

DH-SD3D216NB-GNY

2MP 16x IR WizSense Network PTZ Camera



WizSense

Launched by Dahua Technology, WizSense is a series of AI products and soluEons that adopt independent AI chip and deep learning algorithm. It focuses on human and vehicle with high accuracy, enabling users to fast act on defined targets. Based on Dahua's advanced technologies, WizSense provides intelligent, simple and inclusive products and soluEons.

Series Overview

With its powerful opEcal zoom and accurate pan, Elt, and zoom funcEons, the SD3D series camera provides an all-in-one soluEon for long distance video surveillance in outdoor settings. Their small and compact design make them easy to install. They are also compaEble with IR illuminators, making them great for use in dark and low-light condiEons.

FuncEons

Starlight Technology

Dahua Starlight technology uElizes advanced image processing and opEcal technologies to deliver clear videos, even in low-lighEng environments. This technology is extensively employed across a range of seGings that have inadequate lighEng.

SMD 3.0

Empowered by deep-learning algorithms, Dahua SMD filters out moEon detecEon alarms triggered by targets that are not a concern. It quickly recognizes humans and vehicles, triggering alarms when an intrusion occurs.

IVS

With advanced video algorithm, Dahua IVS technology supports intelligent funcEons, such as tripwire and intrusion.

- 1/2.8" 2Megapixel CMOS
- 16x opEcal zoom
- Starlight technology
- Max. 25/30 fps@1080P
- IR distance up to 80 m
- IVS(Human/Vehicle DetecEon)
- SMD 3.0
- IP66
- Smart Light +



ProtecEon (IP66, TVS 6000 V)

IP66, TVS 6000 V lightning proof, surge protecEon, and voltage transient protecEon.

Smart H.265+ & Smart H.264+

With advanced scene-adapEve rate control algorithm, Dahua smart encoding technology realizes the higher encoding efficiency than H.265 and H.264, provides high-quality video, and reduces the cost of storage and transmission.

Smart Light+

Equipped with advanced LEDs and beam processing technology, the camera effecEvely reduces interference of stray light, ensuring concentrated illuminaEon within the lens's field of view. This allows the camera to easily produce clear images that reveal the fine details of targets even in low light condiEons.

Wide Dynamic Range

The camera produces vivid images, even in high-contrast lighEng condiEons, by using industry-leading wide dynamic range (WDR) technology. For scenes that quickly alternate between bright and low lighEng, WDR adjusts to fully capture both the bright and dark areas of a scene, producing superior quality videos.

Technical Specifications

Camera

Image Sensor	1/2.8" CMOS
Pixel	2 MP
Max. Resolution	1920 (H) × 1080 (V)
ROM	128 MB
RAM	128 MB
Electronic Shutter Speed	1 s–1/30,000 s
Scanning System	Progressive
Min. Illumination	0.005 lux@F1.6 (Color, 30 IRE); 0.0005 lux@F1.6 (B/W, 30 IRE); 0 lux (Illuminator on)
Illumination Distance	80 m (262.47 ft) (IR)
Illuminator On/Off Control	Zoom Priority; Manual; Auto; Off
Illuminator Number	3 (IR)

Lens

Focal Length	5.0 mm–80 mm
Max. Aperture	F1.6–F3.5
Field of View	H: 54.4°–4.1° ; V: 31.4°–2.3°; D: 61.3°–4.7°
Optical Zoom	16×
Focus Control	Auto; Semi-auto; Manual
Close Focus Distance	0.1 m–1 m (0.33 ft–3.28 ft)
Iris Control	Fixed

	Lens	Detect	Observe	Recognize	Identification
	5.0 mm–80 mm	1,103.4 m (3,620.0 ft)	435.9 m (1,430.1 ft)	220.7 m (724.08 ft)	110.3 m (361.88 ft)

DORI Distance

*DORI (Detect, Observe, Recognize, Identification) is a standard system (EN-62676-4) for defining the ability of a person viewing the video to distinguish persons or objects within a covered area. The numbers in this table do not reflect intelligent function distances. For intelligent function distances, refer to installation and commissioning manual/project design tool.

PTZ

Pan/Tilt Range	Pan: 0° to 360° endless; Tilt: –15° to +90°, auto flip 180°
Manual Control Speed	Pan: 0.1°–40°/s; Tilt: 0.1°–40°/s
Preset Speed	Pan: 0.1°–40°/s; Tilt: 0.1°–40°/s
Preset	300
Power-off Memory	Yes
Idle Motion	Preset
PTZ Protocol	DH-SD

Smart Event

IVS	Tripwire; intrusion
Intelligence	
SMD	SMD 3.0

Video

Video Compression	Smart H.265+; H.265; Smart H.264+; H.264B; H.264M; H.264H; MJPEG (Sub Stream 1)
Streaming Capability	2 streams
Resolution	1080p (1920 × 1080); 1.3MP (1280 × 960); 720p (1280 × 720); D1 (704 × 576/704 × 480); VGA (640 × 480); CIF (352 × 288/352 × 240)
Video Frame Rate	Main stream: 1080p/1.3M/720p @ (1–25/30 fps) Sub stream: D1/VGA/CIF @ (1–25/30 fps)
Bit Rate Control	CBR/VBR
Video Bit Rate	H.264: 64 kbps–8,192 kbps H.265: 25 kbps–6,400 kbps
Day/Night	Auto (ICR); Color/B/W
BLC	Yes
WDR	120 dB
HLC	Yes
White Balance	Auto; indoor; outdoor; ATW; manual; sodium lamp; natural light; street lamp
Gain Control	Auto; manual
Noise Reduction	2D NR; 3D NR
Motion Detection	Yes
Region of Interest (ROI)	Yes
Defog	Electronic Image Stabilization (EIS)
Digital Zoom	5×
Image Rotation	180°
S/N Ratio	≥55 dB

Network

Network Port	RJ-45 (10/100 Base-T)
Network Protocol	HTTP; HTTPS; TCP/IP; IPv4; RTSP; UDP; SMTP; NTP; DHCP; DNS; DDNS; IPv6; SSL; FTP; ARP; RTP; IP Filter; RTMP
Interoperability	CGI; SDK; ONVIF (Profile S & Profile T)
Streaming Method	Unicast/Multicast
User/Host	20 (total bandwidth: 64 M)
Storage	Micro SD card (256 GB); FTP
Browser	IE 7 and later versions; All Chrome versions; All Firefox versions; All Safari versions
Management Software	DSS Pro
Mobile Client	iOS; Android

CerEficaEon

CerEficaEons	CE: EN55032/EN55024/EN50130-4
Port	
Alarm Linkage	Capture; recording; send email
Alarm Event	MoEon/tampering detecEon; network disconnectEon detecEon; IP conflict detecEon; memory card state detecEon; memory space detecEon
Power	
Power Supply	12 VDC, 2 A \pm 10% PoE+ (802.3at)
Power ConsumpEon	Basic: 8 W Max. (Basic power consumpEon + WDR + intelligence on + IR on + PTZ operaEon + Heater): 18 W (12 VDC)
Power Adapter	OpEonal
Environment	
OperaEng Temperature	-30 °C to +60 °C (-22 °F to +140 °F)
OperaEng Humidity	\leq 95%
ProtecEon	IP66;TVS 6000 V lightning proof; surge protecEon; voltage transient protecEon
Structure	
Product Dimensions	240 mm \times Φ 151.5 mm (9.45" \times Φ 5.94")
Net Weight	1.5 kg (3.31 lb)
Gross Weight	2.5 kg (5.51 lb)
Filter	
Remarks	The precision of the presets for PTZ cameras might vary depending on different series. For scenes with high requirements on the precision, contact your local sales representaEve for assistance with selecEng the model.

Ordering InformaEon

Type	Model	DescripEon
Network PTZ Camera	DH-SD3D216NB-GNY	2MP 16x IR WizSense Network PTZ Camera
Accessories	PFB5310W	Wall Mount Bracket
	DH-PFB300C	Ceiling Mount Bracket
	PFA7711	Mount Adapter
	DH-PFA150	Pole Mount Bracket
	DH-PFA156	Pole Mount Bracket
	DH-PFA121	Water-proof JuncEon Box

Accessories

Included:



PFB5310W
Wall Mount Bracket

OpEonal:



DH-PFB300C
Ceiling Mount Bracket



PFA7711
Mount Adapter



DH-PFA150
Pole Mount Bracket



DH-PFA156
Pole Mount Bracket



DH-PFA121
Water-proof JuncEon Box

Wall Mount PFB5310W+PFA121	Ceiling Mount PFA7711+PFB300C	Pole Mount(Vertical) PFB5310W+PFA121+PFA156
Pole Mount(Horizontal) PFA7711+PFB300C+PFA150		

Dimensions (mm[inch])

