ahua
TECHNOLOGY

DH-SDZW2030S-N

2MP 30x Starlight IR Zoom Network Camera

- · 1/2.8" 2Megapixel STARVIS™ CMOS
- · Powerful 30x optical zoom
- · Starlight technology
- · H.265 Encoding
- · Max. 50/60fps@1080P
- · IVS
- · IR distance up to 150m
- · IP66

H.265	WDR	0.005Lux	ICR D/N	IP66

System Overview

Pro series adopts powerful DSP and image sensor, which can offer great image performance. It supports excellent optical zoom with autofocus and provides highly detailed zoomed-in views. With upgraded smart H.265 encoding technology, this series achieves high-efficient video stream compression, and enhance the monitoring system by saving network bandwidth and storage capacity. Suitable for both indoor and outdoor environment, this series enables 360° endless pan for wide area coverage. The pro series offers industry-leading IR capability of up to 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 0.005 lux. 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.

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 to rigorous dust and water immersion tests and certified to the IP66 Ingress Protection rating makes it suitable for demanding outdoor applications.

Protection
The camera allows for 6KV lightning rating to provide effective protection for both the camera and its structure against lightning.

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	1/2.8" STARVIS™ CMOS
Effective Pixels	1920(H) x 1080(V), 2 Megapixels
RAM/ROM	512M/128M
Scanning System	Progressive
Electronic Shutter Speed	1/1s~1/30,000s
Minimum Illumination	Color: 0.005Lux@F1.6; 0Lux@F1.6(IR on)
S/N Ratio	More than 55dB
IR Distance	150m(492ft)
IR On/Off Control	Auto / Manual
IR LEDs	4

Lens

Focal Length	4.5mm~135mm
Max. Aperture	F1.6 ~ F4.4
Angle of View	H: 67.8° ~ 2.4°
Optical Zoom	30x
Focus Control	Auto/Manual
Close Focus Distance	100mm~ 1000mm

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
1862m(6109ft)	744m(2441ft)	372m(1220ft)	372m(1220ft)

Intelligence

Auto Tracking	N/A
IVS	Tripwire, Intrusion, Abandoned/Missing, Face Detection

Video

Compression	H.265/H.264 / MJPEG
Streaming Capability	3 Streams
Resolution	1080P(1920×1080)/1.3M(1280×960)/720P(1280×720)/D1(704×576/704×480)/CIF(352×288/352×240)
Frame Rate	Main stream: 1080P/720P(1 ~ 50/60fps), 1.3M(1 ~ 25/30fps)
	Sub stream1: D1/CIF(1 ~ 25/30fps)
	Sub stream2: 1080P/1.3M/720P/D1/CIF (1~25/30fps)
Bit Rate Control	CBR/VBR
Bit Rate	H.265/H.264: 448K ~ 8192Kbps, MJPEG: 5120K ~ 10240Kbps
Day/Night	Auto(ICR) / Color / B/W
Backlight Compensation	BLC / HLC / WDR (120dB)

(White Balance)

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
Privacy Masking	Up to 24 areas

Audio

Compression	G.711a/G.711Mu/AAC/G.722 / G.726/G.729/ MPEG2-L2

Network

Ethernet	RJ-45 (10Base-T/100Base-TX)
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
RS232	N/A
Alarm I/O	2/1

Electrical

Power Supply	DC12V/5A
Power Consumption	10W, 50W(IR on)

Environmental

Operating Conditions	-40°C ~ 70°C (-40°F ~ +158°F) / Less than 90% RH
Ingress Protection	IP66
Vandal Resistance	N/A

Construction

Casing	Metal
Dimensions	Φ404mm×164mm×132mm
Net Weight	4.0kg(8.82lb)

Ordering Information

Type	Part Number	Description
2MP Zoom Camera	DH-SDZW2030S-N	2MP 30x Starlight IR Zoom Network Camera, WDR, PAL
	DH-SDZW2030SN-N	2MP 30x Starlight IR Zoom Network Camera, WDR, NTSC
	SDZW2030S-N	2MP 30x Starlight IR Zoom Network Camera, WDR, PAL
	SDZW2030SN-N	2MP 30x Starlight IR Zoom Network Camera, WDR, NTSC
Accessories	DC12V/5A	Power Supply
	PFB600W	Ceiling Mount
	PFB601W	Ceiling Mount

Dimensions (mm)
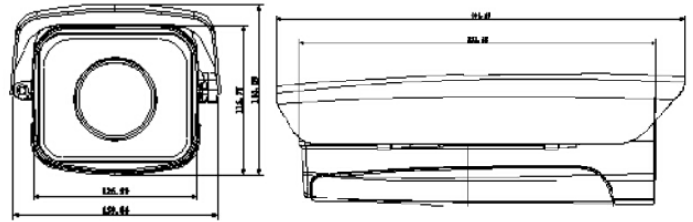
Accessories

Optional：

DC12V/5A
Power Supply

PFB600W
Ceiling Mount

PFB601W
Ceiling Mount