

Technical Specification

Camera

Image Sensor	1/2.8" CMOS
Pixel	2 MP
Max. Resolution	1920 (H) × 1080 (V)
ROM	4 GB
RAM	1 GB
Electronic Shutter Speed	1/1 s–1/30,000 s
Scanning System	Progressive
Min. Illumination	Color: 0.005 lux@F1.6 B/W: 0.0005 lux@F1.6 0 lux (IR light on)
Illumination Distance	150 m (492.13 ft) (IR)
Illuminator On/Off Control	Zoom Prio; Manual; SmartIR
Illuminator Number	4 (IR)

Lens

Focal Length	4.8 mm–154 mm			
Max. Aperture	F1.6–F4.0			
Field of View	H: 58.44°–3.04°; V: 33.45°–1.71°; D: 66.45°–3.49°			
Optical Zoom	32×			
Focus Control	Auto; Semi-auto; Manual			
Close Focus Distance	0.8 m–5.0 m (2.62 ft–16.40 ft)			
Iris Control	Auto; Manual			
DORI Distance	Detect	Observe	Recognize	Identify
	2,124 m (6,968.50 ft)	839 m (2,752.62 ft)	425 m (1,394.36 ft)	212 m (695.54 ft)

PTZ

Pan/Tilt Range	Pan: 0° to 360° endless Tilt: –105° to +105°, auto flip 180°
Manual Control Speed	Pan: 0.1°–300°/s Tilt: 0.1°–200°/s
Preset Speed	Pan: 400°/s; Tilt: 400°/s
Preset	300
Tour	8 (up to 32 presets per tour)
Pattern	5
Scan	5
Power-off Memory	Yes
Idle Motion	Preset; Pattern; Tour; Scan
PTZ Protocol	DH-SD Pelco-P/D (auto recognition)

Intelligence

Smart Capture	Support human, motor vehicle and non-motor vehicle image capture.
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IVS (Perimeter Protection)	Tripwire and intrusion. Support alarm triggering by target types (human and vehicle). Support filtering false alarms caused by animals, rustling leaves, bright lights, etc.
Face Detection	Yes
Auto Tracking	Yes
SMD PLUS	Yes

Video

Video Compression	Smart H.265+; H.265; Smart H.264+; H.264B; H.264M; H.264H; MJPEG (Sub Stream)
Streaming Capability	3 streams
Resolution	1080p (1920 × 1080); 1.3M (1280 × 960); 720p (1280 × 720); D1 (704 × 576); CIF (352 × 288)
Video Frame Rate	Main stream: 2M/1.3M/720p (1–50/60 fps) Sub stream 1: D1/CIF (1–25/30 fps) Sub stream 2: 2M/1.3M/720p (1–25/30 fps)
Bit Rate Control	CBR; VBR
Video Bit Rate	H.264: 3 kbps–20480 kbps H.265: 3 kbps–20480 kbps
Day/Night	Auto (ICR); Color; B/W
BLC	Yes
WDR	120 dB
HLC	Yes
White Balance	Auto; indoor; outdoor; tracking; 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
Image Stabilization	EIS
Defog	Electronic
Digital Zoom	16×
Image Rotation	180°
Privacy Masking	Up to 24 areas can be set, with up to 8 areas in the same view
S/N Ratio	≥ 55 dB

Audio

Audio Compression	G.711a; G.711Mu; G.726; MPEG2-Layer2; G722.1; G729; G723
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Network

Network Port	RJ-45 (10/100 Base-T)
Network Protocol	HTTP; HTTPS; IPv4; RTSP; UDP; SMTP; NTP; DHCP; DNS; DDNS; IPv6; 802.1x; QoS; FTP; UPnP; ICMP; SNMP; SNMP v1/v2c/v3 (MIB-2); IGMP; ARP; RTCP; RTP; PPPoE; RTMP; TCP
Interoperability	ONVIF Profile S&G&T; CGI
Streaming Method	Unicast; Multicast

User/Host	20 (total bandwidth: 64 M)
Storage	FTP; Micro SD card (512 GB); NAS
Browser	IE: IE7 and later Chrome: 42 and earlier Firefox: 52 and earlier Safari
Management Software	Smart PSS; DSS; DMSS; Easy4ip; IVSS
Mobile Client	iOS; Android

Certification

Certifications	CE-LVD: EN 62368-1 CE-EMC: EN55032: 2015/EN61000-3-2; 2019/ EN61000-3-3; 2013+A1: 2019 /EN50130-4; 2011/A1: 2014/EN55024: 2010/A1: 2015/ EN55035: 2017 FCC: CFR 47 FCC Part15, Subpart B UL: UL60950-1+CAN/CSA C22.2, No.60950-1
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Port

Two-way Audio	Yes
Alarm Linkage	Capture; preset; tour; pattern; recording; triggering on-off value output; audio; sending email
Alarm Event	Motion/tampering detection; audio detection; network disconnection detection; IP conflict detection; memory card state detection; memory space detection; power exception detection
Alarm I/O	2/1
Audio I/O	1/1

Power

Power Supply	24 VDC, 2.5 A (± 25%) PoE+ (802.3at)
Power Consumption	Basic: 13 W Max.: 22 W (illuminator + PTZ working)

Environment

Operating Temperature	-40 °C to +70 °C (-40 °F to +158 °F)
Operating Humidity	≤ 95%
Protection	IP67; IK10; TVS 6000 V lightning proof; surge protection; voltage transient protection

Structure

Product Dimensions	331.9 mm × Φ190.4 mm (13.07" × Φ7.50")
Net Weight	4.7 kg (10.36 lb)
Gross Weight	8 kg (17.64 lb)

Ordering Information

Type	Model	Description
2M WizSense Network PTZ Camera	DH-SD5A232XB-HNR-P	2MP 32x Starlight IR WizSense Network PTZ Camera
	SD5A232XB-HNR-P	2MP 32x Starlight IR WizSense Network PTZ Camera
Accessories	PFB305W	Wall Mount Bracket
	DC24V/2.5A	Power Adapter
	PFA111	Mount Adapter
	PFA140	Power Box
	PFB300C	Ceiling Mount Bracket
	PFA120	Junction Box
	PFA150	Pole Mount Bracket
	PFA151	Corner Mount Bracket
	PFB303S	Parapet Mount Bracket

Accessories

Included:



PFB305W
Wall Mount Bracket



DC24V/2.5A
Power Adapter

Optional:



PFA111
Mount Adapter



PFA140
Power Box



PFB300C
Ceiling Mount Bracket



PFA120
Junction Box



PFA150
Pole Mount Bracket



PFA151
Corner Mount Bracket



PFB303S
Parapet Mount Bracket

Wall Mount PFB305W+PFA120	Ceiling Mount PFA111+PFB300C	Ceiling Mount PFA111+PFB301C
Pole Mount(Vertical) PFB305W+PFA150	Corner Mount PFB305W+PFA151	Pole Mount(Horizontal) PFA111+PFB300C+PFA150

Dimensions (mm[inch])

