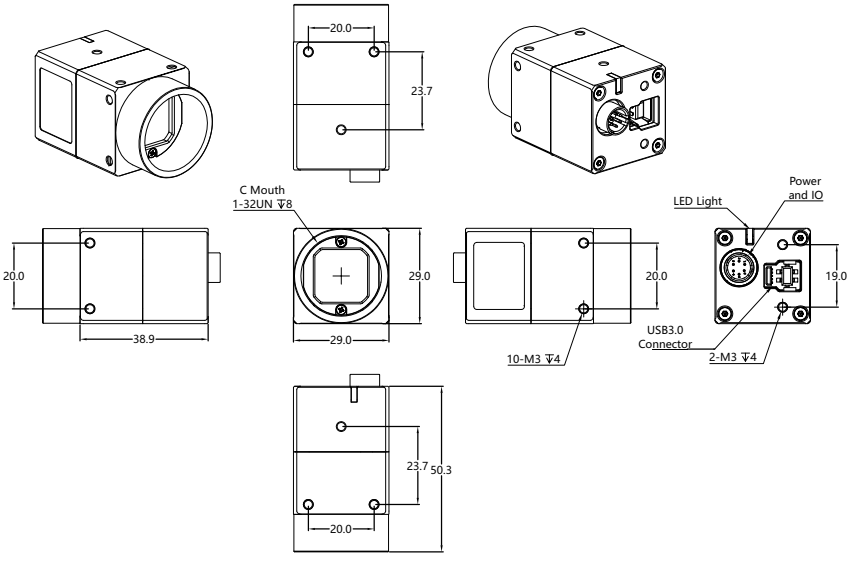
- The camera comes with a programmable IO
- Support external trigger flash synchronization photography
- Support 8bit and 12bit raw Data output
- Fully compatible with GIGE camera SDK, seamlessly replaceable
- Multiple cameras on one computer can work stably without disconnection or frame loss for a long time
- Support PC Linux system and ARM Linux system, can be integrated in embedded devices
- Compatibility Vision, Seamless compatibility Halcon, VisionPro、Labview

Spectrum:



LC-507MDGC/GM

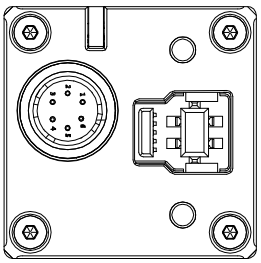
Mechanical specifications:



TECHNICAL PARAMETER

Model	Product Model	LC-507MDGM
	Product Name	USB3.0 Camera
sensor	Colour/black & white	Black and white
	Sensor Model	GMAX3405
	Type of sensor	CMOS
	Optical dimensions	2/3"
	Pixel size	3.4umx3.4um
	Exposure mode	Global exposure
	Effective pixels	5 million
	AD width	12bit
Performance parameters	Signal-to-noise ratio	39.3dB
	Dynamic range	66.9dB
	Sensitivity	2.36x10^7e-/((W/m^2)·s)@540nm
	Quantum efficiency	75% @540nm; 33% @850nm
	Resolution @ frame rate	2448X2048 MAX@79 FPS；1224X1024 BIN2X2(HD)@163FPS
	Output pixel width	12 bit
	Video output format	Mono 8/12 bit
	Maximum gain multiple	16
	Exposure time range	0.0061～12708.7ms
	Trigger mode	Continuous mode/soft trigger/hard trigger
	Frame buffer	128M Bytes
	User defined data area	2KB
Electrical characteristics	data interface	USB3.0
	I/O	1 optocoupler isolated input, 1 optocoupler isolated output, 1 non isolated input/output
	Power supply	USB 5V/Aviation head power supply12V-24V
	Power	＜3W
Structural characteristics	cooling method	Aluminum alloy body with natural heat dissipation
	Lens mount	C
	External dimensions	29x29x38.9mm(The above dimensions do not include the lens mount and rear shell interface)
	Weight	<60g
	IP Protection rating	IP40
	Temperature	Operating temperature 0-50 ° C/storage temperature-30-60 ° C
	Humidity	Working humidity 20-80% (no condensation)/storage humidity 20-95% (no condensation)
Protocol specification	Operating system	WINXP、WIN7/8/10/11 32&64 system、Linux 32&64 system、ARM Linux system、Android system、MAC system
	Software	Support USB 3Vision Protocol software, Directshow component, Halcon component, Labview dedicated drive, OCX component, TWAIN component
	Visual Standards Protocol	USB3 Vision、GenICam
	Certification	CE,RoHS
Other functions	Other functions	Support ROI custom resolution, contrast and gamma adjustment, saturation adjustment, white balance correction, black level correction, custom dead center coordinate correction, ISP image processing acceleration, 3D noise reduction, custom LUT table, frame rate adjustment, custom camera name, etc. of any size

Definition of line order



Ports	PIN number	Line color	Signal name	Signal instructions	Remarks
Port A	1	Red	DC12V+	Camera power input positive terminal	
	2	White	GPI1+/TRIG_IN+	GPI1 positive terminal/ trigger input positive terminal	Default to trigger input
	3	Brown	GPI2/GPO2	GPIO2 input/output	Non isolated bidirectional IO
	4	Green	GPO1+/STRB_OUT+	GPO1 positive terminal/flash output positive terminal	Default is flash output
	5	Yellow	GPO1-/STRB_OUT-/TRIG_IN-	GPO1 negative terminal/flash output negative terminal/ trigger input negative terminal	GPIO common negative terminal
	6	Black	GND	Camera power input negative terminal	