DH-SD59225U-HNI

2MP 25x Starlight IR PTZ Network Camera



- 1/2.8" 2Megapixel STARVIS™ CMOS
- Powerful 25x opθcal zoom
- Starlight technology
- H.265 Encoding
- Max. 50/60fps@1080P
- Auto-tracking and IVS
- Support PoE+
- IR distance up to 150m
- IP66



System Overview

Pro series adopts powerful DSP and image sensor, which can oï er great image performance. It supports excellent opθcal zoom with autofocus and provides highly detailed zoomed-in views. With upgraded smart H.265 encoding technology, this series achieves high-eĸ cient 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 oï ers industry-leading IR capability of up to 200m.

Funcθons

Starlight Technology
For challenging low-light applicaθons, Dahua's Starlight Ultra-low Light Technology oï ers best-in-class light sensiθvity, capturing color details in low light down to 0.002lux. The camera uses a set of opθcal features to balance light throughout the scene, resulθng in clear images in dark environments.

Wide Dynamic Range
The camera achieves vivid images, even in the most intense contrast ligh θng condiθons, using industry-leading wide dynamic range (WDR) technology. For applicaθons with both bright and low ligh θng condiθons that change quickly, True WDR (120 dB) opθmizes both the bright and dark areas of a scene at the same θme to provide usable video.

Auto-tracking
This feature controls the pan/ θlt/ zoom acθons of the camera to automaθcally track an object in moθon and to keep it in the scene. The tracking acθon can be triggered manually or automaθcally by defined rules. Once a rule is triggered, the camera can zoom in and track the defined target automaθcally.

Smart H.265+
Smart H.265+ is the opθmized implementaθon of the H.265 codec that uses a scene-adapθve encoding strategy, dynamic GOP, dynamic ROI, Ñexible mulθ-frame reference structure and intelligent noise reducθon 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.

Environmental
Dahua cameras operate in extreme temperature environments, rated for use in temperatures from -40°C ~ 70°C (-40°F ~ +158°F) with 95% humidity. Subjected to rigorous dust and water immersion tests and cerθfied to the IP66 Ingress Protecθon raθng makes it suitable for demanding outdoor applicaθons.

Protecθon
The camera allows for ±10% input voltage tolerance, suitable for the unstable condiθons for outdoor applicaθons. Its 6KV lightning raθng provides eï ecθve protecθon 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) specificaθons, ensuring interoperability between network video products regardless of manufacturer.

Technical Specifi caƟon

Camera

Image Sensor	1/2.8" STARVIS™ CMOS
Effective Pixels	1920(H) x 1080(V), 2 Megapixels
RAM / ROM	1024M / 128M
Scanning System	Progressive
Electronic Shu∑er 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	Distance up to 150m (492ft)
IR On/Off Control	Auto/Manual
IR LEDs	4

Lens

Focal Length	4.8mm~120mm
Max. Aperture	F1.6 ~ F4.4
Angle of View	H: 59.2° ~ 2.4°
Op Ɵcal Zoom	25x
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 specifica Ɵon and lab test result according to EN 62676-4 which defines the criteria for Detect, Observe, Recognize and Iden Ɵfy respec Ɵvely.

Detect	Observe	Recognize	Iden Ɵfy
1613m(5292Õ)	646m(2119Õ)	323m(1060Õ)	161m(528Õ)

PTZ

Pan/Tilt Range	Pan: 0° ~ 360° endless; Tilt: -15° ~ 90°, auto flip 180°
Manual Control Speed	Pan: 0.1° ~300° / s; Tilt: 0.1° ~200° / s
Preset Speed	Pan: 400° / s; Tilt: 300° / s
Presets	300
PTZ Mode	5 Pa∑ern, 8 Tour, Auto Pan , Auto Scan
Speed Setup	Human-oriented focal Length/ speed adapta Ɵon
Power up Ac Ɵon	Auto restore to previous PTZ and lens status aÕer power failure
Idle Mo Ɵon	Ac Ɵvate Preset/ Scan/ Tour/ Pa∑ern if there is no command in the specified period
Protocol	DH-SD

Intelligence

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

Video

Compression	H.265+/H.265/H.264+/H.264
Streaming Capability	3 Streams
Resolu Ɵon	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	CBR/VBR
Bit Rate	H.265/H.264: 448K~8192Kbps
Day/Night	Auto(ICR) / Color / B/W
Backlight Compensa Ɵon	BLC / HLC / WDR(120dB)
White Balance	Auto, ATW, Indoor, Outdoor, Manual
Gain Control	Auto / Manual
Noise Reduc Ɵon	Ultra DNR(2D/3D)
Mo Ɵon Dete Ɵon	Support
Region of Interest	Support
Electronic Image Stabiliza Ɵon (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/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 SoÕware	Smart PSS, DSS
Smart Phone	IOS, Android

Cer Ɵfi ca Ɵons

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

Interface	
Video Interface	N/A
Audio Interface	1/1
RS485	N/A
Alarm I/O	2/1
Electrical	
Power Supply	AC24V/3A(±10%), PoE+(802.3at)
Power Consumption	13W,23W (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	Φ186(mm) x 309(mm)
Net Weight	3.5kg(7.72lb)
Gross Weight	6.8kg(14.99lb)

Ordering Information

Type	Part Number	Description
2MP PTZ Camera	DH-SD59225U-HNI	2MP 25x Starlight IR PTZ Network Camera, WDR, PAL
	DH-SD59225UN-HNI	2MP 25x Starlight IR PTZ Network Camera, WDR, NTSC
	SD59225U-HNI	2MP 25x Starlight IR PTZ Network Camera, WDR, PAL
	SD59225UN-HNI	2MP 25x Starlight IR PTZ Network Camera, WDR, NTSC
Accessories	PFB300S	Wall Mount
	PFA110	Mount Adapter
	AC24V/3A	Power Supply
	PFA140	Power box
	PFB300C	Ceiling Mount
	PFA120	Water-proof Junction Box
	PFA150	Pole Mount
	PFA151	Corner Mount
	PFB303S	Parapet mount

Accessories

Included:



PFB300S
Wall Mount



PFA110
Mount Adapter



AC24V/3A
Power Supply

Optional :



PFA140
Power box



PFB300C
Ceiling Mount



PFA120
Junction Box



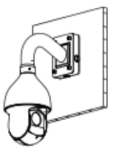
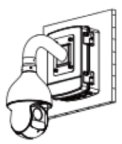
PFA150
Pole Mount



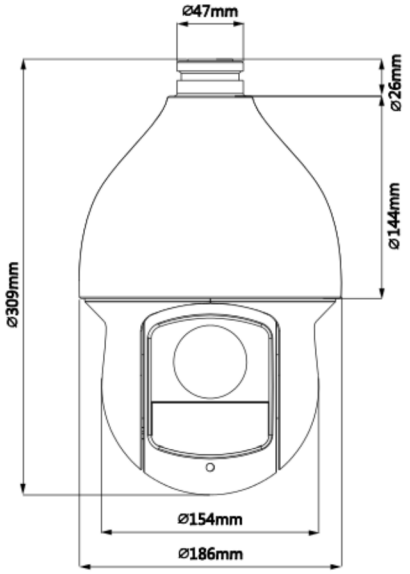
PFA151
Corner Mount



PFB303S
Parapet Mount

Ceiling Mount	Junction Mount
PFA110 + PFB300C	PFA110 + PFB300S + PFA120
	
Power Box Mount	**Pole Mount**
PFA110 + PFB300S + PFA140	PFA110 + PFB300S + PFA150
	
Corner Mount	**Parapet Mount**
PFA110 + PFB300S + PFA151	PFA110 + PFB303S
	

Dimensions (mm)



© 2017 Dahua. All rights reserved. Design and specifications are subject to change without notice.