

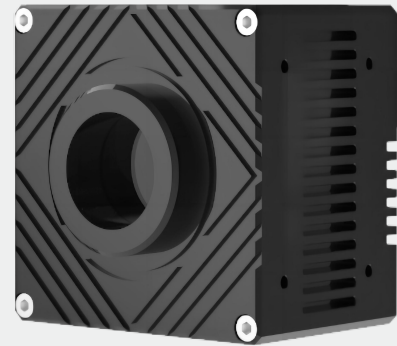
Independent
Development

SM-SP13-F72-GMG-0C

MV-GEC130I is a special camera that senses visible light and short-wave infrared, which is suitable for fluorescence imaging, laser spot tracking imaging, semiconductor detection solar cell detection, hyperspectral imaging, etc.

Application Industry:

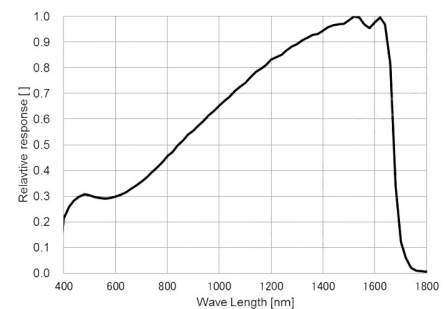
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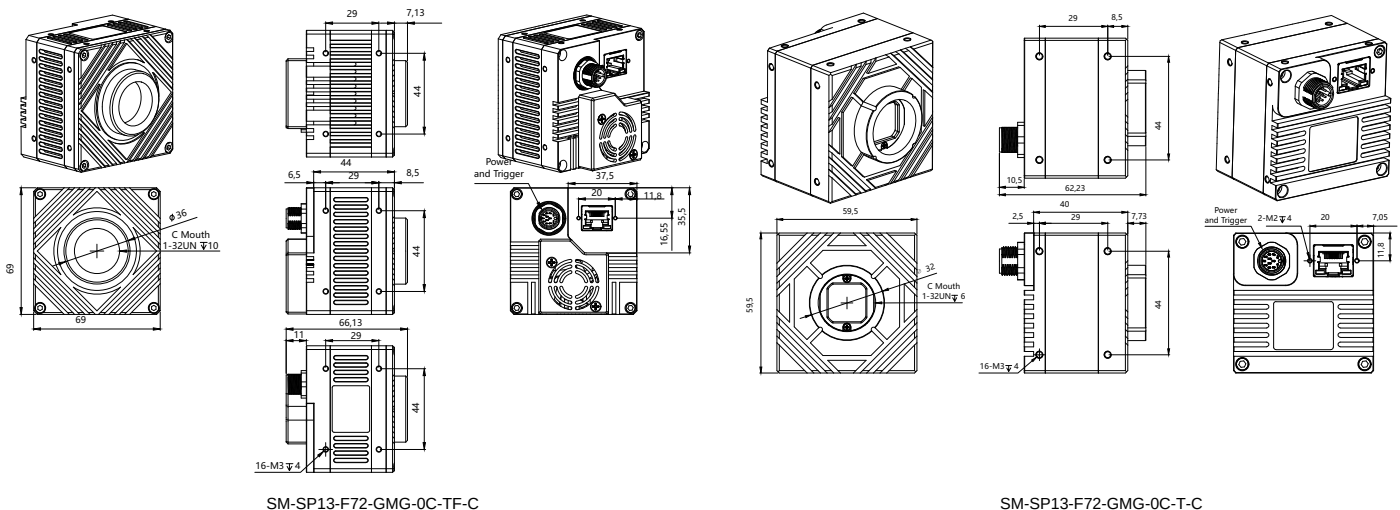
Product Features:

- InGaAs detector, response wavelength 0.4~1.7um.
- Semiconductor refrigeration, can be cooled ambient temperature difference of 20 degrees.
- Black level correction, good image uniformity.
- Gigabit network interface, compatible with vision standards.
- Designed for short-wave infrared imaging and microscopic imaging for research in low illumination.
- Resolution 1280X1024, frame rate up to 72FPS, support ROI.
- Direct support for halcom, visionpro and other software, easy system integration.

Spectral Response Curve:



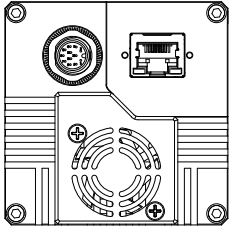
SM-SP13-F72-GMG-0C

Mechanical Specification:
unit:mm

TECHNICAL PARAMETER

Specifications	Model	SM-SP13-F72-GMG-0C
Sensor		1/2" InGaAs
Shutter type		Global shutter
Camera type		SWIR
Pixel size		5umx5um
Effective pixels		1.3MP
Resolution @ frame rate		1280X1024@72FPS
Exposure mode		Frame exposure
Sensitivity		121mV 1/30s
GPIO		2 optocoupler isolated inputs, 2 optocoupler isolated outputs, and 1 bidirectional non-isolated IO, which supports trigger and flash synchronization modes
Output pixel width		12bit
AD width		12bit
Frame buffer		256M Bytes
Exposure time range		0.0130~7987.2ms
Maximum gain (multiple)		126
User EEPROM		2K Bytes
Video output format		Mono 8bit
Visual standard protocol		GigE Vision、GenICam
Lens interface		C-mount
Port		Gigabit Network
Power supply		Support 12 - 24V with a tolerance of plus or minus 10%, typical value: 12V
Power		<12W
Boundary dimension		69(mm)X69(mm)X44(mm) (without lens and rearcase connectors)
Weight		<250g
Refrigeration system		Semiconductor refrigeration, can be cooled ambient temperature difference of 20 degrees
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,ARM Linux system, Android system and MAC system
Drive program		Support GigE Vision protocol software, Directshow components, Halcon dedicated components, Labview dedicated drivers, OCX components and 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.

Line Sequence Definition



Pin No	Line Color	Signal name	Description	Remarks
1	Black	GND	Camera power input negative terminal	
2	Red	DC12V+	Camera power input positive terminal	
3	Gray	GPI1+/TRIG_IN+	GPI1 or trigger input optocoupler positive terminal	Default is trigger
4	Pink	GPI1-/TRIG_IN-	GPI1 or trigger input optocoupler negative terminal	Default is trigger
5	Brown	GPI2+	GPI2 input optocoupler positive terminal	
6	White	GPI2-	GPI2 input optocoupler negative terminal	
7	Green	GPI3+/GPO3+	Positive terminal for non-isolated GPI3 input or GPO3 output	Default is output
8	Yellow	GPI3-/GPO3-	Negative terminal for non-isolated GPI3 input or GPO3 output	Default is output
9	Blue	GPO1+/STRB_OUT+	GPO1 or strobe output optocoupler positive terminal	Default is strobe
10	Light green	GPO1-/STRB_OUT-	GPO1 or strobe output optocoupler negative terminal	Default is strobe
11	Purple	GPO2+	GPO2 output optocoupler positive terminal	
12	Orange	GPO2-	GPO2 output optocoupler negative terminal	