dahua TECHNOLOGY

DH-SD10A248V-HNI

2MP 48x Starlight IR PTZ Network Camera

- · 1/1.9" 2Megapixel CMOS
- · Powerful 48x optical zoom
- · Starlight technology
- · Max. 50/60fps@1080P
- · Support Hi-PoE
- · IR distance up to 450m
- · IP67

H.265 | WDR | 0.001Lux | ICR D/N | IP67 | Hi-PoE

System Overview

Ultra series adopts top-notch DSP and advanced image sensor, which can offer excellent image performance for different environmental applications. The series supports UHD image up to 4K resolution, large optical zoom up to 48x, ultra starlight and WDR, powerful pan/tilt/zoom performance and etc. It also supports smart plan, such as IVS, face detection, heatmap and auto-tracking. The monitoring range is larger than before, the series is ideal for use in city and perimeter surveillance. Meanwhile, it is fully protected from dust and water, certified to IP67 and vandal resistant to IK10 standard. The ultra series offers industry-leading IR capability of more than 200m.

Functions

Starlight Technology

For challenging low-light applications, Dahua's Starlight Ultra-low Light Technology offers best-in-class light sensitivity, capturing color details in low light down to 0.002lux. The camera uses a set of optical features to balance light throughout the scene, resulting in clear images in dark environments.

Wide Dynamic Range

The camera achieves vivid images, even in the most intense contrast lighting conditions, using industry-leading wide dynamic range (WDR) technology. For applications with both bright and low lighting conditions that change quickly, True WDR (120 dB) optimizes both the bright and dark areas of a scene at the same time to provide usable video.

Auto-tracking

This feature controls the pan/tilt/zoom actions of the camera to automatically track an object in motion and to keep it in the scene. The tracking action can be triggered manually or automatically by defined rules. Once a rule is triggered, the camera can zoom in and track the defined target automatically.

Smart Wiper

With Dahua smart wiper technology, the wiper can be start/stop automatically when the build-in rain senor discerns whether it rains. The technology could offer better surveillance performance against wet weather and reduce dependence on manual operation.

High Efficiency Video Coding (H.265)

The H.265 (ITU-T VCEG) video compression standard offers double the data compression ratio at the same level of video quality, or substantially improved video quality at the same bit rate, as compared to older video compression technologies. H.265 offers such impressive compression by expanding the pattern comparison and difference-coding, improving motion vector prediction and motion region merging, and incorporating an additional filtering step called sample-adaptive offset filtering.

Environmental

Dahua cameras operate in extreme temperature environments, rated for use in temperatures from -40 °C to +70 °C (-40 °F to +158 °F) with 95% humidity. Subjected and certified to rigorous dust and water immersion tests, the IP67 rating makes it suitable for demanding outdoor applications.

Protection

The camera allows for ±25% input voltage tolerance, suitable for the most unstable conditions for outdoor applications. Its 8KV lightning rating provides effective protection for both the camera and its structure against lightning, and its IP67 ingress protection make it the choice for installation in even the most unforgiving environments.

Interoperability

The camera conforms to the ONVIF (Open Network Video Interface Forum) and PSIA (Physical Security Interoperability Alliance) specifications, ensuring interoperability between network video products regardless of manufacturer.

ONVIF · PSIA

Technical Specification

Camera

Image Sensor	1/1.9" CMOS
Effective Pixels	1920(H) x 1080(V), 2 Megapixels
RAM/ROM	1024M/128M
Scanning System	Progressive
Electronic Shutter Speed	1/1s~1/300,000s
Minimum Illumination	Color: 0.001Lux@F1.4; 0Lux@F1.4 (IR on)
S/N Ratio	More than 55dB
IR Distance	Distance up to 450m (1476ft)
IR On/Off Control	Auto/Manual
IR LEDs	10

Lens

Focal Length	5.7mm~275mm
Max. Aperture	F1.4~ F4.5
Angle of View	H: 64.55° ~ 1.5°
Optical Zoom	48x
Focus Control	Auto/Manual
Close Focus Distance	10mm~ 1500mm

DORI Distance

*Note: The DORI distance is a "general proximity" of distance which makes it easy to pinpoint the right camera for your needs. The DORI distance is calculated based on sensor specification and lab test result according to EN 62676-4 which defines the criteria for Detect, Observe, Recognize and Identify respectively.

Detect	Observe	Recognize	Identify
2731m(8960ft)	1092m （3583ft)	546m(1791ft)	273m(896ft)

PTZ

Pan/Tilt Range	Pan: 0° ~ 360° endless; Tilt: -30° ~ 90°,auto flip 180°
Manual Control Speed	Pan: 0.1° ~200° /s; Tilt: 0.1° ~120° /s
Preset Speed	Pan: 240° /s; Tilt: 200° /s
Presets	300
PTZ Mode	5 Pattern, 8 Tour, Auto Pan ,Auto Scan
Speed Setup	Human-oriented focal Length/ speed adaptation
Power up Action	Auto restore to previous PTZ and lens status after power failure
Idle Motion	Activate Preset/ Scan/ Tour/ Pattern if there is no command in the specified period
Protocol	DH-SD, Pelco-P/D (Auto recognition)

Intelligence

Auto Tracking	Support
IVS	Tripwire, Intrusion,Abandoned/Missing, Face Detection

Video

Compression	H.265 / H.264 / MJPEG
Streaming Capability	3 Streams
Resolution	1080P(1920×1080)/1.3M(1280x960)/720P(1280×720)/D1(704×576/704×480)/CIF(352×288/352×240)
Frame Rate	Main stream: 1080P/1.3M/720P(1~50/60fps)
	Sub stream1: D1/CIF(1 ~ 25/30fps)
	Sub stream2: 1080P/1.3M/720P (1 ~ 25/30fps)
Bit Rate Control	CBR/VBR
Bit Rate	H.265/H.264: 448K ~ 8192Kbps
Day/Night	Auto(ICR) / Color / B/W
Backlight Compensation	BLC / HLC / WDR(120dB)
White Balance	Auto,ATW,Indoor,Outdoor,Manual
Gain Control	Auto / Manual
Noise Reduction	Ultra DNR (2D/3D)
Motion Detetion	Support
Region of Interest	Support
Electronic Image Stabilization (EIS)	Support
Defog	Support
Digital Zoom	16x
Flip	180°
Privacy Masking	Up to 24 areas

Audio

Compression	G.711a/G.711Mu/AAC/G.722 / G.726/MPEG2-L2

Network

Ethernet	RJ-45 (10/100Base-T)
Protocol	IPv4/IPv6,HTTP,HTTPS,SSL,TCP/IP, UDP,UPnP, ICMP,IGMP,SNMP,RTSP,RTP, SMTP, NTP,DHCP, DNS,PPPOE,DDNS,FTP, IP Filter,QoS,Bonjour,802.1x
Interoperability	ONVIF, PSIA, CGI
Streaming Method	Unicast / Multicast
Max. User Access	20 users
Edge Storage	NAS (Network Attached Storage),Local PC for instant recording, Micro SD card 128GB
Web Viewer	IE, Chrome, Firefox, Safari
Management Software	Smart PSS, DSS
Smart Phone	IOS, Android

Certifications

Certifications	CE: EN55032/EN55024/EN50130-4 FCC: Part15 subpartB,ANSI C63.4- 2014 UL: UL60950-1+CAN/CSA C22.2,No.60950-1

Interface

Video Interface	1
Audio Interface	1/1
RS485	1
Alarm I/O	7/2

Electrical

Power Supply	AC 24V/3A(±25%), Hi-PoE
Power Consumption	24W, 38W (IR on, Heater on)

Environmental

Operating Conditions	-40°C ~ 70°C (-40°F ~ +158°F) / Less than 95% RH
Ingress Protection	IP67
Vandal Resistance	N/A

Construction

Casing	Metal
Dimensions	Φ300(mm) x 527.3(mm)
Net Weight	13kg(28.66lb)
Gross Weight	20kg(44.09lb)

Ordering Information

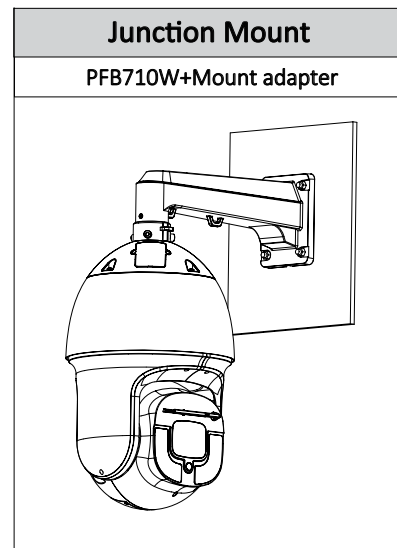| Type	Part Number	Description
2MP PTZ Camera	DH-SD10A248V-HNI	2MP 48x Starlight IR PTZ Network Camera, WDR, PAL
	DH-SD10A248VN-HNI	2MP 48x Starlight IR PTZ Network Camera, WDR, NTSC
	SD10A248V-HNI	2MP 48x Starlight IR PTZ Network Camera, WDR, PAL
	SD10A248VN-HNI	2MP 48x Starlight IR PTZ Network Camera, WDR, NTSC
Accessories	PFB710W	Wall Mount
		Mount Adapter
	AC 24V/5A	Power Supply

Accessories

Included:

AC24V/5A Power Supply

PFB303W Wall Mount

Mount Adapter

Junction Mount

PFB710W+Mount adapter

Dimensions (mm)