

SG-ZCM4037NMI-O

- AI ISP Based 4Megapixel 37x Starlight Network and MIPI Dual Output Camera Module



1. Features

- > 1/1.8" Sony CMOS Sensor.
- > Powerful 37x optical zoom (6.5mm~240mm).
- > Max. 4Mp(2688×1520) Resolution.
- > Support various IVS functions.
- > Support Electronic Defog and Optical Defog.
- > Support various OSD.
- > **Support MIPI video output synchronously.**
- > **Hisilicon new generation AI noise reduction ISP, restoring the true color world.**

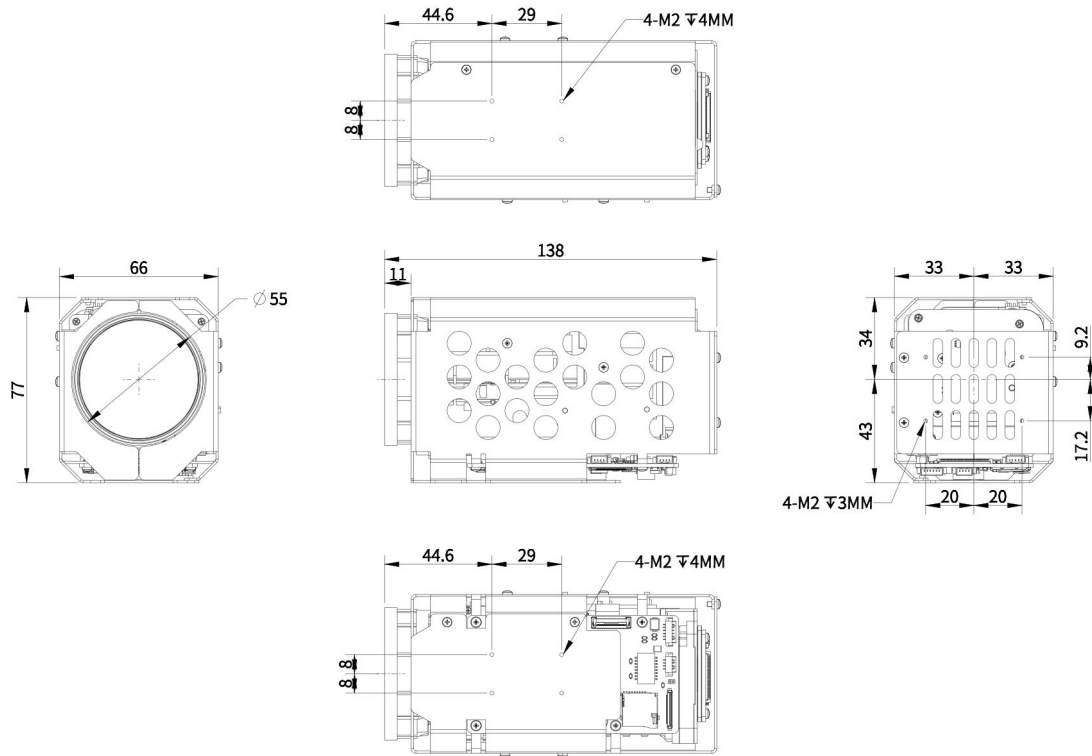
2. Specification

| Model | | SG-ZCM4037NMI-O | | | |
|--------|-----------------------|---------------------------------------------------|---------|-----------|----------|
| Sensor | Image Sensor | 1/1.8" Sony Starvis progressive scan CMOS | | | |
| | Effective Pixels | Approx. 4.17 Megapixel | | | |
| Lens | Focal Length | 6.5mm~240mm, 37x Optical Zoom | | | |
| | Aperture | F1.5~F4.8 | | | |
| | Field of View | H: 61.90°~1.86°, V: 37.28°~1.05°, D: 69.05°~2.13° | | | |
| | Close Focus Distance | 1.0m~5m (Wide~Tele) | | | |
| | Zoom Speed | < 4s (Optical Wide~Tele) | | | |
| | DORI Distance (Human) | Detect | Observe | Recognize | Identify |
| | 3,311m | 1,314m | 662m | 331m | |
| Video | Compression | H.265/H.264B/H.264M/H.264H/MJPEG | | | |
| | Streaming Capability | 3 streams | | | |

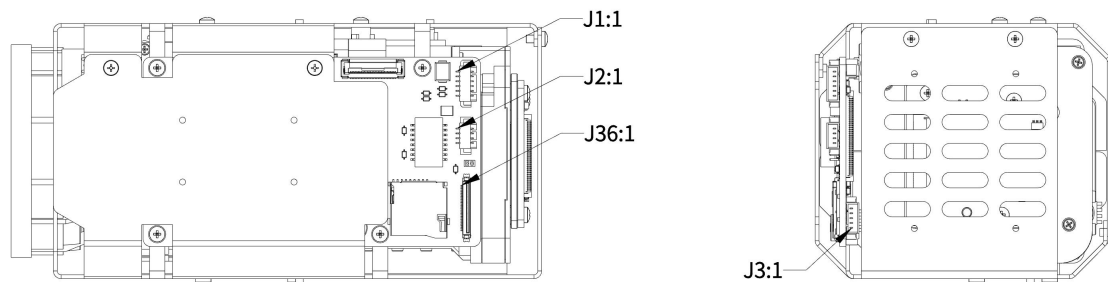
| | | |
|------------------------|-------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | Resolution | 50Hz: 50fps@4MP(2688×1520); 50fps@2MP(1920×1080) 60Hz: 60fps@4MP(2688×1520); 60fps@2MP(1920×1080) |
| | Audio | AAC / MP2L2 |
| | MIPI Video | 50Hz: 50fps@4MP(2688×1520); 50fps@2MP(1920×1080) 60Hz: 60fps@4MP(2688×1520); 60fps@2MP(1920×1080) |
| 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, HTTP API, SDK |
| | Web Browser | IE, Edge, Firefox, Chrome |
| | User | Up to 20 users, 2 level: Administrator, User |
| | Storage | Micro SD/SDHC/SDXC card (Up to 1TB) edge storage, FTP, NAS |
| | Multicast | Support |
| 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. |
| Target Distinction | | Human/Vehicle |
| S/N Ratio | | ≥55dB (AGC Off, Weight ON) |
| Minimum Illumination | | Color: 0.0001Lux/F1.5; B/W: 0.00005Lux/F1.5 |
| Noise Reduction | | 2D/3D/AI Noise Reduction |
| Exposure Mode | | Auto, Aperture Priority, Shutter Priority, Gain Priority, Manual |
| Exposure Compensation | | Support |
| Shutter Speed | | 1/3~1/30000s |
| BLC | | Support |
| HLC | | Support |
| WDR | | Support |
| White Balance | | Auto, Manual, Indoor, Outdoor, ATW, Sodium lamp, Street lamp, Natural, One Push |
| Day/Night | | ICR(Auto/Manual) |
| Focus Mode | | Auto, Manual, Semi Auto, Fast Auto, Fast Semi Auto, One Push AF |
| Electronic Defog | | Support |
| Optical Defog | | Support, 750nm~1100nm channel is Optical Defog |
| Flip | | Support |
| EIS | | Support |
| Digital Zoom | | 16x |
| External Control | | TTL |
| Interface | | 4pin Ethernet port, 6pin Power & UART port, 5pin Audio port, 30pin MIPI |
| Communication Protocol | | SONY VISCA, Pelco D/P |
| Operating Conditions | | -30°C~+60°C/20% to 80%RH |

| | |
|--------------------|----------------------------------------|
| Storage Conditions | -40°C~+70°C/20% to 95%RH |
| Power Supply | DC 12V |
| Power Consumption | Static power: 4.5W, Sports power: 5.5W |
| Dimensions(L*W*H) | 138mm*66mm*76mm |
| Weight | 620g |

3. Dimension



4. Interface Definition



Network Interface

| Type | Number | PIN Name | Description |
|--------------------------------------------|--------|----------|--------------------------------|
| J1_6pin Power & UART (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 |

| | | | |
|----------------------------------------|---|-----------|--------------------------------------|
| J2_4pin Ethernet (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+ |
| J3_5pin Audio (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 |

Hangzhou Savgood Technology Co., Ltd.

Rm. 1201, Xincheng Fazhan Building #1, No. 406 Xintiandi Street,
Gongshu District, Hangzhou City, 310015, 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.