

SG-SWZ12NMI2-7200

- AI ISP Based 1280×1024 Network and MIPI Dual Output SWIR Camera Module



1. Features

- > 1/2" Sony InGaAs Global Shutter SWIR image sensor IMX990.
- > Powerful 28x optical zoom (7.1~200mm).
- > Max. 1.3MP (1280×1024) Resolution.
- > Support ICR switch for Wideband and Narrowband.
- > Support 16x digital zoom.
- > Support network and MIPI dual output.
- > **Support MIPI digital video output synchronously, could convert to HD-SDI output.**
- > **Hisilicon new generation of AI noise reduction ISP**

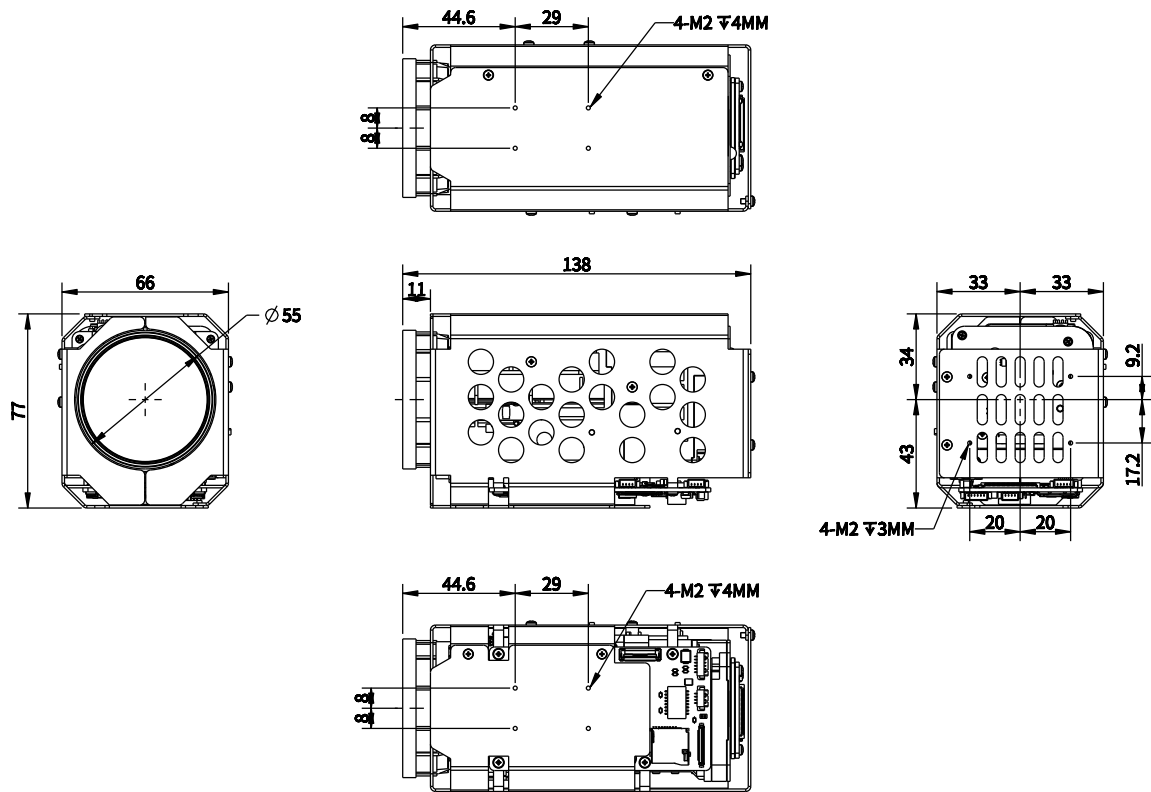
2. Specification

Model		SG-SWZ12NMI2-7200
Sensor	Image Sensor	1/2" SONY InGaAs Global Shutter SWIR Sensor IMX990
	Effective Pixels	Approx. 1.34MP
	Pixel Size	5μm
	Spectral Range	400~1700nm
Lens	Lens Wavelength	1000~1700nm
	ICR	Support 2 modes: Wide band: 1000~1700nm Narrow band: 1450~1700nm
	Focal Length	7.1mm~200mm, 28x Optical Zoom
	Lens Type	Stepper Driver Zoom Len
	Aperture	F1.69~F4.84

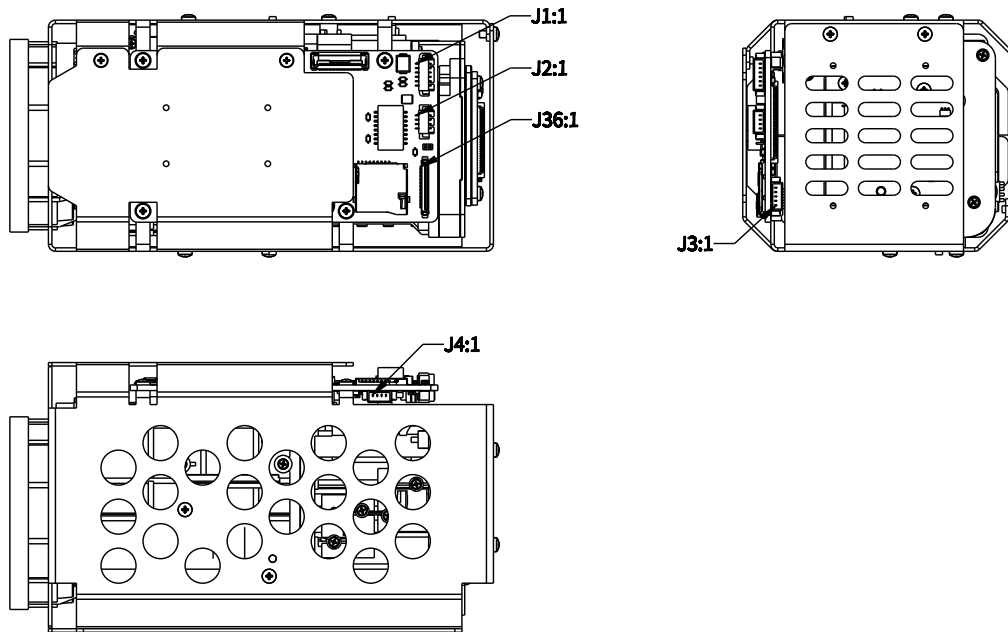
	Field of View	H: 48.52°~1.83°, V: 39.65°~1.47°, D: 59.9°~2.35°
	Close Focus Distance	1m~5m (Wide~Tele)
	Zoom Speed	< 4s (Optical Wide~Tele)
Video	Compression	H.265/H.264/H.264H/H.264.B/MJPEG
	Resolution	Main Stream: 50/60fps@(1280×1024, 704×480) Sub Stream: 50/60fps@(640×512, 352×240)
	Video Bit Rate	32kbps~16Mbps
	Audio	AAC / MP2L2
	MIPI	25/30/50/60fps@2MP (1280×1024)
Network	Network Protocol	IPv4, IPv6, HTTP, HTTPS, TCP, UDP, RTSP, RTCP, RTP, ARP, NTP, FTP, DHCP, PPPoE, DNS, DDNS, UPnP, IGMP, ICMP, SNMP, SMTP, QoS, 802.1x, Bonjour
	API	ONVIF(Profile S, Profile G, Profile T), HTTP API, SDK, GB28181
	User	Up to 20 users, 2 level: Administrator, User
	Storage	MicroSD/SDHC/SDXC card (Up to 1TB) edge storage, FTP, NAS
	Multicast	Support
Intelligence	Normal Event	Motion Detection, Audio detection, IP address conflict, Illegal Access, Storage anomaly, Video blocking, Scene Change, Network Disconnection
	IVS functions	Tripwire, Cross Fence Detection, Intrusion, Abandoned Object, Fast-Moving, Parking Detection, Crowd Gathering Estimation, Missing Object, Loitering Detection.
Firmware Upgrade		Only can upgrade the firmware via Network port
General Events		Motion, Tamper, SD Card, Network
IVS		Tripwire, Cross Fence Detection, Intrusion, Abandoned Object, Fast-Moving, Parking Detection, Crowd Gathering Estimation, Missing Object, Loitering Detection.
Noise Reduction		2D/3D
Exposure Mode		Manual, Auto, Aperture Priority, Shutter Priority
Exposure Compensation		Support
Shutter Speed		1/1~1/30000s
Focus Mode		Auto/Manual/Semi Auto/One Push AF
Electronic Defog		Support
Heat Haze Reduction		Support
Flip		Support
EIS		Support
Digital Zoom		16x
Ethernet		4PIN Ethernet port, 10M/100M self-adaption
External Control		TTL
Interface		4pin Ethernet port, 6pin serial & power port, 5pin Audio port. 30pin MIPI
Communication Protocol		SONY VISCA, Pelco D/P

Operating Conditions	-30~+60°C/20%~80%RH
Storage Conditions	-40~+70°C/20%~95%RH
Power Supply	DC 12V
Power Consumption (TBD)	Static power: 4.5W, Sports power: 5.5W
Dimensions(L*W*H)	Approx. 138mm*66mm*77mm
Weight	618g

3. Dimension



4. Interface Definition



Network Interface

Type	PIN Number	PIN Name	Description
J2_4pin Ethernet Interface (A1251-04A 1.25MM)	1	ETHRX-	Adaptive Ethernet port, Internet RX-
	2	ETHRX+	Adaptive Ethernet port, Internet RX+
	3	ETHTX-	Adaptive Ethernet port, Internet TX-
	4	ETHTX+	Adaptive Ethernet port, Internet TX+
J1_6pin Power & UART Interface (A1251-06A 1.25MM)	1	DC_IN	DC12V
	2	GND	GND
	3	RXD1	TTL Level 3.3V, Pelco Protocol
	4	TXD1	TTL Level 3.3V, Pelco Protocol
	5	RXD0	TTL Level 3.3V, Visca Protocol
	6	TXD0	TTL Level 3.3V, Visca Protocol
J3_5pin Audio Interface (A1251-05A 1.25MM)	1	AUDIO_OUT	Audio Out (Line Out)
	2	GND	GND
	3	AUDIO_IN	Audio In (Line In)
	4	GND	GND
	5	NC	NC

MIPI Interface

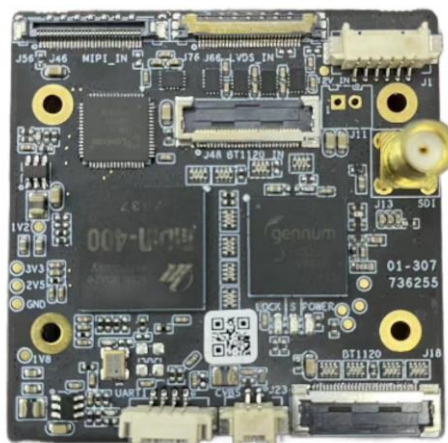
Port	Number	PIN Name	Description
J36_30pin MIPI (HK-IP30-001 0.4MM)	1	GND	
	2	NC	
	3	NC	
	4	GND	
	5	NC	

6	NC	
7	GND	
8	NC	
9	NC	
10	GND	
11	NC	
12	NC	
13	GND	
14	CSI_D3N	Differential data pair 3-
15	CSI_D3P	Differential data pair 3+
16	CSI_D2N	Differential data pair 2-
17	CSI_D2P	Differential data pair 2+
18	CSI_DKN	Differential data pair clock signal-
19	CSI_DKP	Differential data pair clock signal+
20	CSI_D1N	Differential data pair 1-
21	CSI_D1P	Differential data pair 1+
22	CSI_D0N	Differential data pair 0-
23	CSI_D0P	Differential data pair 0+
24	UART1_RX	TTL level 3.3V, VISCA protocol
25	UART1_TX	TTL level 3.3V, VISCA protocol
26	NC	
27	+12V	DC_IN
28	+12V	DC_IN
29	+12V	DC_IN
30	+12V	DC_IN

5. Accessories

SG-TB02-SC board for optional.

SG-TB02-SC Encoding boards are specially designed for Savgood Network & MIPI dual outputs visible camera modules. It can connect to camera via MIPI interface, then output HD-SDI and CVBS signal.



SG-TB02-SC

Hangzhou Savgood Technology Co., Ltd.

Rm. 1201, Xingcheng Fazhan Building #1, No. 406 Xintiandi Street,
Gongshu District, Hangzhou City, 310022, China

Tel: +86 - (571) 8803 8121

Email: sales@savgood.com

<http://www.savgood.com>

<http://www.savgoodtech.com>

*Design and specifications are subject to change without prior notification.

© 2013 Savgood Technology Co., Ltd.