DH-SD49212T-HN

2MP 12x Starlight IR PTZ Network Camera

- 1/2.8” 2Megapixel STARVIS™ CMOS
- Powerful 12x optical zoom
- Starlight technology
- Support H.265&H.264 Triple-streams encoding
- Max. 50/60fps@1080P, 25/30/50/60fps@720P
- IVS
- Support PoE+
- IR distance up to 100m
- IP66

System Overview

Lite series is a range of attractively priced mini PTZ dome camera with compact design. The series is ideal for entry level applications, comprises outdoor and indoor cameras that are esthetically designed to blend in with a building. With pan at speeds of up to 400°/s, and tilt at speeds of up to 200°/s, the lite series ensures complete and timely video capture across a large area. It offers industry-leading IR capability of up to 100m, and IP66 and IK10 protection ratings. They are perfect for remote monitoring of applications such as airports, stores, banks, hotels, office lobbies and etc.

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,which provides 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.

Technical Specification

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 Shutter Speed	1/3s~1/300,000s
Minimum Illumination	Color: 0.005Lux@F1.6; 0Lux@F1.6 (IR on)
S/N Ratio	More than 50dB
IR Distance	Distance up to 100m (328ft)
IR On/Off Control	Auto/Manual
IR LEDs	6

Lens

Focal Length	5.3mm~64mm
Max. Aperture	F1.6 ~ F4.4
Angle of View	H: 58.2° ~ 4.8°
Optical Zoom	12x
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
883m(2897ft)	353m(1158ft)	177m(581ft)	88m(289ft)

PTZ

Pan/Tilt Range	Pan: 0° ~ 360° endless; Tilt: -15° ~ 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

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)/720P(1280×720)/ D1(704×576/704×480)/CIF(352×288/352×240)
Frame Rate	Main stream: 1080P/720P/D1(1~50/60fps),
	Sub stream1: D1/CIF(1 ~ 25/30fps)
	Sub stream2: 1080P/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	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)	N/A
Defog	Support
Digital Zoom	16x
Flip	180°
Privacy Masking	Up to 24 areas

Audio

Compression	G.711a/G.711u(32kbps)/PCM(128kbps)

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	N/A
Audio Interface	1/1
RS485	N/A
Alarm I/O	2/1
Electrical	
Power Supply	DC 12V/3A, PoE+(802.3at)
Power Consumption	13W,20W (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	Φ160(mm) x 295(mm)
Net Weight	4kg(8.82lb)
Gross Weight	4.2kg(9.26lb)

Ordering Information

Type	Part Number	Description
2MP PTZ Camera	DH-SD49212T-HN	2MP 12x Starlight IR PTZ Network Camera, WDR,PAL
	DH-SD49212TN-HN	2MP 12x Starlight IR PTZ Network Camera, WDR,NTSC
	SD49212T-HN	2MP 12x Starlight IR PTZ Network Camera, WDR,PAL
	SD49212TN-HN	2MP 12x Starlight IR PTZ Network Camera, WDR,NTSC
Accessories	PFB305W	Wall Mount
	PFA111	Mount Adapter
	DC12V/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:

PFB305W
Wall Mount

Optional:

PFA111
Mount Adapter

DC12V/3A
Power Supply

PFA140
Power box

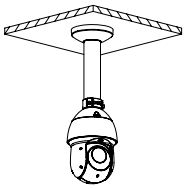
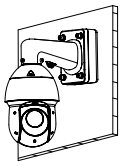
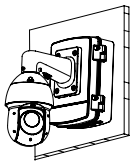
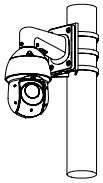
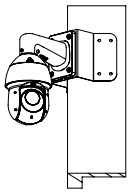
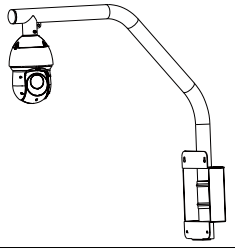
PFB300C
Ceiling Mount

PFA120
Junction Box

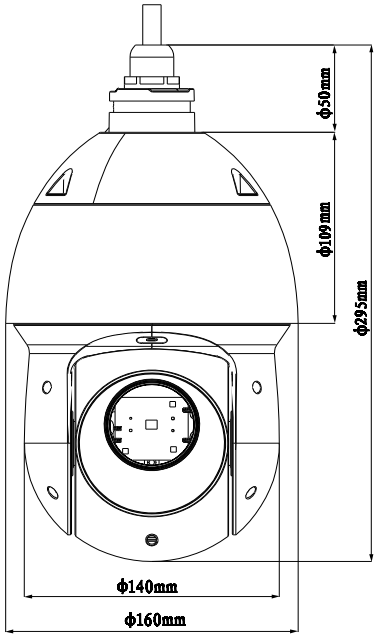
PFA150
Pole Mount

PFA151
Corner Mount

PFB303S
Parapet Mount

Ceiling Mount	Junction Mount
PFA111 + PFB300C	PFB305W + PFA120
	
Power Box Mount	**Pole Mount**
PFB305W + PFA140	PFB305W + PFA150
	
Corner Mount	**Parapet Mount**
PFB305W + PFA151	PFA111+ PFB303S
	

Dimensions (mm)



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