



ISWH-41SIRA-TA4G

4 MP Motorized Varifocal Bullet Solar Power 4G Network Camera Kit, 80 W photovoltaic panel, 360 Wh chargeable lithium battery. Clear imaging against strong back light due to 120 dB true WDR technology. Focus on human and vehicle targets classification based on deep learning. Support battery management, battery display, battery high-low temperature protection, charge-discharge protection, low-battery sleep protection and remote wakeup. LTE-TDD/LTE-FDD/WCDMA/GSM 4G wireless network transmission, support Micro SIM card. Water and dust resistant (IP66). Built-in high-capacity eMMC or SSD storage.

Product features:

- 80 W photovoltaic panel, 360 Wh chargeable lithium battery
- Clear imaging against strong back light due to 120 dB true WDR technology
- Focus on human and vehicle targets classification based on deep learning
- Support battery management, battery display, battery high-low temperature protection, charge-discharge protection, low-battery sleep protection and remote wakeup
- LTE-TDD/LTE-FDD/WCDMA/GSM 4G wireless network transmission, support Micro SIM card
- Water and dust resistant (IP66)
- Built-in high-capacity eMMC or SSD storage

Specifications:

Camera	
Image Sensor	1/8" Progressive Scan CMOS
Min. Illumination	Colour: 0.0005 Lux @ (F1.0, AGC ON), 0 Lux with light
Max. Resolution	2560 x 1440
Shutter Time	1 ÷ 1/100,000 s;
Lens	
Lens Type	Auto, Semi-auto, Manual
Iris Type	Auto-iris
Aperture	2.8 ÷ 12 mm: F1.2; 8 ÷ 32 mm: F1.6 2.8 ÷ 12 mm: horizontal 107.4° to 39.8°, vertical 56° to 22.4°, diagonal 130.1° to 45.7°;
Focal Length & FOV	8 ÷ 32 mm: horizontal 40.3° to 14.5°, vertical 22.1° to 8.2°, diagonal 46.9° to 16.5°
Lens Mount	All In One Lens
DORI	
	2.8 ÷ 12 mm Wide - D: 60.0 m, O: 23.8 m, R: 12.0 m, I: 6.0 m Tele - D: 149.0 m, O: 59.1 m, R: 29.8 m, I: 14.9 m
DORI	8 ÷ 32 mm Wide - D: 150.3 m, O: 59.7 m, R: 30.1 m, I: 15.0 m Tele - D: 400.0 m, O: 158.7 m, R: 80 m, I: 40 m
Illuminator	
Supplement Light Type	IR
Supplement Light Range	2.8 ÷ 12 mm: up to 30 m 8 ÷ 32 mm: up to 50 m
Smart Supplement Light	Yes
Video	
Main Stream	<u>Performance mode:</u> 50 Hz: 25 fps (2560 × 1440, 1920 × 1080, 1280 × 720) 60 Hz: 30 fps (2560 × 1440, 1920 × 1080, 1280 × 720) <u>Proactive mode:</u> 50 Hz: 12.5 fps (2560 × 1440, 1920 × 1080, 1280 × 720) 60 Hz: 15 fps (2560 × 1440, 1920 × 1080, 1280 × 720)

Sub-Stream	<u>Performance mode:</u> 50 Hz: 25 fps (640 × 480, 640 × 360) 60 Hz: 30 fps (640 × 480, 640 × 360) <u>Proactive mode:</u> 50 Hz: 12.5 fps (640 × 480, 640 × 360) 60 Hz: 15 fps (640 × 480, 640 × 360)
Third Stream	50 Hz: 1 fps (1280 × 720, 640 × 480) 60 Hz: 1 fps (1280 × 720, 640 × 480)
Video Compression	Main stream: H.265/ H.264 Sub-stream: H.265/H.264/MJPEG Third Stream: H.265/H.264 <i>*Performance mode: main stream supports H.264+, H.265+</i>
Video Bit Rate	32 to 8 kbps
H.264 Type	Baseline Profile, Main Profile, High Profile
H.265 Type	Main Profile
Bit Rate Control	CBR, VBR
Region of Interest (ROI)	4 fixed regions for main stream
Scalable Video Coding (SVC)	H.264 and H.265 encoding

Audio

Audio Sampling Rate	8 kHz/16 kHz/32 kHz/44.1 kHz/48 kHz
Environment Noise Filtering	Yes
Audio Compression	G.711/G.722.1/G.726/MP2L2/PCM/MP3/AAC-LC
Audio Bit Rate	64 Kbps (G.711ulaw/G.711alaw)/16 Kbps (G.722.1)/16 Kbps (G.726)/32 to 192 Kbps (MP2L2)/8 to 320 Kbps (MP3)/16 to 64 Kbps (AAC-LC)

Network

Security	Password protection, complicated password, HTTPS encryption, 802.1X authentication (EAP-TLS, EAP-LEAP, EAP-MD5), watermark, IP address filter, basic and digest authentication for HTTP/HTTPS, WSSE and digest authentication for Open Network Video Interface, RTP/RTSP over HTTPS, control timeout settings, TLS 1.2, TLS 1.3
Simultaneous Live View	Up to 6 channels
API	Open Network Video Interface (Profile S, Profile G, Profile T), ISAPI, SDK, ISUP, OTAP
Protocols	TCP/IP, ICMP, HTTP, HTTPS, FTP, DHCP, DNS, DDNS, RTP, RTSP, RTCP, NTP, UPnP, SMTP, SNMP, IGMP, 802.1X, QoS, IPv6, UDP, Bonjour, SSL/TLS, WebSocket, WebSockets
User/Host	Up to 32 users; 3 user levels: administrator, operator, and user
Network Storage	NAS (NFS, SMB/CIFS), auto network replenishment (ANR); memory card encryption and health detection are supported.
Client	CMS-MAZi, CTR-MAZi
Web Browser	Plug-in required live view: IE 10+, Plug-in free live view: Chrome 57.0+, Firefox 52.0+, Local service: Chrome 57.0+, Firefox 52.0+

Mobile Communication

SIM Card Type	Micro SIM
Frequency	LTE-TDD: Band38/40/41 LTE-FDD: Band1/3/5/7/8/20/28 WCDMA: Band1/5/8 GSM: 850/900/1800 MHz
Standard	LTE-TDD/LTE-FDD/WCDMA/GSM

Image

SNR	≥ 52 dB
Privacy Mask	4 programmable polygon privacy masks
Wide Dynamic Range (WDR)	120 dB
Day/Night Switch	Day, Night, Auto, Schedule
Image Enhancement	BLC, HLC, 3D-DNR, Defog
Image Parameters Switch	Yes
Image Setting	Saturation, brightness, contrast, sharpness, gain, white balance, adjustable by client software or web browser

Interface

Audio	1 input (line in), max. input amplitude: 3.3 Vpp, input impedance: 4.7 KΩ, interface; type: non-equilibrium; 1 output (line out), max. output amplitude: 3.3 Vpp, output impedance: 100 Ω, interface type: non-equilibrium
Alarm	1 input, 1 output (max. 12 Vdc, 1 A)

Ethernet Interface
On-Board Storage

1 RJ45 10 M/100 M self-adaptive Ethernet port

Built-in memory card slot, support microSD card, up to 256 GB, Built-in 256 GB eMMC storage (256 GB device model supports), Built-in 512 GB SSD storage (512 GB device model supports), Built-in 1 TB SSD storage (1 TB device model supports)

Power Output

12 Vdc, max 1000 mA

Reset Key

Yes

Event

Basic Event	Motion detection, video tampering alarm, exception (network disconnected, IP address conflict, illegal login, HDD error)
Smart Event	Line crossing detection, intrusion detection, region entrance detection, region exiting detection, scene change detection, face detection
Linkage	Upload to FTP/NAS/memory card, notify surveillance center, trigger recording, trigger capture, trigger alarm output, audible warning

General

Power	12 VDC \pm 20%, 4-pin M8 waterproof connector 1 TB/512 GB device model: 1. Standby power consumption: 45 mW 2. The average power consumption of 24 hours (4G transmission is excluded): 4.5 W 3. The max. power consumption: 20 W (6 W if without 12 V load) Other device model: 1. Standby power consumption: 45 mW 2. The average power consumption of 24 hours (4G transmission is excluded): 3 W 3. The max. power consumption: 18 W (6 W if without 12 V load)
Material	Front cover: metal, body: metal, bracket: metal
Storage Conditions	-20 °C \div +60 °C (-4 °F to 140 °F). Humidity 95% or less (non-condensing)
Language	33 languages: English, Russian, Estonian, Bulgarian, Hungarian, Greek, German, Italian, Czech, Slovak, French, Polish, Dutch, Portuguese, Spanish, Romanian, Danish, Swedish, Norwegian, Finnish, Croatian, Slovenian, Serbian, Turkish, Korean, Traditional Chinese, Thai, Vietnamese, Japanese, Latvian, Lithuanian, Portuguese (Brazil), Ukrainian
General Function	Anti-banding, heartbeat, mirror, flash log, password reset via email, pixel counter
Operating Conditions	-20 °C \div +60 °C (-4 °F to 140 °F). Humidity 95% or less (non-condensing)
Dimension	816.2 \times 735.9 \times 760 mm (32.1" \times 28.9" \times 29.9") (Max. size of the camera after it is completely assembled)
Package Dimension	862 \times 352 \times 762 mm (33.9" \times 13.9" \times 30.0")
Weight	Approx. 26.450 kg (58.3 lb.)
With Package Weight	Approx. 32.715 kg (72.1 lb.)

Battery

Battery Type	Lithium
Capacity	360 Wh (90 Wh for each battery)
Battery Voltage	10.8 V
Max. Output Voltage	12.6 V
Operating Temperature	Charging: -20 °C \div 45 °C (-4 °F \div 13 °F); Discharging: -20 °C \div 60 °C (-4 °F \div 140 °F)
Cycle Lifetime	Proactive mode: 5 days, Standby mode: 80 days <i>*in cloudy/rainy days (25 °C)</i>
Battery Life	More than 500 cycles
Battery Weight	Approx. 2,74 kg (6.0 lb.) (0.685 kg (1.5 lb.) for each battery)

Approval

EMC	CE-EMC/UKCA (EN 55032:2015+A11:2020+A1:2020, EN 50130-4:2011+A1:2014); RCM (AS/NZS CISPR 32: 2015); IC (ICES-003: Issue 7)
RF	CE-RED/UKCA (EN 301908-1, EN 301908-2, EN 301908-13, EN 301511, EN 301489-1, EN 301489-52, EN 62133); ICASA: same as CE-RED; IC ID (RSS-132 Issue 3, RSS-133 Issue 6, RSS-139 Issue 3, RSS-130 Issue 2, RSS-102 Issue 5); MIC (Article 49-6-4 and 49-6-5 the relevant articles and MIC Notice No. 1299 of the Ordinance Regulating Radio Equipment)
Safety	CB: IEC 62368-1: 2014+A11, CE-LVD/UKCA: EN 62368-1: 2014/A11: 2017, LOA: IEC/EN 60950-1
Environment	CE-RoHS: 2011/65/EU, WEEE: 2012/19/EU, Reach: Regulation (EC) No 1907/2006
Protection	Camera: IP66 (IEC60529-2013); Wind resistance 12 level, up to 40 m/s wind speed resistance

