

Independent
Development

MV-SUA1201C/M-90

The 90 degree right angle industrial camera sensor surface designed by MindVision is only 29mm in vertical direction, which solves the problem of equipment installation space limitation on the market and brings new solutions to industry users; The performance and mounting holes of cameras of the same model are basically the same, so customers can achieve seamless replacement.

Application Industry :

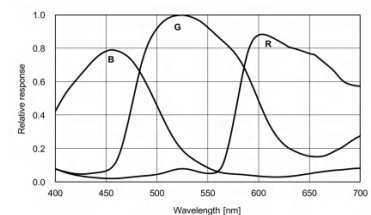
It is suitable for electronics and semiconductor, factory automation, food and beverage, pharmaceutical packaging, image measurement.



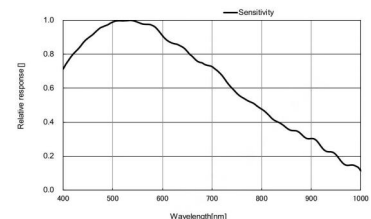
Product Features :

- The camera comes with programmable IO.
- Support external trigger strobe to take photos synchronously.
- Support 8bit raw data output.
- Fully compatible with GIGE camera's SDK for seamless replacement.
- Multiple cameras on one computer can work stably without dropping or losing frames for a long time.
- Support PC Linux system and ARM Linux system, available to be integrated into embedded devices.
- Compatible with Vision protocol, seamlessly compatible with Halcon, VisionPro, Labview and other vision software.

Spectral Response Curve :



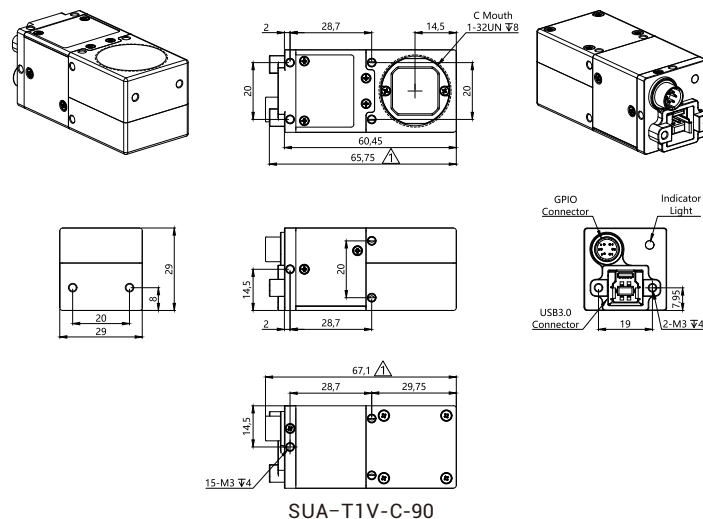
MV-SUA1201C-90



MV-SUA1201M-90

Mechanical Specifications :

unit:mm



SUA-T1V-C-90

TECHNICAL PARAMETER

Specifications \ Model	MV-SUA1201C-90	MV-SUA1201M-90
Sensor	1/1.7" CMOS	
Camera type	Color	Mono
Pixel size	1.85umx1.85um	
Effective pixels	12MP	
Resolution @ frame rate	4000x3000MAX@32fps	
Sensitivity	250mV 1/30s	
Exposure mode	Line exposure	
Signal to noise ratio	38dB	
GPIO	1 opto-coupler isolated input, 1 opto-coupler isolated output, 1 non-isolated input and output	
Output pixel width	10bit	
AD width	12bit	
Dynamic range	66dB	
Frame buffer	128M Bytes	
Exposure time range	0.0102~2665.1ms	
Maximum gain (multiple)	22	
User EEPROM	2K Bytes	
Frequency output format	Bayer RG 8bit	Mono 8bit
Video output format	USB3Vision 1.0,GenICam	
Lens interface	C-mount	
Data interface	USB3.0	
Power supply	USB 5V/Aviation head power supply 12V	
Power	<3W	
Boundary dimension	29X29X60.45(mm)(Lens base and rear shell interface are not included)	
Weight	<100g	
Working temperature	0~50°C	
Working humidity	20~80%(No Condensation)	
Storage temperature	-30~60°C	
Storage humidity	20~95%(No Condensation)	
Operating system	WINXP, WIN7 / 8/10 32 & 64-bit systems, Linux and ARM Linux drivers and Android platform drivers MAC OS system	
Drive program	DirectShow components Halcon special components Labview dedicated drive OCX components TWAIN components	
Programming language	C/C++/C#/VB6/VB.NET/Delphi/BCB/Python/Java	
Other functions	Support ROI of any size 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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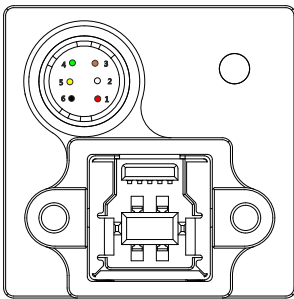

☎ 400 Tel:400-998-7281
 ✉ E-mail(Sales Department):sales@mindvision.com.cn
 ✉ E-mail(Technical Department):support@mindvision.com.cn

📍 South China Company: 5th Floor, Building 6, Chiayiyuan Science and Technology Park, Huaning Road, Longhua New District, Shenzhen
 📍 Central China Company: Building 5D, Yida Chuangzhi Island, Dangui Road, Wangcheng Economic Development Zone, Changsha City
 📍 East China Company: 9th Floor, Jizhi Business Plaza, Erquan East Road, Xishan District, Wuxi City, Jiangsu Province

SUA/SUF Camera Suffix Selection Table

Function Suffix	Airhead line sequence definition chart	12V Power supply	Shrapnel type airhead connector	Lens mount C-mount	Lens mount CS-mount	State
-T1V-C	1	●	●	●		Recommend
-T	2		●		●	Planned shutdown
-T-C	2		●	●		Planned shutdown
-TV-C	3	●	●	●		Planned shutdown

-T1V-C Line sequence definition1



Port	Pin number	Line color	Signal name	Signal description	Remarks
Port A	1	Red	DC12V+	Camera power input positive terminal	
	2	White	GPI_1+/TRIG_IN+	GPI_1 Positive terminal/trigger input positive terminal	Default is trigger input
	3	Brown	GPI_2/GPO_2	GPIO_2 Input / output	Non-isolated bidirectional IO
	4	Green	GPO_1+/STRB_OUT+	GPO_1 Positive terminal/strobe output positive terminal	Default is strobe output
	5	Yellow	GPO_1-/STRB_OUT- /TRIG_IN-	GPO_1 Negative terminal/strobe output negative terminal/trigger input negative terminal	GPIO common negative terminal
	6	Black	GND	Camera power input negative terminal	

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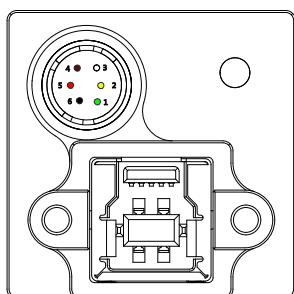
☎ 400 Tel:400-998-7281

✉ E-mail(Sales Department):sales@mindvision.com.cn

✉ E-mail(Technical Department):support@mindvision.com.cn

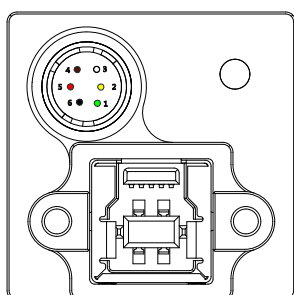
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-T-C、-T Line sequence definition2



Pin number	Line color	Signal name	Signal description	Remarks
1	Green	GPO_1+/STRB_OUT+	GPO_1 Positive terminal /strobe output positive terminal	Default is strobe output
2	Yellow	GPO_1-/STRB_OUT-	GPO_1 Negative terminal /strobe output negative terminal	Default is strobe output
3	White	GPI_1+/TRIG_IN+	GPI_1 Positive terminal / trigger input positive terminal	Default is trigger input
4	Brown	GPI_1-/TRIG_IN-	GPI_1 Negative terminal / trigger input negative terminal	Default is trigger input
5	Red	GPO_2+	GPO_2 Positive terminal output	
6	Black	GPO_2-	GPO_2 Negative terminal output	

-TV-C Line sequence definition3



Port	Pin number	Line color	Signal name	Signal description	Remarks
Port A	1	Green	GPO_1+/STRB_OUT+	GPO_1 Positive terminal /strobe output positive terminal	Default is strobe output
	2	Yellow	GPO_1-/STRB_OUT-	GPO_1 Negative terminal /strobe output negative terminal	Default is strobe output
	3	White	GPI_1+/TRIG_IN+	GPI_1 Positive terminal / trigger input positive terminal	Default is trigger input
	4	Brown	GPI_1-/TRIG_IN-	GPI_1 Negative terminal / trigger input negative terminal	Default is trigger input
	5	Red	DC12V+	Camera power input positive terminal	
	6	Black	GND	Camera power input negative terminal	

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