

Product number

MV-SUA133GC/M

The transmission speed of USB3.0 is significantly higher than USB2.0 and GigE cameras. With 5Gbps transmission and bandwidth and high-speed sensor, The camera of 0.3MP and 800 fps can achieve a minimum transmission time of 1.2 ms, and a 20MP pixel camera can also reach 18fps; Due to the abundant transmission bandwidth, a computer can guarantee high frame rate compatible with multiple cameras; The USB3.0 series has a low CPU utilization. DMA transmission is adopted. The 5Gbps data transmission part hardly occupies CPU resources.



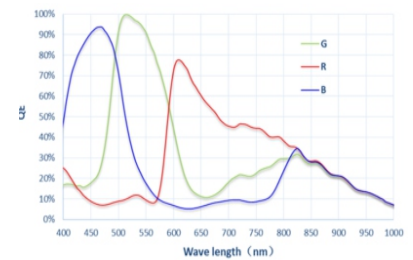
### Application industry:

It is widely used in electronic 3C, automatic semiconductor, logistics code scanning, intelligent transportation, biomedicine, packaging and printing, etc.

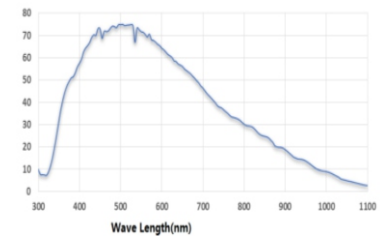
### Feature of product:

- The camera comes with programmable IO
- Support external trigger flash to take photos synchronously
- Support 16bit grayscale and 48bit color lossless format output
- Fully compatible with GIGE camera's SDK for seamless replacement
- 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 into embedded devices
- Compatible with Vision protocol, seamlessly compatible with Halcon, VisionPro, Labview and other vision software

### Spectrum:



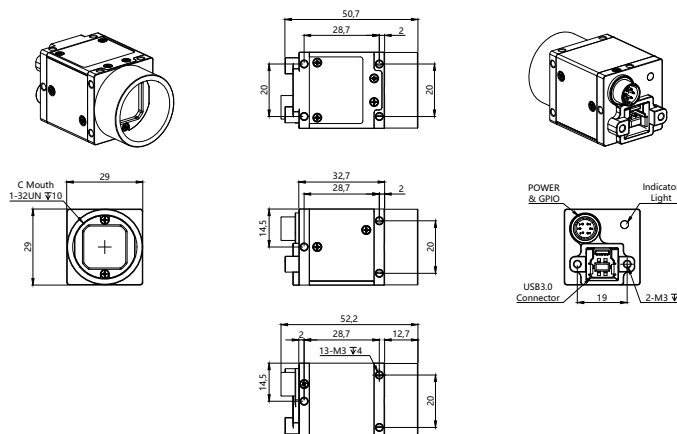
MV-SUA133GC



MV-SUA133GM

### Mechanical Specifications:

Unit:mm



## Parameter:

Parameter	Model	MV-SUA133GC	MV-SUA133GM
sensor		1/2.7" CMOS	
shutter type		Global Shutter	
camera type		color	Mono
Pixel size		4.0μmX4.0μm	
Effective Pixels		1.3MP	
Resolution@ Frame Rate		1280X1024@245FPS	
pixel depth		8bit	
Sensitivity		8 V/Lux-s	
GPIO		1 trigger input, 1 flash control output; 1 GPO output	
Acquisition mode		Continuous/soft trigger/hard trigger	
Maximum gain (multiple)		6	
Exposure time range (ms)		0.00194~31	
Filter		Standard 650nm IR cut filter	Standard double-sided AR antireflection film
Frame buffer		128M Bytes	
User-defined data area		2K Bytes	
Video output format		Bayer8	Mono8
Vision Standard Agreement		USB3Vision 1.0,GenICam	
Lens Mount		C-Mount	
Data interface		USB3.0 TYPE B	
Power supply		5V, USB bus power supply	
Power		<3W	
Dimensions		29(mm)X29(mm)X32.7(mm)(Without lens mount and rear shell interface)	
Weight		<75g	
Operating temperature		0~50°C	
Operating humidity		20~80%(No condensation)	
storage temp		-30~60°C	
Storage humidity		20~95%(No condensation)	
Operating system		WIINXP/WIN7/8/10 32@64-bit system, Linux and ARM Linux driver (customizable), Android platform driver (customizable)Linux and ARM Linux driver (customizable), Android platform driver (customizable)	
Driver		Directshow component Halcon special component Labview special driver OCX component TWAIN component	
Programming language pack		C/C++/C#/VB6/VB.NET/Delphi/BCB/Python/Java	
Other functions		Support any size ROI custom resolution, contrast and gamma adjustment, saturation adjustment, white balance correction, black level correction, custom dead point coordinate correction,ISP image processing acceleration, 3D noise reduction, custom LUT table, frame rate adjustment, custom camera name, etc.	

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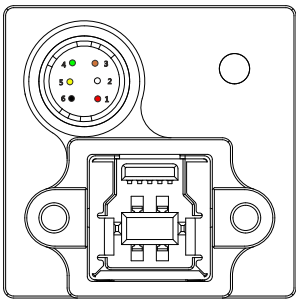
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## SUA/SUF Model selection table of camera tail patch

Suffix	Function	Aircraft head line sequenceDefinition diagram	12V Power supply	Power supply shrapnel type Aircraft head	C-mount	CS-mount	State
-T1V-C		1	●	●	●		Recommend
-T		2		●		●	Planned shutdown
-T-C		2		●	●		Planned shutdown
-TV-C		3	●	●	●		Planned shutdown

### Line sequence definition1



Port	Pin number	Line color	Signal name	Signal description	Remarks
Port A	1	Red	PWR12V	Camera power input positive terminal	
	2	White	GPI1+/TRIG_IN+	GPI1 Positive end / trigger input positive end	Default to trigger input
	3	Brown	GPI2/GPO2	GPI02 Input / output	Non isolated bidirectional IO
	4	Green	GPO1+/STRB_OUT+	GPO1Positive end / flash output positive end	Default to 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	PWRGND	Camera power input negative terminal	

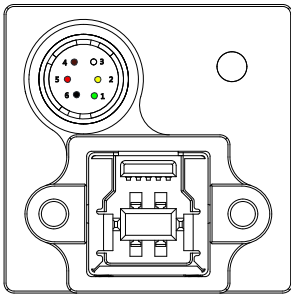
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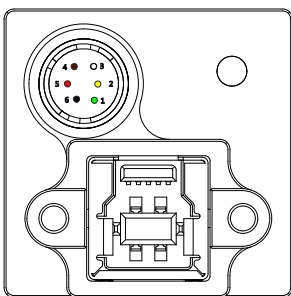
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## Line sequence definition2



Pin number	Line color	Signal name	Signal description	Remarks
1	Green	GPO1+/STRB_OUT+	GPO1Positive end / flash output positive end	Default to flash output
2	Yellow	GPO1-/STRB_OUT-	GPO1Negative terminal / flash output negative terminal	Default to flash output
3	White	GPI1+/TRIG_IN+	GPI1Positive end / trigger input positive end	Default to trigger input
4	Brown	GPI1-/TRIG_IN-	GPI1Negative end / trigger input negative end	Default to trigger input
5	Red	GPO2+	GPO2Positive end output	
6	Black	GPO2-	GPO2Negative end output	

## Line sequence definition3



Port	Pin numbe	Line color	Signal name	Signal description	Remarks
Port A	1	Green	GPO1+/STRB_OUT+	GPO1Positive end / flash output positive end	Default to flash output
	2	Yellow	GPO1-/STRB_OUT-	GPO1Negative terminal / flash output negative terminal	Default to flash output
	3	White	GPI1+/TRIG_IN+	GPI1Positive end / trigger input positive end	Default to trigger input
	4	Brown	GPI1-/TRIG_IN-	GPI1Negative end / trigger input negative end	Default to trigger input
	5	Red	PWR12V	Camera power input positive terminal	
	6	Black	PWRGND	Camera power input negative terminal	

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