

Independent
Development

MV-GE501GC/GM

MV-GE501GC/GM has high definition, low noise, excellent performance, easy installation and usage and other features. It is suitable for industrial inspection, medical treatment, scientific research, education, security and other fields.

Application Industry:

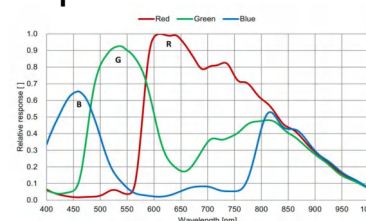
It is suitable for industrial inspection, medical treatment, scientific research, education, security and other fields.



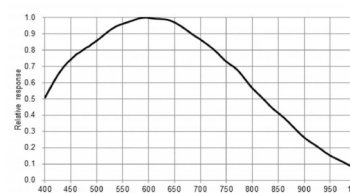
Product Features:

- 100 meters long-distance stable transmission, optional POE power supply.
- Compatible with VISION standard, the free drive directly supports software such as Halcon and VisionPro.
- Support external trigger and flash synchronization, up to 7 GPIO, all opto-isolated.
- Support 8bit to 12bit lossless format output.
- SDK supports Windows, Linux, Mac OS systems.
- Unique data packet retransmission technology ensures reliable data transmission.
- Excellent SDK, easy to use like a USB camera, plug and play.
- Support multiple cameras working at the same time, the number is not limited, and can be networked arbitrarily.

Spectral Response Curve:



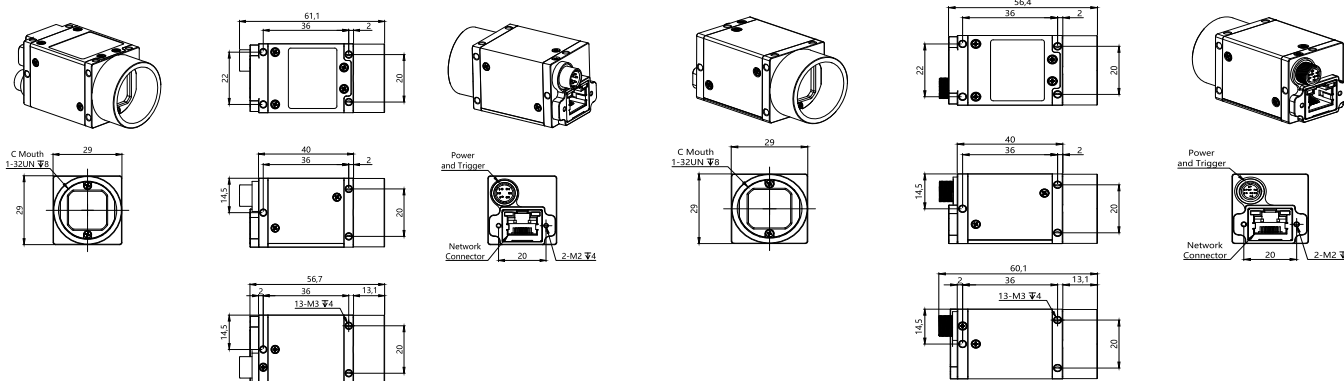
MV-GE501GC



MV-GE501GM

Mechanical Specification:

unit:mm



GE-T1-C

GE-T-CL

TECHNICAL PARAMETER

Specifications	Model	MV-GE501GC	MV-GE501GM
Sensor		2/3" CMOS	
Exposure mode		Frame exposure	
Camera type		Color	Mono
Pixel size		3.45umx3.45um	
Effective pixels		5MP	
Resolution @ frame rate		2448X2048MAX@24FPS	
Trigger mode		Continuous/Software Trigger/Hard Trigger	
GPIO		1 way optical isolation input, 1 way optical isolation output; optional 3 inputs and 4 outputs	
Sensitivity		1146mV 1/30s	915mV 1/30s
Signal to Noise Ratio		40.4dB	
Dynamic range		73.6dB	
Output pixel width		12bit	
AD width		12bit	
Frame buffer		128M Bytes	
Exposure time range		0.001~1048.6ms	
Maximum gain (multiple)		64	
User EEPROM		2K Bytes	
Video output format		Bayer BG 8/12bit	Mono 8/12bit
Visual standard protocol		GigE Vision V1.2,GenICam	
Lens interface		C/CS mount, provide with an adapter ring	
Port		Gigabit Network	
Power supply		12~24V/POE 48~57V(POE is optional)	
Power		<2.5W	
Boundary dimension		29(mm)X29(mm)X40(mm) (without lens and rearcase connectors)	
Weight		<75g	
Working temperature		0~50℃	
Working humidity		20~80% (No Condensation)	
Storage temperature		-30~60℃	
Storage humidity		20~95% (No Condensation)	
Operating system		WINXP/7 / 8/10 / 11 32 & 64-bit systems, Linux 32 & 64-bit systems and ARM Linux drivers and Android platform drivers MAC system	
Drive program		Directshow components Halcon special components Labview dedicated drive OXC components TWAIN components	
Programming language		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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400 Tel: 400-998-7281

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

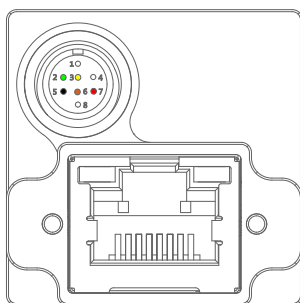
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⑨ South China Company: 5th Floor, Building 6, Chiayiyuan Science and Technology Park, Huaning Road, Longhua New District, Shenzhen
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GE/GEF/GED/ Camera Suffix Selection Table

Function Suffix	Aviation head line sequence definition diagram	POE power supply	Dual aviation head IO extension	Shrapnel type aviation head interface	Threaded type aviation head interface	Lens interface	Lens interface CS-mount	State
-T-CL	1				●	●		Recommend
-T-L	1				●		●	Book
-TPO-CL	2	●	●		●	●		Book
-T1-C	3			●		●		Recommend
-T1P-C	3	●		●		●		Book
-T	4			●			●	Planned shutdown
-TPO	5	●	●	●			●	Planned shutdown
-TPO-C	5	●	●	●		●		Planned shutdown

-T-CL、-T-L Line Sequence Definition1



Port	Pin number	Line color	Signal name	Signal description	Remarks
Port A	1	White	GPI_1+/TRIG_IN+	GPI_1 Positive end/Trigger input positive end	Default to trigger input
	2	Green	GPO_1+/STRB_OUT+	GPO_1 Positive end / Flash output positive end	Default to flash output
	3	Yellow	GPO_1-/STRB_OUT-	GPO_1 Negative terminal / flash output negative terminal	Default to flash output
	4	Empty foot			
	5	Black	GND	Camera power input negative terminal	
	6	Brown(high soft blue)	GPI_1-/TRIG_IN-	GPI_1 Negative end / trigger input negative end	Default to trigger input
	7	Red	DC12V+	Camera power input positive terminal	
	8	Empty foot			

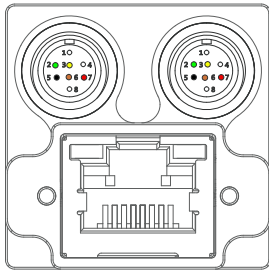
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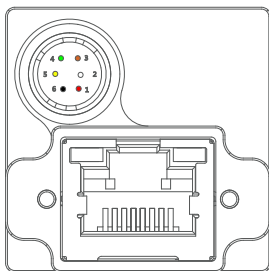
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-TPO-CL Line Sequence Definition2



Port	Pin Number	Line Color	Signal Name	Signal Description	Remarks
Port A	1	White	GPI_1+/TRIG_IN+	GPI_1 positive end/Trigger input positive end	Default to trigger input
	2	Green	GPO_1+/STRB_OUT +	GPO_1 positive end/flash output positive end	Default to flash output
	3	Yellow	GPO_1-/STRB_OUT-	GPO_1 negative end/Flash output negative terminal	Default to flash output
	4	Empty foot			
	5	Black	GND	Camera power input negative terminal	
	6	Brown (High soft blue)	GPI_1-/TRIG_IN-	GPI_1 negative end/Trigger input negative terminal	Default to trigger input
	7	Red	DC12V+	Camera power input positive terminal	
	8	Empty foot			
Port B	1	White	GPO_4+	GPO_4 positive end output	
	2	Green	GPO_2+	GPO_2 positive end output	
	3	Yellow	GPO_3+	GPO_3 positive end output	
	4	Empty foot			
	5	Black	IO_COM	GPIO common negative terminal	
	6	Brown	GPI_2+	GPI_2 positive end output	
	7	Red	GPI_3+	GPI_3 positive end output	
	8	Empty foot			

-T1-C、 -T1-C Line Sequence Definition 3



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 end/Trigger input positive end	Default to trigger input
	3	Brown	GPO_2+	GPO_2 output positive end	
	4	Green	GPO_1+/STRB_OUT+	GPO_1 positive end/Flash output positive end	Default to flash output
	5	Yellow	GPO_1-/STRB_OUT-/TRIG_IN-	GPO_1 negative terminal/Flash output negative terminal/Trigger input negative terminal	GPIO common negative terminal
	6	Black	GND	Camera power input negative terminal	

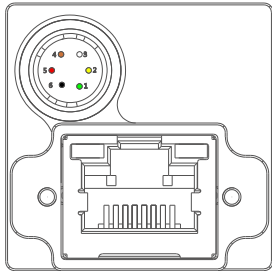
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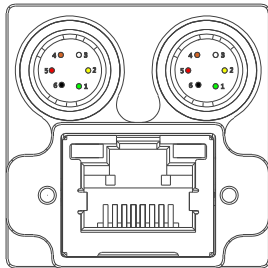
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-T Line Sequence Definition 4



Port	Pin number	Line color	Signal name	Signal name	Remarks
Port A	1	Green	GPO_1+/STRB_OUT+	GPO_1 positive end/Flash output negative terminal	Default to flash output
	2	Yellow	GPO_1-/STRB_OUT-	GPO_1 negative end/Flash output negative terminal	Default to flash output
	3	White	GPI_1+/TRIG_IN+	GPI_1 positive end/Trigger input positive end	Default to trigger input
	4	Brown	GPI_1-/TRIG_IN-	GPI_1 negative end/Trigger input negative terminal	Default to trigger input
	5	Red	DC12V+	Camera power input positive terminal	
	6	Black	GND	Camera power input negative terminal	

-TPO、-TPO-C Line Sequence Definition 5



Port	Pin number	Line color	Signal name	Signal description	Remarks
Port A	1	Green	GPO_1+/STRB_OUT+	GPO_1 positive end/flash output positive end	Default to flash output
	2	Yellow	GPO_1-/STRB_OUT-	GPO_1 negative end/flash output negative end	Default to flash output
	3	White	GPI_1+/TRIG_IN+	GPI_1 positive end/Trigger input positive end	Default to trigger input
	4	Brown	GPI_1-/TRIG_IN-	GPI_1 negative end/Trigger input negative terminal	Default to trigger input
	5	Red	DC12V+	Camera power input positive terminal	
	6	Black	GND	Camera power input negative terminal	
Port B	1	Green	GPO_2+	GPO_2 positive end output	
	2	Yellow	GPO_3+	GPO_3 positive end output	
	3	White	GPO_4+	GPO_4 positive end output	
	4	Brown	GPI_2+	GPI_2 positive input	
	5	Red	GPI_3+	GPI_3 positive input	
	6	Black	IO_COM	GPIO common negative terminal	

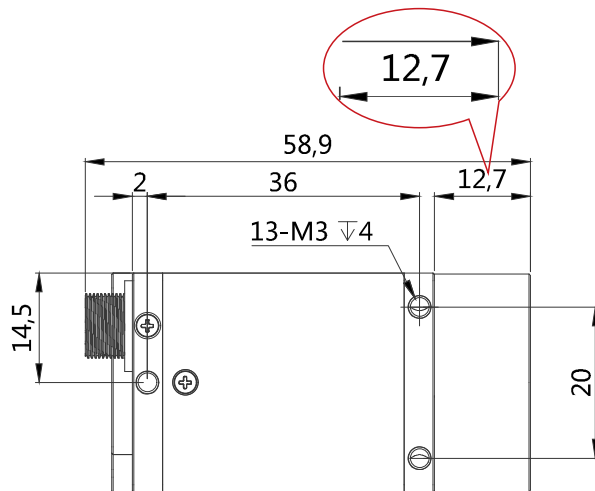
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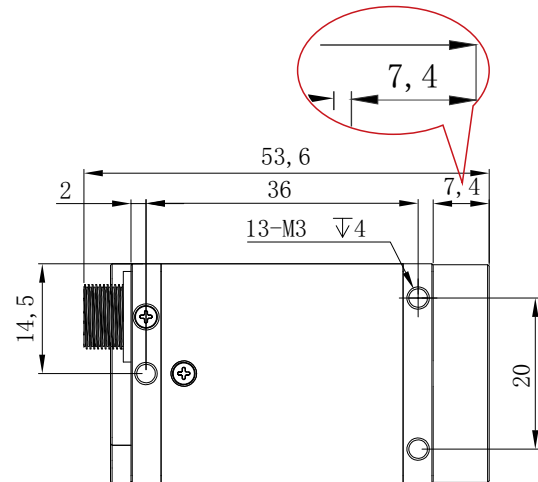
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C-Mount/CS-Mount Camera Drawing



C-Mount



CS-Mount

Unit:mm

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