

# VH221-A20B-P022

HD 2MP INTELLIGENT STARLIGHT WDR IR IP  
MINIDOME CAMERA

**Infinova**<sup>®</sup>



## FEATURES

- 1/2.8" CMOS sensor
- IR-Cut Removable (ICR) Filter for Day/Night switching
- IR illumination distance up to 50m
- Applied with Smart-IR technology to adjust the light power according to ambient lighting conditions
- Support multi-frame integrated WDR, with a range up to 120dB
- Built-in motorized zoom lens for focus adjustment
- Support H.265/H.264/M-JPEG/SVC encoding
- High-resolution image signal output: 1920×1080P@25fps
- Smart H.265/Smart H.264 applied for a better utilization of broadband resources
- Support vivid smart analysis functions such as video anomaly detection, behaviour-analysis detection, sound detection, statistics detection, intelligent grouping detection
- Bi-directional audio, G.711-U/G.711-A/AAC
- Local PC recording
- Micro SD card
- Support multiple ways to trigger alarms, such as IO input, smart analysis, SD card full with recording, SD card full with image storage, network disconnection and heartbeat loss etc.; support flexible alarm associated settings: like I/O output, email, uploading images via FPT, audio, SD card recording, SD card snapshot, and alarm information pushing
- Up to 8 ROI (Region of Interest) areas
- Up to 16 definable privacy mask areas
- Support corridor mode
- Support simultaneous access and parameter setting via Web Server from multiple clients
- Onvif Profile S/G & T compliant
- Powered by PoE/12VDC/24VAC
- IK10 vandal-proof rating
- IP66 environmental rating for outdoor use
- UL

# DESCRIPTION

Infinova VH221- A20B-P022 series HD 2MP Intelligent Star Light WDR IR IP Minidome Camera applies 1/2.8" CMOS sensor with built-in 2.7~13.5mm HD motorized vari-focal lens. The built-in IR lights cover an illumination distance up to 50m and 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 encoding, the camera outputs high-definition images with resolution up to 1080P@25fps, which can provide marvelous definition, color restoration and accurate details.

With self-developed deep learning algorithms, the camera is endowed with vivid smart functions such as video anomaly detection, face detection, face tracking and face capture, mask recognition, counting, crowd density detection, and behaviour analysis, catering for various high-end requests.

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
Optical Zoom	-
Digital Zoom	-
Focal Length	f=2.7~13.5 mm
Iris	F1.6
Focus	Available with online assistant focus
FOV(H/V/D)	H:53.2°~18.6°; V:104°~33.2°; D:123.2°~38°
Lens Mount	φ14
<b>Lens (Thermal)</b>	
Imager Type	-
Lens Type	-
Spectral Band	-
Pixel Size	-
NETD	-
Focal Length	-
FOV	-
<b>Video</b>	
Camera Resolution (Visible Lens)	2MP
Camera Resolution (Thermal Lens)	-
Max. Coding Capacity (Visible Lens)	Major stream: H.264/H.265-25fps@1920x1080 Minor stream: H.264/H.265-15fps@1920x1080 Third stream: M-JPEG -25fps@1920x1080
Max. Coding Capacity (Thermal Lens)	-
Data Rate	VBR/CBR Major stream: 256Kbps~10240Kbps Minor stream: 256Kbps~4096Kbps
Video Compression	H.265/H.264/M-JPEG/SVC independent coding
Multi-Streaming	Three-stream independent output
Video Rotation	Video can be rotated by 90°, 180° or 270°
<b>Audio</b>	
Audio Compression	G.711-A/ G.711-U/ AAC
Sample Rate	8KHz (for G.711-U/G.711-A), 16KHz, 32KHz, 44.1KHz and 48KHz (for AAC)
Audio Interface	1 input, Linear level; 1 output, Linear level
Two-way Audio	Supported

Mic & Speaker	-
<b>Image</b>	
Shutter	Auto/Manual (1/1s~1/32,000s)
WDR	Up to 120dB
Exposure	Auto/Manual/Shutter
Sensitivity	Color mode: 0.001lux@ F1.4 (AGC ON); B/W mode: 0.0001lux@ F1.4 (AGC ON); 0 lux (IR ON)
White Balance	Auto/Manual/Outdoor
Video Adjustment	Brightness, Contrast, Saturation, Hue, Sharpness adjustable
Noise Reduction	3D
S/N Ratio	≥55dB
Defog	Available
EIS	Available
Mirror	Horizontal/Vertical
Corridor Mode	Available by video rotation
Day/Night Switching	ICR
AGC	Auto/Manual, up to 64X
BLC	Available
HLC	Available
Privacy Mask	Up to 4 definable zones
ROI	Up to 8 definable zones
OSD	Supported
<b>Pan/Tilt Functions</b>	
Preset	-
Pattern	-
Autopan	-
Normal Tour	-
Home Return	-
Timing Tour	-
Autoscan	-
Area Zoom	-
<b>IR Illumination</b>	
Smart-IR	Available
Wave Length	850nm
Night Vision Distance	50m
<b>Temperature Measurement</b>	
Screening Function	-
Measurement	-

# TECHNICAL SPECIFICATIONS

Measurement Distance	-
Measurement Range	-
Accuracy	-
<b>Smart Analytics</b>	
Video Analytics	<p>Video Anomaly Detection-Camera tampering, camera shifting, defocus detection, high brightness detection, low brightness detection, video loss detection, color cast detection, and motion detection</p> <p>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</p> <p>Sound Detection - Abnormal sound detection and fight detection</p> <p>Statistics Detection - Counting, density detection, queue length detection and dwelling detection</p> <p>Intelligent Grouping Detection- Behaviour analysis grouping, face capture grouping.</p> <p>Face capture - Supports face detection, tracking and capturing.</p> <p>Optimum Selection- Supports optimum selection and duplicate removal for captured target to deliver the best-quality images.</p> <p>Face Exposure - Available</p> <p>Face attributes - gender, glasses, eyes open, mask, mouth open</p>
<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, heartbeat loss
Alarm Association	I/O output, email, image upload via FTP, image upload via HTTP, SD card recording, SD card snapshot, alarm info push
<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, V3), FTP, SMTP, NTP, RTC, RTP, RTSP, RTCP, HTTP, HTTPS, SSL, 802.1x, QoS, PPPoE, DNS, DDNS, ARP, UPnP, IP Filter, TLS, DES, Multicast

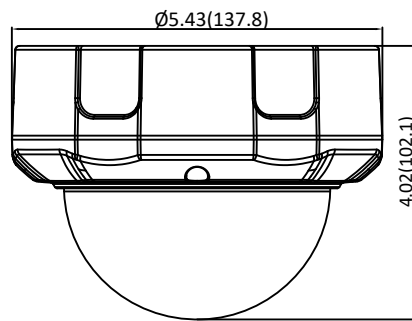
IP Address Filtering	Available
Network Delay	≤200ms
<b>Environmental</b>	
Anti-Static	Air discharge: 8KV; contact discharge: 6KV
Surge Protection	Difference mode ±1KV, common mode ±2KV
Operating Temperature	-40°F~140°F (-40°C~+60°C)
Storage Temperature	-4°F~158°F (-20°C~+70°C)
Operating Humidity	≤ 95% RH
Environmental Rating	IP66
Impact Resistance	IK10
<b>Mechanical</b>	
Manual Speed	-
Preset Speed	-
Rotation Angle	-
Preset Accuracy	-
Electric Motor	-
<b>Electrical</b>	
Power Supply	PoE (IEEE 802.3af Class 2) / 12VDC/ 24VAC
Power Consumption	<12W
<b>Physical</b>	
Product Dimension (L×W×H) or (H x D)	4.02"×5.43" (102.1mm×Ø137.8mm)
Package Dimension (L x W x H)	8.03"×6.34"×8.11" (204mm×161mm×206mm)
Unit Weight	2.07lbs. (0.94Kg)
Shipping Weight	2.54lbs. (1.15Kg)
<b>Certifications</b>	
Product Certifications	CE, FCC, IK10, IP66, RoHS, UL

# ORDERING INFORMATION

VH221-A20B-P022	HD IR IP Minidome Camera, 2MP, 1/2.8" CMOS, Day/night, WDR, Starlight, Intelligent, Face capture, Face mask recognition, H.265/H.264/M-JPEG/SVC, 2.7~13.5 mm motorized lens, IR illumination distance up to 50m, With audio alarm, Outdoor, Surface mount, PoE/12VDC/24VAC
<b>Accessories</b>	
<b>Mount</b>	
V1761HA	Wall-mounting bracket
<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



# MOUNTING

