SG5-IMX490C-5300-GMSL2-Hxxx

5MP GMSL2 CAMERA



www.sensing-world.com



GENERAL DESCRIPTION

The camera is equipped with SONY Semiconductor CMOS image sensor IMX490 and Maxim GMSL2 . It has an automotive-grade sensor with a well-tuned Image Signal Processor (ISP) that produces exceptional image quality, which comes with an IP67-rated enclosure - is supplied with an M12/M14/M15/M16 lens that is focused and glued in our factory.



KEY PARAMETERS

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Sensor	SONY 5.44MP IMX490 RGGB			
ISP	GW5300			
Image Size	1/1.55 inch CMOS			
Output Pixels	2880H*1860V			
Pixel Size	3um*3um			
Frame Rate	2880*1860@30fps			
HDR Support	Yes			
LFM	Yes			
Output data	YUV422@8bit			
Serializer	MAXIM MAX9295A			
Camera Interface	GMSL2			
Power Supply	9~16V POC			
Current	<300mA@12VDC			
Connector	Amphenol Fakra(Z Code)			
Operating temp. range	-40~+85°C			
Dimensions	W: 40mm, L:40mm, H:23mm			
Weight	<80g			



- Output format: Uncompressed YUV422 format
- S-mount IP67/IP69K compliant lens focused and glued at our factory
- Multi-Camera synchronization Support
- Support different focal length lens
- FCC, CE and RoHS



Application

- Automotive
- ADAS + Viewing Fusion
- High Dynamic Range Imaging
- **Autonomous Driving**
- **Robots**

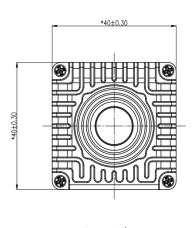


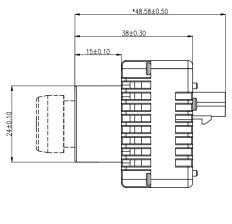


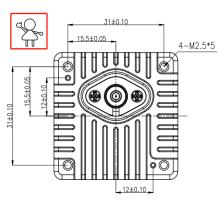
MODEL AND LENS

Model	HFOV	VFOV	F.No	EFL	Max Optical Distortion	Water- proof	Lens Mount
SG5-IMX490C-5300-GMSL2-H30S1	32°	21°	1.6	15.3mm	-2.7%	IP67	M16
SG5-IMX490C-5300-GMSL2-H60S	64°	40°	1.8	7.87mm	-14%	IP67	M12
SG5-IMX490C-5300-GMSL2-H100Y	100°	57°	1.8	6.16mm	-32%	IP69K	M15
SG5-IMX490C-5300-GMSL2-H110S	114°	74°	2.8	4.3mm	-49.18%	IP67	M14

DIMENSIONS







Front View

Side View

Rear View

Note:

%

This icon indicates the imaging direction is positive.

Dimension



PLATFORMS SUPPORT

Platforms	Product Link			
NVIDIA Jetson platforms ELITE PARTNER	Provide development driver package https://www.sensing-world.com/jetson_camera_ecosystem			
SerDes Camera to USB Converter	Not support			
CoaxCapture II GMSL Capture Card	Provide development driver package https://www.sensing-world.com/Coaxcapture Card			





DEVELOPMENT KIT

♦ GMSL Video capture card (Gen2)

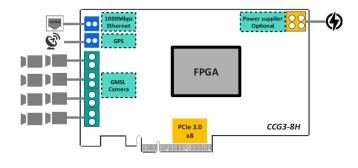


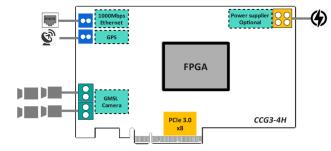


SG5-IMX490C-5300-GMSL2 can connect to CCG3-4H/8H.

♦ KEY FEATURES

- → CCG3-8H at most can support connect 8* SG5-IMX490C-5300-GMSL2 at the same time;
- → CCG3-4H at most can support connect 4* SG5-IMX490C-5300-GMSL2 at the same time;
- → PCI-e Gen3*8lane and supports x86 architecture;
- → Support external trigger synchronization;
- → Support GPS Timing synchronization;
- → Support network PTP timing synchronization;





<u>CCG3-8H</u> <u>CCG3-4H</u>



⋄ Coaxial Cable

Product Name	Order PN#	Specification
Mini-fakra Coaxial Cable 4-in-1 (TE)	T4JC-JS-ZZZZ-0500A	Mini-fakra, 4 in 1, 0.5m, Male to Female
Mini-fakra Coaxial Cable 4-in-1(Rosenberg)	R4PC-JS-ZZZZ-0500L	Mini-fakra, 4 in 1, 0.5m, Male to Female
Mini-fakra Coaxial Cable 4-in-1(Rosenberg)	R4JC-JS-ZZZZ-0500L	Mini-fakra, 4 in 1, 0.5m, Female to Female
Camera coaxial Cable	SG-JSZPSZ2000L	2M, Male to Female, IP67
Camera coaxial Cable	SG-JSZJSZ2000L	2M, Female to Female, IP67
Camera coaxial Cable	SG-JSZPSZ3000L	3M, Male to Female, IP67
Camera coaxial Cable	SG-JSZJSZ3000L	3M, Female to Female, IP67
Camera coaxial Cable	SG-JSZPSZ5000L	5M, Male to Female, IP67
Camera coaxial Cable	SG-JSZJSZ5000L	5M, Female to Female, IP67
Camera coaxial Cable	SG-JSZJSZ7000L	7M, Female to Female, IP67
Camera coaxial Cable	SG-JSZJSZ8000L	8M, Female to Female, IP67
Camera coaxial Cable	SG-JSZPSZL100L	10M, Male to Female, IP67
Camera coaxial Cable	SG-JSZJSZL100L	10M, Female to Female, IP67
Camera coaxial Cable	SG-JSZJSZL120L	12M, Female to Female, IP67
Camera coaxial Cable	SG-JSZJSZL160L	16M, Female to Female, IP67
Camera coaxial Cable	SG-JSZJSZL200L	20M, Female to Female, IP67







REVISION HISTORY

版本	描述	日期
Rev1	First release	Oct 2020
Rev2	 → Update the connector description → Update the cable description → Add a system block diagram → Add supporting platforms and development tools 	Mar 2023





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WECHAT



SKYPE



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