

# DH-SD50230U-HNI

2MP 30x Starlight PTZ Network Camera



- · 1/2.8" 2Megapixel STARVIS™ CMOS
- · Powerful 30x optical zoom
- Starlight technology
- · H.265 Encoding
- Max. 50/60fps@1080P
- · Auto-tracking and IVS
- Support PoE+
- · IP67, IK10















## **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 0.005lux. 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.

## **Auto-tracking**

This feature controls the pan/tilt/zoom actions of the camera to automatically track an object in motion and to keep it in the scene. The tracking action can be triggered manually or automatically by defined rules. Once a rule is triggered, the camera can zoom in and track the defined target automatically.

#### 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 +60 °C (-40 °F to +140 °F) with 95% humidity. The camera complies with the IK10 Vandal Resistance impact rating. Subjected to rigorous dust and water immersion tests and certified to the IP67 Ingress Protection rating makes it suitable for demanding outdoor applications.

#### **Protection**

The camera allows for  $\pm 10\%$  input voltage tolerance, suitable for the unstable conditions for outdoor applications. Its 6KV lightning rating provides 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.

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Technical Specification				Auto Tracking	Support
Camera				IVS	Tripwire, Intrusion, Abandoned/Missing
Image Sensor		1/2.8" STARVIS™ CMOS		Advanced Intelligent Functions	Face Detection, Heat Map
Effective Pixels	ective Pixels 1920(H) x 1080(V), 2 Megapixels		Video		
RAM/ROM		512M/128M		Compression	H.265+/H.265/H.264+/H.264
Scanning System		Progressive		Streaming Capability	3 Streams
Electronic Shutter S	peed	1/1s~1/30,000s			1080P(1920×1080)/1.3M(1280×960)/720P(1280×
Minimum Illuminati	Minimum Illumination Color: 0.005Lux@F1.6; B/W: 0.0005Lux@F1.6		Resolution	720)/D1(704×576/704×480)/CIF(352×288/352×240)	
S/N Ratio		More than 55dB			Main stream: 1080P/1.3M/720P(1~50/60fps)
IR Distance		N/A		Frame Rate	Sub stream1: D1/CIF(1 ~ 25/30fps)
IR On/Off Control		N/A			Sub stream2: 1080P/1.3M/720P/D1/CIF (1~25/30fps)
IR LEDs		N/A		Bit Rate Control	CBR/VBR
Lens				Bit Rate	H.265/H.264: 448K ~ 8192Kbps
Focal Length		4.5mm~135mm		Day/Night	Auto(ICR) / Color / B/W
Max. Aperture		F1.6 ~ F4.4		Backlight Compensation	BLC / HLC / WDR (120dB)
Angle of View		H: 67.8° ~ 2.4°		White Balance	Auto, ATW, Indoor, Outdoor, Manual
Optical Zoom		30x		Gain Control	Auto / Manual
Focus Control		Auto/Manual		Noise Reduction	Ultra DNR (2D/3D)
Close Focus Distance	e	100mm~ 1000mm		Motion Detection	Support
DORI Distance				Region of Interest	Support
		ral proximity" of distance whi eeds. The DORI distance is cal		Electronic Image Stabilization (EIS)	Support
sensor specification	and lab test resu	ult according to EN 62676-4 wize and Identify respectively.		Defog	Support
Detect	Observe	Recognize	Identify	Digital Zoom	16x
1862m(6109ft)	744m(2441ft)	) 372m(1220ft)	186m(610ft)	Flip	180°
PTZ				Privacy Masking	Up to 24 areas
Pan/Tilt Range		Pan: 0° ~ 360° endless; Tilt: 0	° ~ 90°,auto flip 180°	Audio	
Manual Control Spe		Pan: 0.1° ~350° /s; Tilt: 0.1° ~250° /s		Compression	G.711a/G.711Mu/AAC/G.722 / G.726/G.729/ MPEG2-L2
Preset Speed		Pan: 500° /s; Tilt: 500° /s		Network	
Presets		300		Ethernet	RJ-45 (10Base-T/100Base-TX)
PTZ Mode		5 Pattern, 8 Tour, Auto Pan ,Auto Scan		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
Speed Setup		Human-oriented focal Length/ speed adaptation		Interoperability	ONVIF Profile S&G, API
Power up Action		Auto restore to previous PTZ and lens status after power failure		Streaming Method	Unicast / Multicast
Idle Motion		Activate Preset/ Scan/ Tour/ Pattern if there is no command in the specified period		Max. User Access	20 users
Protocol		DH-SD		Edge Storage	NAS (Network Attached Storage),Local PC for instant recording, Micro SD card 256GB
Intelligence		Web Viewer	IE, Chrome, Firefox, Safari		
Event Trigger cha		Motion detection, Video tampering , Scene changing, Network disconnection, IP address conflict, Illegal Access, Storage anomaly		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
	UL: UL60950-1+CAN/CSA C22.2,No.60950-1

#### Interface

Video Interface	N/A
RS485	N/A
Audio I/O	1/1
Alarm I/O	2/1

#### Electrical

Power Supply	AC24V/1.5A(±10%), PoE+(802.3at)
Power Consumption	13W,23W (Heater on)

## Environmental

Operating Conditions	-40°C $^{\sim}$ 60°C (-40°F $^{\sim}$ +140°F) / Less than 95% RH
Ingress Protection	IP67
Vandal Resistance	IK10

#### Construction

Casing	Metal
Dimensions	Ф186(mm) x 253(mm)
Net Weight	2.5kg(5.51lb)
Gross Weight	4.5kg(9.92lb)

# **Ordering Information**

Туре	Part Number	Description	
	DH-SD50230U-HNI	2MP 30x Starlight PTZ Network Camera, WDR, PAL	
2MP PTZ	DH-SD50230UN-HNI	2MP 30x Starlight PTZ Network Camera, WDR, NTSC	
Camera	SD50230U-HNI	2MP 30x Starlight PTZ Network Camera, WDR, PAL	
	SD50230UN-HNI	2MP 30x Starlight PTZ Network Camera, WDR, NTSC	
	PFB300S	Wall Mount	
	PFA110	Mount Adapter	
	AC24V/1.5A	Power Adapter	
	PFA140	Power Box	
Accessories	PFB300C	Ceiling Mount	
	PFA120	Water-proof Junction Box	
	PFA150	Pole Mount	
	PFA151	Corner Mount	
	PFB303S	Parapet Mount	

# Accessories

# Included:







PFA110 Mount Adapter



AC24V/1.5A Power Adapter

# Optional:



PFA140 Power Box



PFB300C Ceiling Mount



PFA120 Junction Box



PFA150



PFA151



PFB303S Parapet Mount

Pole Mount	Corner Moun	t Parapet Mount
Ceiling Mou	nt	Junction Mount
PFA110 + PFB300	ос	PFA110 + PFB300S + PFA120
Power Box Mo	ount	Pole Mount
PFA110 + PFB300S + I	PFA140	PFA110 + PFB300S + PFA150
Corner Moun	t	Parapet Mount
PFA110 + PFB300S +	PFA151	PFA110 + PFB303S

# Dimensions (mm)

