

# VS221-A60B-P022

HD 8MP INTELLIGENT STARLIGHT WDR IR IP MINIDOME  
CAMERA

**Infinova**<sup>®</sup>



## FEATURES

- 1/1.8" progressive scan CMOS
- Sensitivity: 0.0001 lux
- Support multi-frame integrated WDR, with a range up to 135dB
- 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 50m
- Built in with motorized vari-focal lens; support ABF
- H.265/H.264/M-JPEG/SVC encoding formats, available with four video streams
- With embedded design and integrated NPU module; support face detection, tracking and capturing based on deep learning algorithm
- High-resolution image signal output: 3840×2160@25fps
- Support vivid smart functions such as video anomaly detection, behaviour-analysis detection, sound detection, intelligent grouping detection
- Support multi-target detection, tracking and snapshot; support optimum selection and duplicate removal for captured images; small face images and panoramic images output
- Able to detect face, pedestrian, motor and non-motor
- The face detection function can be effectively cover various entrances and exits, which reduces the deployment cost
- Support face image optimum selection and duplicate removal; images can be selected by face angles and image resolutions, thus to reduce invalid face uploading, which may occupy the server resources; small face images and panoramic images are optional to be uploaded to platforms for secondary analysis and retrieval
- 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
- 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
- 2 alarm inputs, 1 on-off output
- Micro SD card
- Powered by PoE/12VDC/24VAC
- Outdoor IP67 environmental rating and IK10 vandal-proof level
- UL, IK10
- 3-axis adjustable

# DESCRIPTION

Infinova VS221-A60B-P022 Series HD 8MP Intelligent Starlight WDR IP Minidome Camera applies 1/1.8-inch CMOS sensor with built-in 2.8~12mm HD motorized vari-focal lens and dot-matrix IR LED, supporting an IR illumination distance up to 50m. 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 4-stream output, the camera can output high-quality images with resolution up to 3840×2160@25fps, 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 supports people and vehicle coexistence detection and face detection etc. The face detection function can be enabled as alarm event to trigger panoramic image capture and small image capture, which can be uploaded to Infinova smart platform at the same time for secondary smart recognition and analysis. The product is applicable for Safe City checkpoint video surveillance requirement.

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	1/1.8" progressive scan CMOS
Optical Zoom	-
Digital Zoom	-
Focal Length	f=2.8~12mm
Iris	F1.5
Focus	Available with online assistant focus
FOV(H/V/D)	H:110.4°-45°; V:57.8°-25.2°
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)	8MP
Camera Resolution (Thermal Lens)	-
Max. Coding Capacity (Visible Lens)	Major stream: H.264/H.265 -25fps@3840×2160 Minor stream: H.264/H.265 -25fps@1280×720 Third stream: H.264/H.265 -25fps@384×256 Fourth stream: H.264/H.265 -25fps@720×576 Major stream: H.264/H.265 -25fps@3840×2160 Minor stream: H.264/H.265 -25fps@1280×720 Third stream: MJPEG -25fps@1920×1080 Fourth stream: H.264/H.265 -25fps@720×576
Max. Coding Capacity (Thermal Lens)	-
Data Rate	VBR/CBR Major stream: 128kbps~16384kbps Minor stream: 128kbps~4096kbps Third stream: 128kbps~512kbps Fourth stream: 128kbps~512kbps
Video Compression	H.265/H.264/M-JPEG/SVC independent coding
Multi-Streaming	Four-stream independent output
Video Rotation	Video can be rotated by 0°, 90°, 180° or 270°

<b>Audio</b>	
Audio Compression	G.711-A/ G.711-U/ G.726/ AAC
Sample Rate	8KHz (for G.711-A/G.711-U/G.726), 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 (fill-in light OFF); B/W mode: 0.0001lux (fill-in light OFF); 0 Lux (fill-in light ON)
White Balance	Auto/Manual/Outdoor
Video Adjustment	Brightness, Contrast, Saturation, Hue, Sharpness adjustable
Noise Reduction	3D
S/N Ratio	≥65dB
Defog	Available
EIS	Available
Mirror	Horizontal/Vertical
Corridor Mode	Available
Day/Night Switching	Available
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

# TECHNICAL SPECIFICATIONS

Night Vision Distance	50m
<b>Temperature Measurement</b>	
Screening Function	-
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 removal, 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	-

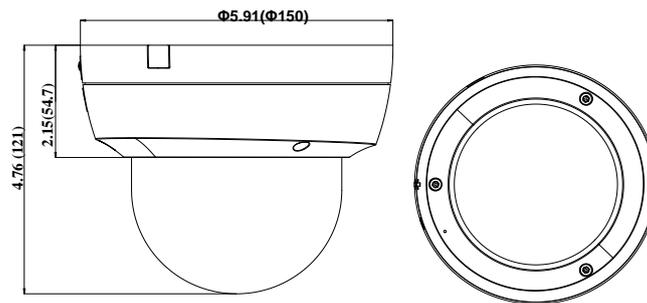
<b>Network</b>	
Network Interface	1 RJ45 10M/ 100M self-adaptive Ethernet port
Network Protocols	IPv4/IPv6, TCP, UDP, IGMP, ICMP, IGMPv2/3, DHCP, SNMP (V1, V2, V3), FTP, SMTP, NTP, RTP, RTSP, RTCP, HTTP, HTTPS, SSL, 802.1x, QoS, PPPoE, DNS, DDNS, ARP, UPnP, IP Filter, TLS, Multicast, SIP
IP Address Filtering	Available
Network Delay	<300ms
<b>Environmental</b>	
Anti-Static	Air discharge: 8KV; contact discharge: 6KV
Surge Protection	Difference mode ±2KV, common mode ±4KV
Operating Temperature	-40°F~140°F (-40°C~+60°C)
Storage Temperature	-40°F~140°F (-40°C~+60°C)
Operating Humidity	≤ 95% RH
Environmental Rating	IP67
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)/ 12VDC/ 24VAC
Power Consumption	IR OFF: <6W; IR ON: <13W
<b>Physical</b>	
Product Dimension (L×W×H) or (HxD)	4.76"×5.91" (121mm×150mm)
Package Dimension (L x W x H)	7.52"×7.13"×7.36" (191mm×181mm×187mm)
Unit Weight	2.43lbs (1.10kg)
Shipping Weight	3.42lbs (1.55kg)
<b>Certifications</b>	
Product Certifications	CE, FCC, RoHS, IP67, IK10, UL

# ORDERING INFORMATION

VS221-A60B-P022	HD IP Minidome Camera, 8MP, 1/1.8" CMOS, Day/night, WDR, Starlight, Intelligent, H.265/H.264/M-JPEG/SVC, 2.8~12mm motorized lens, With audio alarm, Outdoor, Surface mounting, PoE/12VDC/24VAC
<b>Accessories</b>	
<b>Mount</b>	
V1761MT-W1	Wall Mount, 6 inches, glossy white
V1762MT-W1	Corner Mount, 6 inches, glossy white
V1763MT-W1	Pole Mount, 6 inches, glossy white
<b>Power Supply</b>	
N3921-12D-1	AC to DC Power Supply, Plug-In, 230VAC, Output 12VDC, 1.5A
N3921-24A-2	AC to AC Power Supply, Plug-In, 230VAC, Output 24VAC, 1A
N3922-30P-2	Smart POE Injector, 100VAC-240VAC input, 30W output

**\*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)