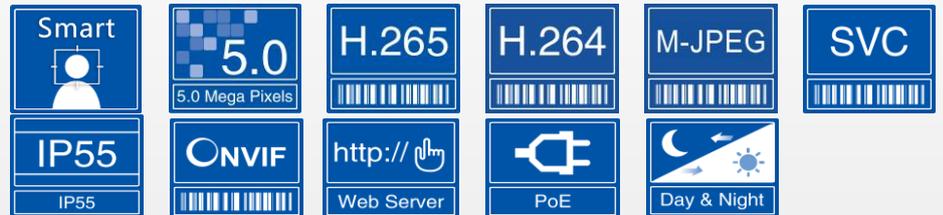


# VH221-B5 SERIES

HD 5MP INTELLIGENT LOW LIGHT WDR IP MINIDOME CAMERA

**Infinova**<sup>®</sup>



## FEATURES

- 1/2.8" progressive scan CMOS
- Sensitivity: 0.0005 lux
- Support multi-frame integrated WDR, with a range up to 120dB
- IR-Cut Removable (ICR) Filter for true Day/Night
- Applied with Smart-IR technology to adjust the light power according to ambient lighting conditions
- IR illumination distance up to 30m
- Support 2.8/4/6mm fixed focal lens
- H.265/H.264/M-JPEG/SVC encoding formats, available with three video streams
- With embedded design and integrated TPU module; support behaviour analysis based on deep learning algorithm
- High-resolution network video output: 2560×1920@30fps
- Support vivid smart functions such as video anomaly detection, behaviour-analysis detection, sound detection, statistics detection, intelligent grouping detection
- Support Structurized target attributes: able to detect face and pedestrian such as face attributes - gender, glasses, eyes open, mask, mouth open and expression
- Able to detect human face when tilting up or down  $\pm 45^\circ$ , turning right or left  $\pm 45^\circ$ , or leaning right or left  $45^\circ$
- Able to detect face images with a minimum of 30\*30 pixels at 1080P
- The face capture rate is  $\geq 99\%$
- Able to detect 32 face images simultaneously in a single scene
- Support intelligent face exposure, automatic face position detection and dynamic area adjustment for face exposure to obtain clearer face images
- Onvif Profile S/G & T and RTSP compliant
- Support corridor mode
- Bi-directional audio, G.711-A/G.711-U/G.726/AAC
- 2 alarm inputs, 1 on-off output
- Micro SD card
- Powered by PoE/12VDC/24VAC
- IP55 environmental rating

# DESCRIPTION

Infinova VH221-B5 Series HD 5MP Intelligent Low Light WDR IP Minidome Camera applies 1/2.8-inch CMOS sensor with built-in HD fixed-focal lens (optional with 2.8mm/4mm/6mm) and dot-matrix IR LED, supporting an IR illumination distance up to 30m. The power can be adjusted according to ambient lighting conditions with results of power assumption reduced and service life extended.

With H.265/H.264/M-JPEG/SVC video compression formats and 3-stream output, the camera can output high-quality images with resolution up to 2560×1920@30fps, which can not only provide marvelous definition, color restoration and accurate details, but also effectively ensure the intelligent analysis accuracy.

The camera is endowed with vivid smart functions and video structuring functions such as face detection, and able to output target attributes and images to the backend platform for big data analysis.

The camera can be widely used in ordinary buildings, supermarkets, hotels, shops, parks, schools, factories, warehouses, underground parking and other occasions with low light condition but requiring high-quality images.

# TECHNICAL SPECIFICATIONS

<b>Lens (Visible)</b>			
Image Sensor	1/2.8" progressive scan CMOS	Sample Rate	8KHz (for G.711-A/G.711-U/G.726), 16KHz, 32KHz, 44.1KHz and 48KHz (for AAC)
Optical Zoom	-	Audio Interface	1 input, Linear level; 1 output, Linear level
Digital Zoom	-	Two-way Audio	Supported
Focal Length	f=2.8mm, 4mm, 6mm	Mic & Speaker	-
Iris	F1.6	<b>Image</b>	
Focus	Fixed	Shutter	Auto/Manual (1/1s~1/100000s)
FOV(H/V/D)	f=2.8mm- H:88.7°; V:64.9°; D:116.6°	WDR	Up to 120dB
	f=4mm- H:78.2°; V:59.1°; D:97.8°	Exposure	Auto/Manual/Shutter
	f=6mm- H:47.7°; V:35.8°; D:59.6°	Sensitivity	Color mode: 0.005lux (IR OFF); B/W mode: 0.0005lux (IR OFF); 0 Lux (IR ON)
Lens Mount	M12	White Balance	Auto/Manual/Outdoor
<b>Lens (Thermal)</b>		Video Adjustment	Brightness, Contrast, Saturation, Hue, Sharpness adjustable
Imager Type	-	Noise Reduction	3D
Lens Type	-	S/N Ratio	≥65dB
Spectral Band	-	Defog	Available
Pixel Size	-	EIS	Available
NETD	-	Mirror	Horizontal/Vertical
Focal Length	-	Corridor Mode	Available
FOV	-	Day/Night Switching	ICR
<b>Video</b>		AGC	Auto/Manual, up to 64X
Camera Resolution (Visible Lens)	5MP	BLC	Available
Camera Resolution (Thermal Lens)	-	HLC	Available
Max. Coding Capacity (Visible Lens)	Major stream: H.264/H.265 -30fps@2560×1920	Privacy Mask	Up to 4 definable zones
	Minor stream: H.264/H.265 -30fps@1280×720	ROI	Up to 8 definable zones
	Third stream: H.264/H.265 -30fps@384×256	OSD	Supported
	Major stream: H.264/H.265 -30fps@2560×1920	<b>Pan/Tilt Functions</b>	
Minor stream: H.264/H.265 -30fps@1280×720	Preset	-	
Third stream: MJPEG -15fps@1920×1080	Pattern	-	
Max. Coding Capacity (Thermal Lens)	-	Autopan	-
	-	Normal Tour	-
Data Rate	VBR/CBR	Home Return	-
	Major stream: 128kbps~16384kbps	Timing Tour	-
	Minor stream: 128kbps~4096kbps	Area Zoom	-
	Third stream: 128kbps~512kbps	<b>IR Illumination</b>	
Video Compression	H.265/H.264/M-JPEG/SVC independent coding	Smart-IR	Available
Multi-Streaming	Three-stream independent output	Wave Length	850nm
Video Rotation	Video can be rotated by 0°, 90°, 180° or 270°	Night Vision Distance	30m
<b>Audio</b>		<b>Temperature Measurement</b>	
Audio Compression	G.711-A/ G.711-U/ G.726/ AAC	Screening Function	-
		Measurement	-

# TECHNICAL SPECIFICATIONS

Measurement Distance	-
Measurement Range	-
Accuracy	-
<b>Smart Analytics</b>	
Video Analytics	Video Anomaly Detection-Camera tampering, camera shifting, defocus detection, high brightness detection, low brightness detection, video loss detection, color cast detection, and motion detection Behaviour Analysis Detection - Wire crossing detection, intrusion detection, object abandoned detection, object lost detection, loitering detection, crowd detection, fast moving detection, target stop detection, and fall over detection Sound Detection - Abnormal sound detection and fight detection Statistics Detection - Counting, density detection, queue length detection and dwelling detection Intelligent Grouping Detection- Behaviour analysis grouping, face capture grouping. Face capture - Supports face detection, tracking and capturing. Optimum Selection- Supports optimum selection and duplicate removal for captured target images to deliver the best-quality images. Face Exposure - Available Face attributes - gender, glasses, eyes open, mask, mouth open and facial expression (angry, disgusted, fearful, happy, sad, surprised or neutral)
<b>Storage</b>	
Storage Slots	Supports single card
Built-in Storage	Up to 512GB
NAS Storage	-
Local PC Recording	Available
<b>Alarm</b>	
Alarm Ports	2 alarm inputs, 1 on-off output
Alarm Input	I/O input, smart events, SD card full of videos, SD card full of images, network disconnection, and heartbeat loss
Alarm Association	I/O output, email, image upload via FTP, audio, alarm info push, SD card snapshot, SD card recording
<b>System Functions</b>	
Operating System	Win 7 and higher versions
Browser	IE8 and higher versions
Access Protocol	ONVIF Profile S/G/T, Infinova CGI
Multiple Access	Up to 20-ch simultaneous access
Web Server	Available
Remote Upgrade	Available
Password Protection	Available
RS485 Port	-
Analog Video Output	-
Maximum Number of Users	64, with 3 types of users available: administrator, normal user, and operator
Wiper	-
<b>Network</b>	
Network Interface	1 RJ45 10M/ 100M self-adaptive Ethernet port

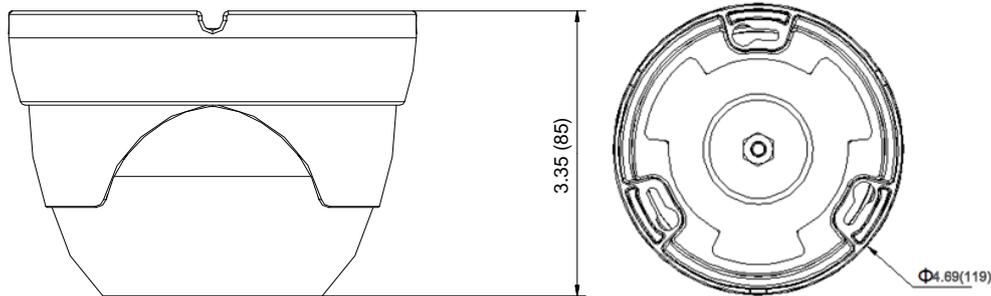
Network Protocols	IPv4/IPv6, TCP, UDP, IGMP, ICMP, IGMPv2/3, DHCP, SNMP (V1, V2, V3), FTP, SMTP, NTP, RTP, RTSP, RTCP, HTTP, HTTPS, SSL, 802.1x, QoS, PPPoE, DNS, DDNS, ARP, UPnP, IP Filter, TLS, Multicast, SIP
IP Address Filtering	Available
Network Delay	<250ms
<b>Environmental</b>	
Anti-Static	Air discharge: 8KV; contact discharge: 6KV
Surge Protection	Difference mode ±1KV, common mode ±2KV
Operating Temperature	-40°F~131°F (-40°C~+55°C)
Storage Temperature	-4°F~131°F (-20°C~+55°C)
Operating Humidity	≤ 95% RH
Environmental Rating	IP55
Impact Resistance	-
<b>Mechanical</b>	
Manual Speed	-
Preset Speed	-
Rotation Angle	-
Preset Accuracy	-
Electric Motor	-
<b>Electrical</b>	
Power Supply	PoE (IEEE 802.3af)/ 12VDC/ 24VAC
Power Consumption	IR OFF: <5W; IR ON: <13W
<b>Physical</b>	
Product Dimension (L×W×H) or (H x D)	3.35"×4.69" (85mm×119mm)
Package Dimension (L x W x H)	6.65"×6.65"×5.79" (169mm×169mm×147mm)
Unit Weight	1.43lbs. (0.65kg)
Shipping Weight	1.83lbs. (0.83kg)
<b>Certifications</b>	
Product Certifications	CE, FCC, RoHS

# ORDERING INFORMATION

VH221-B502-Q011	HD IR IP Minidome Camera, 5MP, 1/2.8" CMOS, Day/night, WDR, Starlight, Structurized face and Pedestrian analysis, H.265/H.264/M-JPEG/SVC, 2.8mm lens, IR illumination distance up to 30m, With audio alarm, Indoor, Surface mounting, PoE/12VDC/ 24VAC
VH221-B504-Q011	HD IR IP Minidome Camera, 5MP, 1/2.8" CMOS, Day/night, WDR, Starlight, Structurized face and Pedestrian analysis, H.265/H.264/M-JPEG/SVC, 4mm lens, IR illumination distance up to 30m, With audio alarm, Indoor, Surface mounting, PoE/12VDC/24VAC
VH221-B506-Q011	HD IR IP Minidome Camera, 5MP, 1/2.8" CMOS, Day/night, WDR, Starlight, Structurized face and Pedestrian analysis, H.265/H.264/M-JPEG/SVC, 6mm lens, IR illumination distance up to 30m, With audio alarm, Indoor, Surface mounting, PoE/12VDC/24VAC
<b>Accessories</b>	
<b>Power Supply</b>	
N3921-12D-1	AC to DC Power Supply, Plug-In, 230VAC, Output 12VDC, 1.5A
N3922-30P-2	Smart POE Injector, 100VAC-240VAC input, 30W output
N3921-24A-2	AC to AC Power Supply, Plug-In, 230VAC, Output 24VAC, 1A

**\*Note:** - "Confirmation of SD Card installation has to be notified with the Camera Purchase Order. Such confirmation if received on Order Readiness will attract additional cost. Please contact Infinova to know more".

# DIMENSIONS



(Unit: inch, in the parentheses is mm)