VIKYLIN

VD-2BR81-ZAS
8MP Lite IR Vari-focal Dome Network Camera

- 8MP, 1/2.7" CMOS image sensor, low illuminance, high definition image
- Outputs max. 8MP (3840 × 2160)@15 fps, and supports 2688 × 1520 (2688 × 1520)@25/30 fps
- H.265 codec, high compression rate, ultra-low bit rate
- Built-in IR LED, max IR distance: 40 m
- ROI, SMART H.264+/H.265+, flexible coding, applicable to various bandwidth and storage environments
- Rotation mode, WDR, 3D NR, HLC, BLC, digital watermarking, applicable to various monitoring scenes
- Intelligent detection: Intrusion, tripwire
- Abnormality detection: Motion detection, video tampering, no SD card, SD card full, SD card error, network disconnection, IP conflict, illegal access, local alarm, voltage detection, audio detection
- Alarm: 1 in, 1 out; audio: 1 in, 1 out; supports max. 256 GB Micro SD card
- 12 V DC/PoE power supply
- IP67, IK10 protection

| 8Mp | Smart Codec | WDR | Starlight | IVS | IP67 | IK10 |

Series Overview

With upgraded H.265 encoding technology, Lite series network camera has efficient video encoding capacity, which saves bandwidth and storage space. This camera adopts the latest starlight technology and displays better color image in the condition of low illumination. It supports SD card storage, dust-proof function, waterproof function and vandal-proof function, complying with the standards of IP67 and IK10 (Supported by some select models).

Functions

Smart H.265+ & Smart H.264+
With advanced scene-adaptive rate control algorithm, 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.

WDR
With advanced Wide Dynamic Range (WDR) technology, network camera provides clear details in the environment of strong brightness contrast. The bright and dark area can get clear video even in high brightness environment or with backlight shadow.

Starlight
With advanced image processing technology and optical technology, Starlight technology can provide clear colorful video in the environment of low illuminance. It widely applies to various environments of low illuminance.

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

Cyber Security
Network cameras employ a series of security technologies, including security authentication and authorization, access control protocols, trusted protection, encrypted transmission and encrypted storage. These technologies improve the camera's defense against external cyber threats and prevent malicious programs from compromising the device.

Protection (IP67, IK10, wide voltage)
IP67: The camera passes a series of strict test on dust and soak. It has dust-proof function, and the enclosure can works normal after soaking in 1 m deep water for 30 minutes.
IK10: The enclosure can stand the punch more than 5 times from a 5 kg hammer falling from a height of 40 cm (Impact energy is 20J).
Wide voltage: The camera allows ±30% input voltage tolerance (wide voltage range), and it is widely applied to outdoor environment with instable voltage.

Technical Specification

Camera

Image Sensor	1/2.7" CMOS
Max. Resolution	3840 (H) × 2160 (V)
ROM	128 MB
RAM	256 MB
Scanning System	Progressive
Electronic Shutter Speed	Auto/Manual 1/3 s–1/100,000 s
Min. Illumination	0.008 Lux@F1.5
S/N Ratio	> 56 dB
Illumination Distance	40 m (131.2 ft)
Illuminator On/Off Control	Auto/Manual
Illuminator Number	2 (IR LED)
Pan/Tilt/Rotation Range	Pan: 0°–355° Tilt: 0°–67° Rotation: 0°–355°

Lens

Lens Type	Motorized vari-focal
Mount Type	φ14
Focal Length	2.7 mm–13.5 mm
Max. Aperture	F1.5
Field of View	Pan: 113°–31° Tilt: 58°–17° Diagonal: 138°–36°
Iris Type	Fixed
Close Focus Distance	0.8m–0.8m (2.62 ft–2.62 ft)

DORI Distance	Lens	Detect	Observe	Recognize	Identify
	W	85.3 m (279.9 ft)	34.1 m (111.9 ft)	17 m (55.8 ft)	8.5 m (27.9 ft)
	T	280 m (918.6 ft)	112 m (367.5 ft)	56 m (183.7 ft)	28 m (91.9 ft)

Smart Event

IVS	Tripwire; intrusion

Video

Video Compression	H.265; H.264; H.264B; MJPEG (only supported by the sub stream)
Smart Codec	Smart H.265+/ Smart H.264+
Video Frame Rate	Main stream: 3840 × 2160 (1 fps–15 fps) 2688 × 1520 (1 fps–25/30 fps) Sub stream: 704 × 576 (1 fps–25 fps) 704 × 480 (1 fps–30 fps)
Stream Capability	2 streams

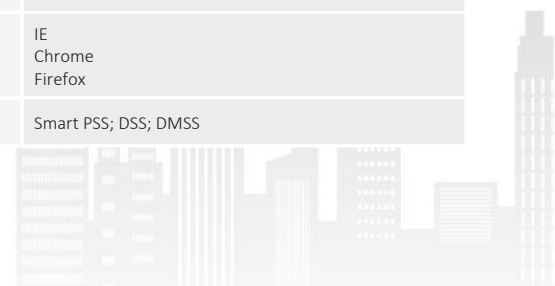|	
Resolution	3840 × 2160 (3840 × 2160); 3072 × 2048 (3072 × 2048); 3072 ×1728 (3072 × 1728); 2592 × 1944 (2592 × 1944); 2688 × 1520 (2688 × 1520); 3M (2048 × 1536); 2304 × 1296 (2304 × 1296); 1080p (1920 × 1080); 1.3M (1280 × 960); 720p (1280 × 720); D1 (704 × 576/704 × 480); VGA (640 × 480); CIF (352 × 288/352 × 240)
Bit Rate Control	CBR/VBR
Video Bit Rate	H.264: 32 kbps–8192 kbps H.265: 12 kbps–8192 kbps
Day/Night	Auto (ICR)/Color/B/W
BLC	Yes
HLC	Yes
WDR	120 dB
White Balance	Auto/natural/street lamp/outdoor/manual/regional custom
Gain Control	Auto/Manual
Noise Reduction	3D NR
Motion Detection	OFF/ON (4 areas, rectangular)
Region of Interest(RoI)	Yes (4 areas)
Smart Illumination	Yes
Image Rotation	0°/90°/180°/270° (Supports 90°/270° with 2688 × 1520 resolution and lower.)
Mirror	Yes
Privacy Masking	4 areas

Audio

Audio Compression	G.711a; G.711Mu; G.726

Alarm

Alarm Event	No SD card; SD card full; SD card error; network disconnection; IP conflict; motion detection; video tampering; tripwire; intrusion; illegal access; voltage detection; audio detection; safety exception; local alarm

Network

Network	RJ-45 (10/100 Base-T)
SDK and API	Yes
Cyber Security	Video encryption; firmware encryption; configuration encryption; Digest; WSSE; account lockout; security logs; IP/MAC filtering; generation and importing of X.509 certification; syslog; HTTPS; 802.1x; trusted boot; trusted execution; trusted upgrade
Protocol	IPv4; IPv6; HTTP; TCP; UDP; ARP; RTP ; RTSP; RTCP; RTMP; SMTP; FTP; SFTP; DHCP; DNS; DDNS; QoS; UPnP; NTP; Multicast; ICMP; IGMP; NFS; PPPoE; Bonjour
Interoperability	ONVIF(Profile S/Profile G/Profile T); CGI; P2P; Milestone; Genetec
User/Host	20
Storage	FTP; SFTP; Micro SD Card (support max. 256 GB); NAS
Browser	IE Chrome Firefox
Management Software	Smart PSS; DSS; DMSS

Mobile Phone	IOS; Android

Certification

Certifications	CE-LVD: EN62368-1 CE-EMC: Electromagnetic Compatibility Directive 2014/30/EU FCC: 47 CFR FCC Part 15, Subpart B UL/CUL: UL60950-1 CAN/CSA C22.2 No.60950-1-07

Port

Audio Input	1 channel (RCA port)
Audio Output	1 channel (RCA port)
Alarm Input	1 channel In: 5mA 5V DC
Alarm Output	1 channel Out: 300mA 12V DC

Power

Power Supply	12 V DC/PoE (802.3af)
Power Consumption	< 7.4 W

Environment

Operating Conditions	−30 °C to +60 °C (−22 °F to +140 °F)/less than ≤ 95% RH
Storage Temperature	−40 °C to +60 °C (−40 °F to +140 °F)
Protection	IP67; IK10

Structure

Casing	Metal
Dimensions	Φ122 mm × 88.9 mm (Φ4.80" × 3.50")
Net Weight	0.47 kg (1.1 lb)
Gross Weight	0.63 kg (1.4 lb)

Ordering Information

Type	Part Number	Description
8MP Camera	DH-IPC-HDBW2831RP-ZAS-S2	8MP Lite IR Vari-focal Dome Network Camera,PAL
	DH-IPC-HDBW2831RN-ZAS-S2	8MP Lite IR Vari-focal Dome Network Camera,NTSC
Accessories (optional)	PFA137	Junction Box
	PFB203W	Wall Mount
	PFA152-E	Pole Mount
	PFA200W	Rain Shade
	PFA106	Mount Adapter
	PFB220C	Ceiling Mount
	PFB200C	In-Ceiling Mount
	PFM321D	DC12 V 1A Power Adapter
	LR1002-1ET/1EC	Single-port Long Reach Ethernet over Coax Extender
	PFM900-E	Integrated Mount Tester
	PFM114	TLC SD Card

Accessories

Optional:

PFA137
Junction Box

PFB203W
Wall Mount

PFA152-E
Pole Mount

PFA200W
Rain Shade

PFA106
Mount Adapter

PFB220C
Ceiling Mount

PFB200C
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PFM321D
DC12V1A Power Adapter

LR1002-1ET/1EC
Single-port Long Reach Ethernet over Coax Extender

PFM900-E
Integrated Mount Tester

PFM114
TLC SD Card

Junction Mount	Wall Mount	Wall Mount	Pole Mount
PFA137	PFA137+PFA200W	PFB203W	PFB203W+PFA152-E

Ceiling Mount	In-Ceiling Mount
PFA106+PFB220C	PFB200C

Dimensions (mm[inch])

88.9 [3.50]   45.5 [1.79]   1.79 [1.79]

⌀122.0 [⌀4.80]

3-⌀4.5 [⌀0.18]   ⌀110.0 [⌀4.33]