

# VS221-A60B-A0 Series HD 8.0MP Starlight WDR IP Minidome Camera

**Infinova**<sup>®</sup>  
The Integrator's Manufacturer



- 1/1.8" progressive scan CMOS sensor
- IR-Cut Removable (ICR) Filter for Day/Night switching
- Sensitivity: 0.0001 lux
- With Smart-IR technology, the power of IR illuminator can be adjusted according to ambient condition
- IR illumination distance: up to 30m
- High-resolution image signal output: 3840 x 2160@30fps
- Supports frame integration WDR, with dynamic range up to 120dB
- Built-in motorized zoom lens, supporting assistant focusing
- H.265/H.264/M-JPEG video encoding, four streams
- Supports vivid intelligent detection functions:
  - 7 types of abnormal video detection: camera tampering, scene change, defocus, low brightness, high brightness, video loss, and color cast
  - 10 types of behavior-analysis detection: motion detection, wire crossing detection, intrusion detection, loitering detection, object abandoned detection, object lost detection, abnormal sound detection, crowd detection, fast moving detection, and fighting detection
  - 4 types of statistics detection: people counting, density detection, queue length detection, and dwelling detection
  - 3 types of feature detection: face detection, vehicle detection, and people detection
- Based on deep learning, supports face detection, face tracking and snapshot.
- Supports snapshots priority selection and duplicate deletion, which means captured face images can have a prioritized selection according to the face angle and the image definition so as to ensure the invalid images will not be uploaded to the server to waste its capacity. Face images or scene images can be uploaded to the platform for secondary research and analysis.
- Able to detect faces within depression angle  $\pm 20^\circ$ , right and left deflection  $\pm 40^\circ$ , and right and left tilt  $\pm 30^\circ$ .
- Able to detect faces that the pupil distance is as much as 20 pixels.
- Able to detect 32 faces simultaneously in a scene.
- With a width of 8m in the center area of face detection, it can effectively cover every major entrance/exit and reduce the schedule cost.
- Supports intelligent exposure on face image.
- Supports regional configuration of face detection, compatible with large scene surveillance and face capture.
- Supports built-in storage/NAS
- Bi-directional audio, G.711-U/G.711-A/AAC

- 2 alarm inputs, 1 on-off output
- Supports multiple alarm trigger methods such as I/O input, intelligent detection, SD card removal, SD picture full, SD record full, network disconnection, heartbeat loss, etc.; supports flexible alarm association settings like I/O output, emails, FTP picture uploading, audio, TF card recording and alarm information push
- Up to 8 ROI (Region of Interest) areas
- Support simultaneous access and parameter setting via Web Server from multiple clients
- Multiple User Level Access
- Compatible with Infinova digital video surveillance software
- Standard SDK is provided for easy integration with other systems
- Onvif Profile S. Onvif Profile G
- POE/12VDC/24VAC power supply
- IP67 and IK10 environment rating
- Three-axis adjustment
- With analog video output

Infinova VS221-A60B-A0 Series Starlight Intelligent WDR IP bullet camera features 1/1.8" progressive scan CMOS sensor and built-in 2.8 ~ 12 mm motorized Vari-focus lens. The built-in dot matrix IR illuminators allow a maximum of 30 meters night vision distance.

With H.265/H.264/M-JPEG compression format utilized, this camera outputs D videos with the resolution of 3840x2160@30fps and four streams, which can provide excellent definition and color restoration, obtain more accurate image details and safeguard the precision of intelligent analysis.

Boasts of rich intelligent functions, this camera supports facial detection and face snapshot. The facial detection could be set as alarm events and would trigger image capture and upload the images to our V2233 Intelligent Platform for secondary detection and analysis. The camera applies to the "spot detection" in the video surveillance of Safe City.

VS221-A60B-A0 series camera is widely used in normal buildings, supermarkets, hotels, shops, parks, schools, factories, warehouses, underground parking lots and other high-resolution surveillance applications.

## Technical specifications

Image Sensor	1/1.8 " progressive scan CMOS
Lens Configuration	Motorized zoom lens F1.5, f=2.8-12mm
Lens Mount	Φ14
FOV	H 45°-103°
	V 25°-57°
	D 51°-105°
Day/Night Switching	ICR
IR light wave length	850nm
Illumination Distance	30m
Sensitivity	Color mode: 0.001 Lux @ F1.5(AGC ON) B/W mode: 0.0001Lux @ F1.5(AGC ON); 0 Lux IR ON
Camera Angle Adjustment	X (Panning): 0°~360° Y (Tilting): 0°~75° Z (Rotating): 0°~360°
Exposure	Scene, Manual, Shutter
Shutter	Auto/Manual (adjustment range 1/1s-1/32000s)
AGC	Auto/Manual , up to 64X
White Balance	Auto/Manual/Outdoor
WDR	Supports frame integration WDR, with dynamic range up to 120dB
HLC	Available
Video Adjustment	Brightness, contrast, saturation, chroma, sharpness
Noise Reduction	3D
Defog	Available
EIS	Available
Corridor Mode	Available
Image Mirror	Horizontal/Vertical mirror
Video Rotation	90°, 180°, 270°clockwise rotation
Video Compression	H.265/H.264/M-JPEG
Max. Encoding Capacity	H.264/H.265 -30fps@3840×2160+30fps@1920×1080+30fps@1920×1080+30fps@ (720×576/720×480)
Video Encoding	H.264/H.265+M-JPEG -30fps@3840×2160+30fps@1920×1080+M-JPEG 30fps@3840×2160+30fps@ (720×576/720×480)
Video Bit Rate	256 Kbps – 10 Mbps
Stream Code	Outputting 4 streams independently
Network Delay	340ms
Audio	Compression: G.711-A/G.711-U/AAC Sampling rate: 8KHz (for G.711-A, G.711-U), 16KHz 32 KHz, 44.1KHz, 48 KHz optional (for ACC) Port: 1 linear input, 1 linear output, with built-in MIC
Audio Bit Rate	32 Kbps- 128 Kbps
Smart Video Analytics	<b>Abnormal video detections:</b> camera tampering, scene change, defocus, low brightness, high brightness, video loss, and color cast <b>Behavior-analysis detections:</b> motion detection, wire crossing detection, intrusion detection, loitering detection, object abandoned detection, object lost detection, abnormal sound detection, crowd detection, fast moving detection, and fighting detection <b>Statistics detections:</b> people counting, density detection, queue length detection, and dwelling detection <b>Feature detections:</b> face detection, vehicle detection, and people detection

Smart Video Analytics	Supports face detection, face tracking and snapshot based on deep learning
	Supports snapshots priority selection and duplicate deletion. Face images or scene images can be uploaded to the platform for secondary research and analysis
	Supports intelligent exposure
Alarm	2 alarm inputs, 1 on-off output
Input	I/O input, intelligent detection, SD card removal, SD picture full, SD record full, network disconnection, heartbeat loss
Linkage	I/O output, emails, FTP picture uploading, audio, TF card recording, alarm information push, SD card snapshot, and SD card recording
Private Mask	Up to four areas
ROI	Up to eight areas
Internal Storage	Supporting dual-car storage, compatible with Micro SD/SDHC/SDXC card (up to 128GB)
Local PC recording	Available
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,PPoE,DNS,DDNS,ARP,UPnP, IP Filter, TLS, DES, Multicast
IP Address Filter	Available
Operating System	Windows XP, Win7, Win8, Windows10
Browser	IE8, IE9, IE10,IE11
Access Protocol	ONVIF Profile S & Profile G, CGI 2.7
Remote Network Upgrade	Available
Password Protection	Available
Network Port	One RJ45 10/100M self-adaptive Ethernet port
Analog Video Output	Available, BNC connector
Power Supply	PoE (IEEE 802.3af)/12VDC(±20%)/24VAC(±25%)
Power	<9W
Protection Design	Lighting protection (network port and power supply connector): protection differential mode 2KV, common mode 2KV surge; Anti-static (all ports): contact protection 6KV static, 8KV air discharge
Operating Temperature	-40°F ~ 140°F (-40°C ~ 60°C)
Storage Temperature	-4°F ~ 140°F (-20°C ~ 60°C)
Operating Humidity	0%~90% RH (non-condensing)
Unit Dimensions (L×W×H)	4.76"×Φ5.91" (121mm×Φ150mm)
Box Dimensions (L×W×H)	7.52"×7.13"×7.36" (191mm×181mm×187mm)
Unit Weight	Surface Mount: 2.43lbs. (1.10Kg) Ceiling Mount: 2.43lbs. (1.10Kg) Bracket Mount: 4.30lbs. (1.95Kg)
Shipping Weight	Surface Mount: 3.42lbs. (1.55Kg) Ceiling Mount: 3.20lbs. (1.45Kg) Bracket Mount: 5.30lbs. (2.40Kg)

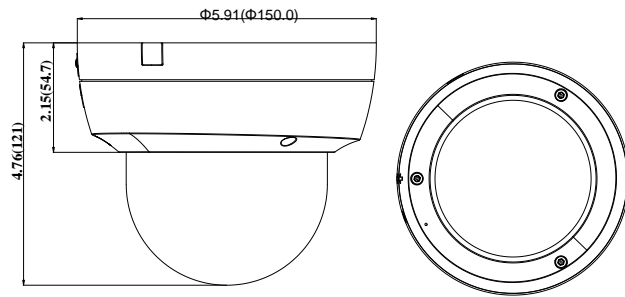
## Ordering information

VS221-A60B-A012	HD IP mini-dome camera, Starlight, WDR, 8.0Mpx, 1/1.8 inch CMOS sensor, Day/night, H.265/ H.264 /M-JPEG, 2.8~12mm motorized lens, with audio alarm, indoor, surface mount, clear bubble, PoE/12VDC/24VAC
VS221-A60B-A022	HD IP mini-dome camera, Starlight, WDR, 8.0Mpx, 1/1.8 inch CMOS sensor, Day/night, H.265/ H.264 /M-JPEG, 2.8~12mm motorized lens, with a pigtail & audio alarm, outdoor, surface mount, clear bubble, PoE/12VDC/24VAC
VS221-A60B-A032	HD IP mini-dome camera, Starlight, WDR, 8.0Mpx, 1/1.8 inch CMOS sensor, Day/night, H.265/ H.264 /M-JPEG, 2.8~12mm motorized lens, with audio alarm, indoor, ceiling mount, clear bubble, PoE/12VDC/24VAC
VS221-A60B-A062	HD IP mini-dome camera, Starlight, WDR, 8.0Mpx, 1/1.8 inch CMOS sensor, Day/night, H.265/ H.264 /M-JPEG, 2.8~12mm motorized lens, with a pigtail & audio alarm, outdoor, bracket mount, clear bubble, PoE/12VDC/24VAC

### Accessories

V1761MT-W1	6" wall-mount bracket, glossy white
V1762MT-W1	6" corner-mount bracket, glossy white
V1763MT-W1	6" pole-mount bracket, glossy white

## Dimensions



(Unit: inch, in the parentheses is mm)