Technical Specification

Camera

Image Sensor	1/2.8" CMOS
Pixel	2MP
Max. Resolution	1920 × 1080
ROM	128 MB
RAM	512 MB
Electronic Shutter Speed	1/1s~1/30000s
Scanning System	Progressive
Min. Illumination	Color: 0.005 lux@F1.6 B/W: 0.0005 lux@F1.6 0 lux (IR on)
Illumination Distance	100 m (328.08 ft) (IR)
Illuminator On/Off Control	Zoom Prio; Manual; Auto; Off
Illuminator Number	6 (IR)

Lens

Focal Length	5 mm–80 mm
Max. Aperture	F1.6–F3.5
Field of View	H: 53.9°–4.6° V: 30.3°–2.6° D: 60°–5.3°
Optical Zoom	16×
Focus Control	Auto; semi-auto; manual
Close Focus Distance	0.1 m–0.5 m (0.33 ft–1.64 ft)
Iris Control	Fixed

DORI Distance	Detect	Observe	Recognize	Identify
	1,103.4 m (3,620.08 ft)	435.9 m (1,430.12 ft)	220.7 m (724.08 ft)	110.3 m (361.88 ft)

PTZ

Pan/Tilt Range	Pan: 0° to 360° endless Tilt: –5° to +90°, auto flip 180°
Manual Control Speed	Pan: 0.1°/s–240°/s Tilt: 0.1°/s–160°/s
Preset Speed	Pan: 240°/s; Tilt: 160°/s
Preset	300
Tour	8 (up to 32 presets per tour)
Pattern	5
Scan	5
Power-off Memory	Yes
Idle Motion	Pattern;Preset;Scan;Tour
PTZ Protocol	DH-SD

Intelligence

IVS (Perimeter Protection)	Tripwire; intrusion; crossing fence detection; loitering detection; abandoned/missing object; fast moving; parking detection; people gathering; vehicle/human alarm classification; linkage tracking
Face Detection	Supports face detection, face track box, capturing pictures, face enhancement; Supports face cutout: Face, one-inch photo. Capturing strategies include real-time capturing and quality first
Auto Tracking	Human tracking based on Auto Tracking 1.0 technology
SMD	SMD 3.0
Auto Patrol	It triggers the IVS rule when a target is detected and makes the camera link with the PTZ to rotate to the position of the target and patrol based on its presets

Video

Video Compression	H.264H; H.264B; Smart H.265+; H.264; H.265; MJPEG (Sub Stream); Smart H.264+
Streaming Capability	3 streams
Resolution	1080p (1920 × 1080); 1.3M (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 1: D1/VGA/CIF@ (1–25/30 fps) Sub stream 2: 1080p/1.3M/720p @(1–25/30 fps)
Bit Rate Control	CBR/VBR
Video Bit Rate	H264: 64 kbps–8192 kbps H265:25 kbps–6400 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
Image Stabilization	Electronic (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; PCM

Network

Network Port	RJ-45 (10/100 Base-T)
Network Protocol	FTP;RTMP;IPv6;Bonjour;IPv4;DNS;RTCP;PPPoE;NTP;RTP;802.1x;HTTPS;SNMP;TCP/IP;DDNS;UPnP;NFS;ICMP;UDP;IGMP;SMB;HTTP;SSL;DHCP;SMTP;SNMPv1/v2c/v3(MIB-2);Qos;RTSP;ARP
Interoperability	CGI;SDK;ONVIF (Profile S&G&T);P2P

Streaming Method	Unicast/Multicast
User/Host	20 (total bandwidth: 64 M)
Storage	Micro SD card (512 GB); FTP/SFTP; NAS
Browser	IE 9 and later versions Chrome 41 and later versions Firefox 50 and later versions iOS 10 and later versions
Management Software	DSS;DSS Pro
Mobile Client	iOS;Android

Certification

Certifications	CE: EN55032/EN55024/EN50130-4 FCC: Part15 subpartB, ANSI C63.4-2014 UL: UL62368-1

Port

Audio Input	1 channel (LINE IN, bare wire)
Audio Output	1 channel (LINE OUT,bare wire)
Alarm Linkage	Capture; preset; tour; pattern; recordings on SD card; alarm digital input; send email; audio
Alarm Event	Motion/Tampering detection; audio detection; network disconnection detection; IP conflict detection; memory card state detection; memory space detection;
Alarm I/O	2/1
Audio I/O	1/1

Power

Power Supply	12 VDC/2 A ± 10% (included) PoE+ (802.3at)
Power Consumption	Basic: 10 W Max.: 19 W (illuminator on + fan on + PTZ)

Environment

Operating Temperature	–40 °C to +65 °C (–40 °F to +149 °F)
Operating Humidity	≤ 95%
Protection	IP66, TVS 6000 V lightning proof; surge protection; voltage transient protection

Structure

Product Dimensions	170.4 mm × Φ171.1 mm (6.71" × Φ6.74")
Net Weight	2.5 kg (5.51 lb)
Gross Weight	3.2 kg (7.05 lb)

Ordering Information

Type	Model	Description
2MP WizSense PTZ Camera	DH-SD4A216DB-HNY	2MP 16x Starlight IR WizSense Network PTZ Camera
	SD4A216DB-HNY	2MP 16x Starlight IR WizSense Network PTZ Camera
Accessories	DC 12 V/2A	Power Adapter
	PFM900-E	Integrated Mount Tester
	TF-P100	MicroSD Memory Card
	PFA101	Mount Adapter
	PFB303W	Wall Mount Bracket
	PFB300C	Ceiling Mount Bracket
	PFA150	Pole Mount Bracket
	PFA151	Corner Mount Bracket
	PFB303S	Parapet Mount Bracket
	PFB5310C	In-ceiling Mount

Accessories

Included:



DC 12 V/2A
Power Adapter

Optional:



PFM900-E
Integrated
Mount Tester



TF-P100
MicroSD Memory
Card



PFA101
Mount Adapter



PFB303W
Wall Mount
Bracket



PFB300C
Ceiling Mount
Bracket



PFA150
Pole Mount
Bracket



PFA151
Corner Mount
Bracket



PFB303S
Parapet Mount
Bracket



PFB5310C
In-ceiling Mount