Dahua TECHNOLOGY

30x Starlight Laser PTZ Dome
2MP Indoor/Outdoor Network Camera

· Max 60fps@720p and 30fps@1080p
· Powerful 30x Optical Zoom
· Starlight Ultra-low Light Technology
· Laser Beam Distance Up to 500m (1640ft)
· Auto-tracking and IVS (optional)
· Built-in 7/2 Alarm in/out
· Outdoor Rated IP67
· Hi-POE

| 500 m IR | 0.002 Lux | TRACKING Smart Tracking | IVS | WDR | IP67 | Wiper |

System Overview

Featuring a True Day/Night, 2-megapixel resolution, Pan/Tilt/Zoom (PTZ) camera with a 30x optical zoom lens, this series provides an all-in-one solution for capturing long distance video surveillance for outdoor applications. Together with its infrared illumination and Starlight Technology, the camera is the perfect solution for dark, lowlight applications. The series combines a day/night mechanical IR cut filter for the highest image quality for variable lighting conditions during the day and True WDR for applications with direct sunlight or glare.

Functions

Starlight Technology

Featuring Dahua's Starlight Technology, this camera is ideal for applications with challenging lighting conditions. Its low-light performance delivers usable video with minimal ambient light. Even in extreme low-light conditions, Starlight Technology is capable of delivering color images in near complete darkness (0.002 lux).

Wide Dynamic Range

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

Intelligent Video System (IVS)

With optional built-in intelligent video analytics, the camera has the ability to detect and analyze moving objects for improved video surveillance. The camera provides optional standard intelliegence at the edge allowing detection of multiple object behaviors such as abandoned or missing objects. IVS also supports Tripwire analytics, allowing the camera to detect when a pre-determined line has been crossed, People Counting, ideal for business intelligence, and Facial Detection, for searching or identification of individuals.

Defog

Untilizing Dahua's advanced algorithm tecchnology, the Defog feature dynamically adjusts the camera's contrast settings to provide satisfying image quality in scenes affected by fog, smog, mist, smoke or other lowcontrast scenes. Regardless of weather conditions, the quality and relevancy of video images are improved with the Defog feature.

Auto-tracking

The camera supports single-scene, multiple-scene, and panaroma-scene auto-tracking. The tracking action can be triggered manually or automatically by defined rules. Once rules are triggered, the camera can zoom in and track the defined target automatically.

Environmental

With a temperature range of -40 °C to +70 °C (-40 °F to +158 °F), the camera is designed for extreme temperature environments. Subjected and certified to rigorous dust and water immersion tests, the IP67 rating makes it suitable for demanding outdoor applications. For enviorments with rain, sleet, snow and fog, an integrated wiper provides users with clear visibility at all times.

Protection

Supporting ±25% input voltage tolerance, this camera suits even the most unstable conditions for outdoor applications. Its 8KV lightning rating provides protectection against the camera and its structure from the effects of lightning.

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Technical Specification

Camera

Image Sensor	1/1.9" Exmor CMOS
Effective Pixels	1944 H x 1092 V
Scanning System	Progressive
Electronic Shutter Speed	1/1 ~ 1/30,000s
Minimum Illumination	Color: 0.002Lux@F1.6; B/W: 0.0002Lux@F1.6; 0Lux (IR on)
S/N Ratio	More than 56dB
IR Distance	500m (1640ft)
IR On/Off Control	Auto / Manual
IR LEDs	1

Lens

Lens Type	Motorized/ Auto Iris
Mount Type	Board-in
Focal Length	6mm~180mm (30x Optical zoom)
Max Aperture	F1.6 ~ F4.8
Angle of View	H: 61.2° ~ 2.1°
Focus Control	Auto / Manual
Close Focus Distance	100mm~ 1000mm

PTZ

Pan/Tilt Range	Pan: 0° ~ 360° Endless; Tilt: -20° ~ 90°, Auto Flip 180°
Manual Control Speed	Pan: 0.1° ~240° /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
Time Task	Auto activation of Preset/ Pan/ Scan/ Tour/ Pattern by preset-time
Protocol	DH-SD, Pelco-P/D (Auto recognition)

Intelligence

Auto Tracking	Single-scene, multiple-scene, panorama-scene
IVS (optional)	Tripwire, Intrusion, Cross Warning Zone, Perimeter Protection, Loitering Detection, Abandoned Object Detection, Missing Object Detection, Illegal Parking, Fast Moving
Advanced Intelligent Functions	Face Detection
Tracking Trigger Mode	Manual / Auto (alarm triggered)
Tracking Trigger Event	Targeting, Zoom, Tracking, Recording, Snapshot, Alarm

Video

Compression	H.264 / MJPEG
Streaming Capability	3 Streams
Resolution	1080p (1920×1080) / 720p (1280×720) / D1 (704×576/704×480) / CIF (352×288/352×240)
	Main Stream: 1080p / D1 (1 ~ 30fps), 720p (1~60fps)
	Sub Stream 1: D1/CIF (1 ~ 30fps)
	Sub Stream 2: 720p/D1/ CIF (1 ~ 30fps)
Bit Rate Control	CBR / VBR
Bit Rate	H.264: 56K ~ 8192Kbps, MJPEG: 56K ~ 20480Kbps
Day/Night	Auto (ICR) / Color / B/W
BLC Mode	BLC / HLC / WDR (120dB)
White Balance	Auto, ATW, Indoor, Outdoor, Manual
Gain Control	Auto / Manual
Noise Reduction	Ultra DNR (2D/3D)
Motion Detetion	Off / On (4 Zone, Rectangle)
Region of Interest	Off / On (4 Zone)
Electronic Image Stabilization (EIS)	Support
Smart IR	Support
Defog	Support
Digital Zoom	16x
Flip	0°/180°
Privacy Masking	Up to 24 Areas

Audio

Compression	G.711a / G.711Mu (32kbps)/ PCM (128kbps)
Interface	1/1 Channel In/Out

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
Edge Storage	Micro SD (128GB) Memory Status Display (Normal / Error/ Active / Formatting / Lock), NAS (Network Attached Storage), Local PC for Instant Recording, Micro SD, Max 128GB
Web Viewer	IE10….
Management Software	Smart PSS, DSS
Smart Phone	Android, Ios

Certifications

Certifications	FCC (SEFV1505156-A)

Interface

Video Interface	BNC (1.0Vp-p /75Ω), PAL/NTSC
Audio Interface	Input/Output 1 Input / 1 Output
RS485	Support
Alarm	7/2 In/Out

Electrical

Power Supply	24V AC ±25%, Hi-PoE
Power Consumption	Max. 20W/43W (24VAC, IR OFF / ON), Max. 11.5W/12.95W (Hi-PoE, IR OFF / ON)

Environmental

Operating Conditions	-40°C ~ +70°C (-40°F ~ +158°F) / Less than 90% RH *Start up should be done at above -35°C (-31°F)
Storage Conditions	-30°C ~ +60°C (-22°F ~ +140°F) / Less than 90% RH
Ingress Protection	IP67

Construction

Casing	Metal
Dimensions	Φ240mm x 357mm (Φ9.45" x 14.06")
Net Weight	6.9 kg (15.2 lbs)
Gross Weight	10.9kg (24.03lbs)

Accessories

Included:

DH-PFB303W
Wall mount

DH-PFA111
Mount adapter

Power supply

Optional:

DH-PFB300C
Ceiling mount

DH- PFB303S
Parapet mount

DH- PFA140
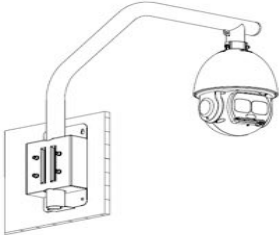Junction box

DH- PFA120
Junction box

DH-PFA150
Pole mount
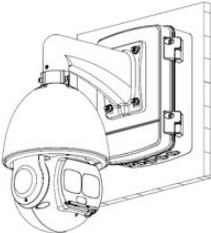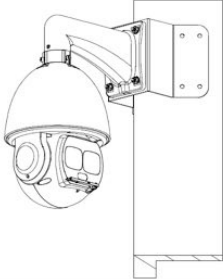
DH-PFA151
Pole mount

Ordering Information

Type	Part Number	Description
2MP Camera	DH-SD6ALA230FN-HN	2MP HD PTZ 30x Zoom, Starlight Laser Camera, True WDR, (power supply included)
	DH-SD6ALA230FN-HNI	2MP HD PTZ 30x Zoom, Starlight Laser Camera, True WDR, Auto-tracking, IVS (power supply included)
Accessories	DH-PFB303W	Wall Mount Bracket (Included)
	DH-PFA111	Mount Adapter (Included)
	DH-PFB300C	Ceiling Mount Bracket
	DH-PFB303S	Parapet Mount Bracket
	DH-PFA140	Junction Box
	DH-PFA120	Water-proof Junction Box
	DH-PFA150	Pole Mount Bracket
	DH-PFA151	Pole Mount Bracket

Installation

Parapet Mount	Ceiling Mount	Wall Mount
PFA111+PFB303S	PFA111+PFB300C	PFA111+PFB303W+PFA120

Pole Mount	Junction Mount	Corner Pole Mount
PFA111+PFB303W+PFA140	PFA111+PFB303W+PFA150	PFA111+PFB303W+PFA151

Dimensions (mm/inch)