ahua
TECHNOLOGY

DH-SD2A400HB-GN-AGQ-PV-SP-EAU

4MP 4G Solar Power Network PT Camera

· Supports solar power, making it ideal for use in locations that have difficulty accessing electricity and network.

· 4-MP 1/2.8" CMOS sensor, low luminance, and high definition

· H.265 codec that supports high compression ratio and an ultra-low bit rate.

· Built-in warm light and IR LED.

· Sound and light alarm linkage. When the alarm is triggered, the sound and light will be linked.

· Built in high-performance 4G Module that suits all mobile networks.

· Built-in PIR sensor triggers the camera to quickly track and monitor targets.

· Supports two-way talk.

· Supports max. 512 G Micro SD card.

4Mp	4G	Low Power Consumption	Two-way Talk	Sound and Light Alarm

Cyber Security

Dahua network cameras employ a series of security technologies, including security authentication and authorization, access control protocols, trusted protection, encrypted transmission and encrypted storage. These technologies improve the camera's defense against external cyber threats and prevent malicious programs from compromising the device.

System Overview

Driven by low power consumption technology, 4G Solar Power Network PT Camera operates safely in areas that do not have access to electricity and the internet. Designed for convenience, it is easy to install, cost effective and supports multiple types of 4G bands to meet the needs of different countries. It features two-way talk which allows you to communicate with people in front of the camera in real-time. The camera is also equipped with smart dual illuminators, which help the camera display clear images in full color, and capture videos of critical events.

Functions

4G

With a built-in high-performance 4G mobile network module, the camera can be directly registered to cloud platforms after a 4G SIM card has been inserted into it. It can be installed anywhere without the hassle of network cables. Users can perform real-time monitoring and remote control of the camera from a mobile client through 4G network.

Starlight

With its large image sensor and large aperture, the camera delivers high performance and quality, even in low-light conditions. The starlight feature allows the camera to capture highly detailed images in accurate color, recognizing targets even at night or in scenes with limited light.

Two-way Talk

With its built-in high-sensitivity microphone and high-power speaker, the camera realizes two-way talk through the mobile app.

Scene

Ideal for use on farmland, pastures, orchards, fish ponds, river channels, highways and other locations that are inconvenient for electric power distribution networks to reach.

Technical Specification

Camera

Image Sensor	1/2.8" CMOS
Pixel	4 MP
Max. Resolution	2560 (H) × 1440 (V)
ROM	128 MB
RAM	256 MB
Electronic Shutter Speed	1/3s–1/30,000s
Scanning System	Progressive
Min. Illumination	Color: 0.05 lux@F1.6 B/W: 0.005 lux@F1.6 0 lux@F1.6 (Illuminator on)
Illumination Distance	30 m (98.43 ft) (IR) 30 m (98.43 ft) (white light)
Illuminator On/Off Control	Manual; Smart IR; Off
Illuminator Number	2 (IR) 2 (white light)
PIR Sensor Distance	10 m (the height of device is 2.2 m, placed horizontally,+25°C,+77°F) 7m (the height of the device is 2.2 m, placed at an angle of 15° from the horizontal,+25°C,+77°F)

Battery

Battery Type	Lithium-ion
Capacity	10 Ah
Max. Charging Voltage	4.2 V
Operating Temperature	0 °C to +50 °C (+32 °F to +122 °F)
Battery Voltage	3.6 V
Cycle Lifetime	Sleep Mode:7 days (at the rate of 1-hour remote live view per day)
Battery Life	More than 500 cycles
Battery Weight	Approx. 192 g (0.42 lb)

Solar Module

Maximum Power	5.5 W
Cell type	Monocrystalline
Operating Temperature	–40 °C to +80 °C (–40 °F to +176 °F)
Dimensions	224 mm × 195 mm × 44 mm (8.8" × 5.9" × 1.7") (L × W × H)
Standard testing condition	AM = 1.5, 25 °C (77 °F), 1000 W/m², SMQ + 12%

Lens

Focal Length	4mm
Max. Aperture	F1.6
Field of View	H: 84° V: 42° D: 101°
Close Focus Distance	2 m (6.56 ft)
Iris Control	Fixed Iris

	Detect	Observe	Recognize	Identify
DORI Distance	86 m (282.15 ft)	34.4 m (112.86 ft)	17.2 m (56.43 ft)	8.6 m (28.22 ft)

PTZ

Pan/Tilt Range	Pan: 0° to 345° Tilt: 0° to +80°
Manual Control Speed	Pan: 0.1°/s–74°/s Tilt: 0.1°/s–36.4°/s
Preset Speed	Pan: 62°/s; Tilt: 36.3°/s
Preset	300
Power-off Memory	Yes
Idle Motion	Preset

Active Deterrence

Light Warning	White light warning Flash duration: 5 s–30 s Flash frequency: High, medium, low
Sound Warning	1 sound warning alarm The alarm can be configured to go off 1-3 times

Video

Video Compression	H.265; H.264; H.264B; H.264H; MJPEG(Sub Stream)
Streaming Capability	2 streams
Resolution	4M (2560 × 1440); 1080p (1920 × 1080); 1.3M(1280 × 960); 720p (1280×720); D1 (704 × 576); CIF (352 × 288); VGA (640 × 480)
Video Frame Rate	Main stream: 4M/1080p/1.3M/720p @ (1–25/30 fps) Sub stream 1: D1/CIF/VGA@ (1–25/30 fps)
Bit Rate Control	CBR/VBR
Video Bit Rate	H.264: 32 kbps–8192 kbps
Day/Night	Auto (ICR)
BLC	Yes
WDR	DWDR
HLC	Yes
White Balance	Auto; indoor; outdoor; ATW; manual; sodium lamp; natural light; street lamp
Gain Control	Auto; manual
Noise Reduction	2D NR; 3D NR
Motion Detection	Yes
Region of Interest (RoI)	Yes
Defog	Electronic
Image Rotation	180°
S/N Ratio	≥ 55 dB

Audio

Audio Compression	G.711a; G.711Mu; G.726; PCM

Network

Network Port	RJ-45 (10/100 Base-T)
4G	Yes

Frequency Band	LTE-FDD: B1/3/5/7/8/20/28 LTE-TDD: Band 38/40/41 WCDMA: Band 1/5/8 GSM: 850/900/1800 MHz
Network Protocol	HTTP; HTTPS; TCP/IP; IPv4; RTSP; UDP; SMTP; NTP; DHCP; DNS; DDNS; IPv6; 802.1x; SSL; Qos; FTP; UPnP; ICMP; SNMP; IGMP; ARP; RTCP; RTP; PPPoE; RTMP; Bonjour; SMB; NFS
Interoperability	ONVIF (Profile S&G&T);CGI;SDK;P2P
Streaming Method	Unicast/Multicast
User/Host	20 (total bandwidth: 64 M)
Storage	FTP; Micro SD card (support up to 512 GB); NAS
Browser	IE 9 and later versions Chrome 41 and earlier versions Firefox 50 and earlier versions iOS 10 and later versions
Management Software	DMSS
Mobile Client	iOS; Android

Certification

Certifications	CE-LVD: EN62368-1; CE-EMC: Electromagnetic Compatibility Directive 2014/30/EU; CE-RED: Radio Equipment Directive 2014/53/EU; FCC: 47 CFR FCC Part 15; Subpart B

Port

Audio Input	1 channel (built-in mic)
Audio Output	1 channel (built-in speaker)
Alarm Linkage	Capture; record; send email; preset; audio; warning light
Alarm Event	Motion/Tampering detection; audio detection; network disconnection detection; IP conflict detection; memory card state detection; memory space detection; passive infrared detection

Power

Power Supply	5.4 VDC, 3A (Standard solar panel)
Battery Life on a Full Charge	Sleep Mode: 7days (at the rate of 1-hour remote live view per day)
Power Consumption	Sleep: 35 mW Static: 2.3 W (daytime,only SD storage) 2.5 W (daytime: pulling stream in 4G), 4.8 W (illuminator on, pulling stream in 4G) Max.: 10 W (illuminator + PTZ + heater + pulling stream in 4G)

Environment

Operating Temperature	0 °C to +50 °C (32 °F to +122 °F)
Operating Humidity	≤ 95%
Storage Temperature	0 °C to +50 °C (32 °F to +122 °F)
Storage Humidity	≤ 95%
Protection	IP66 TVS 2000 V lightning proof; surge protection; voltage transient protection

Structure

Product Dimensions	336 mm × 247 mm × 223 mm (13.23" × 9.72" × 8.78") (L × W × H)
Net Weight	1.40 kg (3.09 lb)
Gross Weight	2.14 kg (4.72 lb)

Ordering Information

Type	Model	Description
4MP PT Camera	DH-SD2A400HB-GN- AGQ-PV-SP-EAU	4MP 4G Solar Power Network PT Camera
	SD2A400HB-GN-AGQ- PV-SP-EAU	4MP 4G Solar Power Network PT Camera
Accessories (Optional)	PFM900-E	Integrated Mount Tester
	TF-P100	MicroSD Memory Card

Accessories

Optional:

PFM900-E
Integrated Mount Tester

TF-P100
MicroSD Memory Card

Installation

Wall Mount	Pole Mount (vertical)

Dimensions (mm[inch])