

4 MP Motorized Varifocal Bullet Solar 4G Camera Kit

WHCI9C43W-SZD-4G



It can be used in areas that are not suitable for laying wired network and electric supply lines, or used for the scenes that feature tough environment and have high demanding for device stability. It can be used for monitoring the farms, electric power cables, water and river system, oil pipelines and key forest areas.

It also can be used in the temporary monitoring scenes, such as the large-scale competitions, the sudden public activity, the temporary traffic control and the city construction.

Empowered by deep learning algorithms, VCA technology brings human and vehicle targets classification alarms to front- and back-end devices. The system focuses on human and vehicle targets, vastly improving alarm efficiency and effectiveness.

- 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-FDD/WCDMA 4G wireless network transmission, support Micro SIM card
- Water and dust resistant (IP66)

▪ Specification

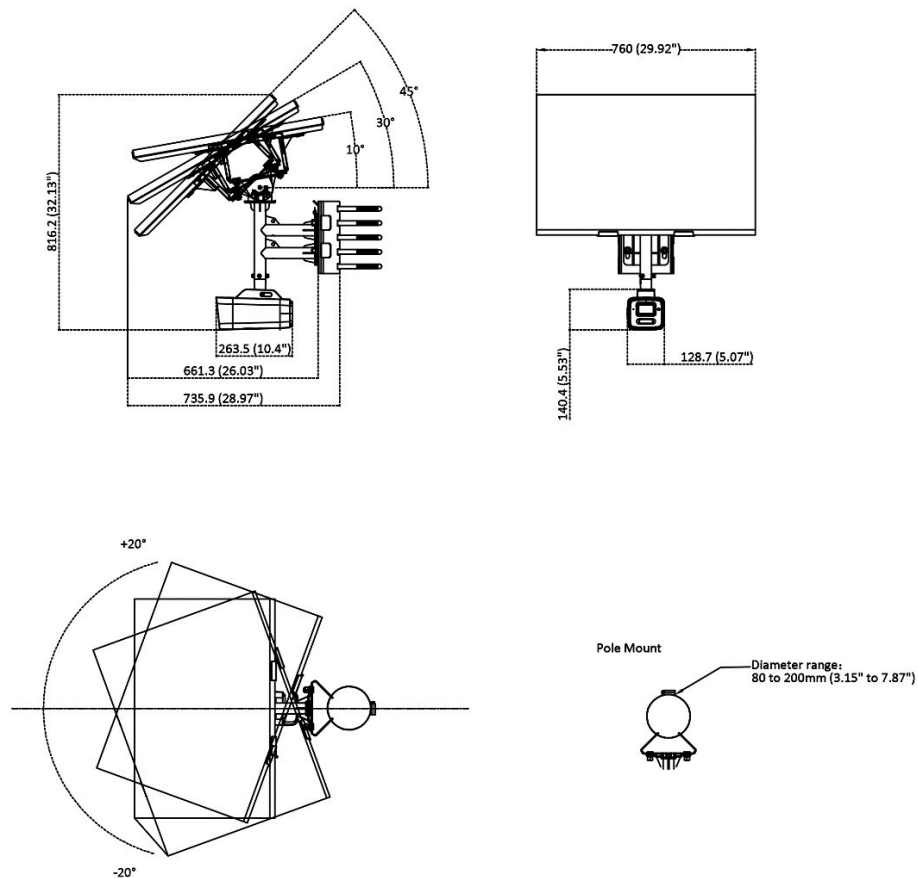
Camera	
Image Sensor	1/1.8" Progressive Scan CMOS
Max. Resolution	2560 × 1440
Min. Illumination	Color: 0.0005 Lux @ (F1.2, AGC ON), B/W: 0 Lux with light
Shutter Time	1 s to 1/100,000 s
Lens	
Focal Length & FOV	2.8 to 12 mm, horizontal FOV 107.4° to 39.8°, vertical FOV 56° to 22.4°, diagonal FOV 130.1° to 45.7° 8 to 32 mm, horizontal FOV 40.3° to 14.5°, vertical FOV 22.1° to 8.2°, diagonal FOV 46.9° to 16.5°
Lens Type	Auto, Semi-auto, Manual
Iris Type	Auto-iris
Aperture	2.8 to 12 mm: F1.2, 8 to 32 mm: F1.6
Lens Mount	All In One Lens
DORI	
DORI	2.8 to 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 8 to 32 mm: Wide: D: 150.3 m, O: 59.7 m, R: 30.1 m, I: 15.0 m Tele: D: 400 m, O: 158.7 m, R: 80 m, I: 40 m
Illuminator	
Supplement Light Type	IR
Supplement Light Range	2.8 to 12 mm: Up to 30 m 8 to 32 mm: Up to 50 m
Smart Supplement Light	Yes
Video	
Main Stream	Performance mode: 50 Hz: 25 fps (2560 × 1440, 1920 × 1080, 1280 × 720) 60 Hz: 30 fps (2560 × 1440, 1920 × 1080, 1280 × 720) Proactive mode: 50 Hz: 12.5 fps (2560 × 1440, 1920 × 1080, 1280 × 720) 60 Hz: 15 fps (2560 × 1440, 1920 × 1080, 1280 × 720)
Sub-Stream	Performance mode: 50 Hz: 25 fps (640 × 480, 640 × 360) 60 Hz: 30 fps (640 × 480, 640 × 360) Proactive mode: 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 Sub-stream: H.265/MJPEG Third Stream: H.265 *Performance mode: main stream supports H.265+
Video Bit Rate	32 Kbps to 8 Mbps
H.265 Type	Main Profile
Bit Rate Control	CBR/VBR
Scalable Video Coding (SVC)	H.265 encoding
Region of Interest (ROI)	4 fixed regions for main stream
Audio	
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)
Audio Sampling Rate	8 kHz/16 kHz/32 kHz/44.1 kHz/48 kHz
Environment Noise Filtering	Yes
Network	
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
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
Network Storage	NAS (NFS, SMB/CIFS), auto network replenishment (ANR) Together with high-end memory card, memory card encryption and health detection are supported.
Client	LTS Connect, X-VMS
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	MicroSIM
Frequency	WHCI9C43W-SZD-4G (US): LTE-FDD: Band2/4/5/12/13/66/71 WCDMA: Band2/4/5
Standard	WHCI9C43W-SZD-4G (US): LTE-FDD/WCDMA
Image	
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 Settings	Saturation, brightness, contrast, sharpness, gain, white balance, adjustable by client software or web browser
SNR	≥ 52 dB
Privacy Mask	4 programmable polygon privacy masks
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)
On-Board Storage	Built-in memory card slot, support microSD card, up to 256 GB
Reset Key	Yes
Ethernet Interface	1 RJ45 10 M/100 M self-adaptive Ethernet port
Power Output	12 VDC, max. 1000 mA
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, unattended baggage detection, object removal detection, scene change detection, face detection
Linkage	Upload to FTP/NAS/memory card, notify surveillance center, send email, trigger recording, trigger capture, trigger alarm output, audible warning
General	
Power	12 VDC ± 20%, 4-pin M8 waterproof connector
Material	Front cover: metal, body: metal, bracket: metal
Dimension	816.2 mm × 735.9 mm × 760 mm (32.1" × 28.9" × 29.9") (Max. size of the camera after it is completely assembled)
Package Dimension	862 mm × 352 mm × 762 mm (33.9" × 13.9" × 30.0")
Weight	Approx. 26.450 kg (58.3 lb.)
With Package Weight	Approx. 32.715 kg (72.1 lb.)
Storage Conditions	-20 °C to 60 °C (-4 °F to 140 °F). Humidity 95% or less (non-condensing)
Startup and Operating Conditions	-20 °C to 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
Battery	
Battery Type	Lithium

Capacity	360 Wh (90 Wh for each battery)
Max. Output Voltage	12.6 V
Battery Voltage	10.8 V
Operating Temperature	Charging: -20 °C to 45 °C (-4 °F to 113 °F) Discharging: -20 °C to 60 °C (-4 °F to 140 °F)
Cycle Lifetime	Performance mode: 5 days, Proactive mode: 8 days, Standby mode: 80 days *in cloudy/rainy days (25 °C)
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	FCC (47 CFR Part 15, Subpart B);
RF	FCC ID (47 CFR Part15 Subpart C);
Protection	Camera: IP66 (IEC 60529-2013) Wind resistance 12 level, up to 40 m/s wind speed resistance

Dimension



Unit: mm (inch)