alhua
TECHNOLOGY

DH-SDZ2030S-N

2MP 30x Starlight Zoom Network Camera

· 1/2.8" 2Megapixel STARVIS™ CMOS
· Powerful 30x optical zoom
· Starlight technology
· H.265 Encoding
· Max. 50/60fps@1080P
· IVS
· Support PoE

| H.265 | WDR | 0.005Lux | ICR D/N | PoE |

System Overview

Featuring powerful optical zoom and accurate pan/tilt/zoom performance, this camera can provide large monitoring range and great detail. The camera has very excellent low light performance due to adopting the latest starlight technology. The camera is equipped with smooth control, high quality image and good protection, which make it can meet most of the requirements of video surveillance applications.

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.

Smart H.265+

Smart H.265+ is the optimized implementation of the H.265 codec that uses a scene-adaptive encoding strategy, dynamic GOP, dynamic ROI, flexible multi-frame reference structure and intelligent noise reduction to deliver high-quality video without straining the network. Smart H.265+ technology reduces bit rate and storage requirements by up to 70% when compared to standard H.265 video compression.

PFA Technology

PFA technology has innovatively introduced new methods of judgment to ensure the accuracy and predictability of the direction of subject distance adjustment. The result is a set of advanced focusing algorithms. PFA ensures clarity of the image throughout the process of zooming and shortens focus time. The realization of PFA technology substantially improves user experience and increases product value.

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.

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) specifications, ensuring interoperability between network video products regardless of manufacturer.

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; B/W: 0.0005Lux@F1.6
S/N Ratio	More than 55dB
IR Distance	N/A
IR On/Off Control	N/A
IR LEDs	N/A

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)	186m(610ft)

Intelligence

Event Trigger	Motion detection, Video tampering , Scene changing, Network disconnection, IP address conflict, Illegal Access, Storage anomaly
Auto Tracking	N/A
IVS	Tripwire, Intrusion, Abandoned/Missing
Advanced Intelligent Functions	Face Detection, Heat Map

Video

Compression	H.265+/H.265/H.264+/H.264
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/1.3M/720P(1~50/60fps)
	Sub stream1: D1/CIF(1 ~ 25/30fps)
	Sub stream2: 1080P/1.3M/720P/D1/CIF (1~25/30fps)

Bit Rate Control

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 Detection	Support
Region of Interest	Support
Electronic Image Stabilization (EIS)	Support
Defog	Support
Digital Zoom	16x

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 Profile S&G, API
Streaming Method	Unicast / Multicast
Max. User Access	20 users
Edge Storage	NAS (Network Attached Storage),Local PC for instant recording, Micro SD card 256GB
Web Viewer	IE, Chrome, Firefox, Safari
Management Software	Smart PSS, DSS, DMSS
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 port(BNC, 1.0V[p-p], 75Ω)
RS485	1
RS232	1
Audio I/O	1/1
Alarm I/O	2/1

Electrical

Power Supply	DC12V/1.5A, PoE(802.3af)
Power Consumption	10W

Environmental

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

Construction

Casing	Metal
Dimensions	Φ160mm×70mm×70mm
Net Weight	1.0kg(2.20lb)

Ordering Information

Type	Part Number	Description
2MP Zoom Camera	DH-SDZ2030S-N	2MP 30x Starlight Zoom Network Camera, WDR, PAL
	DH-SDZ2030SN-N	2MP 30x Starlight Zoom Network Camera, WDR, NTSC
	SDZ2030S-N	2MP 30x Starlight Zoom Network Camera, WDR, PAL
	SDZ2030SN-N	2MP 30x Starlight Zoom Network Camera, WDR, NTSC
Accessories	DC12V/2A	Power Adapter
	PFH610N	Housing
	PFH610N-W	Housing

Accessories

Optional：

DC12V/2A
Power Adapter

PFH610N
Housing

PFH610N-W
Housing

Dimensions (mm)

160mm

70mm

78mm

151mm