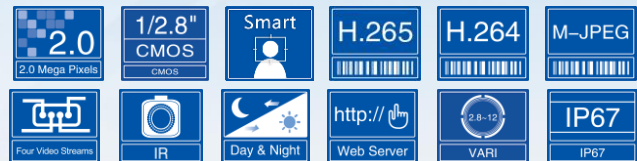


VS221-A20B-B0 Series

HD 2.0MP Starlight WDR Intelligent IR IP Minidome Camera

Infinova[®]
The Integrator's Manufacturer



- 1/2.8" progressive scan CMOS sensor
- IR-Cut Removable (ICR) Filter for Day/Night switching.
- Applied with Smart-IR technology, it can adjust the IR light power as per the ambient condition.
- With max.30m IR lighting distance.
- High-resolution image signal output: 1920×1080@60fps
- Supports multi-frame integration WDR, with dynamic range up to 132dB.
- Built-in motorized vari-focus lens, supporting assistant focusing.
- Quad Simultaneous Video Streams: H.265/H.264/M-JPEG video encoding formats.
- Supports vivid intelligent detection functions:
 - 7 anomaly detections: camera tampering, scene change, defocus, low brightness, high brightness, video loss, and color cast
 - 10 behavior-analysis detections: 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 statistics detections: people counting, density detection, queue length detection, and dwelling detection
 - 3 feature detections: face detection, vehicle detection, and humanoid detection
- Supports face detection, face tracking and face capture on the basis of deep learning.
- Able to select an optimized capture face and delete the duplicate, which means that the selected face can be optimized by the capture angle and image definition and the invalid will not be uploaded to the platform. Besides, the image of the scene and faces can be uploaded to the platform for secondary analysis and research.
- Camera is installed right ahead the passage to capture the face. Up and down deflection <20°; Right and left deflection<40°; Right and left tilt <30°.
- Able to detect faces that the Pupil Distance is no less than 20 pixels.
- Able to detect 32 faces in a scene.
- The width of detection area reaches 8m, which is sufficient to cover every major entrance/exit and make cost down.

- Supports intelligent exposure.
- Supports SD card storage/NAS.
- Bi-directional audio, G.711-A/G.711-U/AAC.
- 2 alarm inputs, 1 on-off output.
- Supports multiple ways to trigger alarms, such as IO input, intelligent detection, SD card removal, net linkage lost, heartbeat loss, etc.; supports flexible alarm association settings, such as I/O output, email, FTP image upload, audio, SD card recording and arming schedules.
- Up to eight ROI (Region of Interest) areas.
- Support simultaneous access and parameter setting via Web Server from multiple clients.
- Multiple User Level Access
- Standard SDK is provided for easy integration with other video surveillance software.
- ONVIF Profile S/ONVIF Profile G compatible
- 12VDC/24VAC/PoE power supply
- IP67 environmental rating for outdoor models.
- 3-axis adjustment
- With analog video output

Infinova VS221-A2 Series HD 2MP Starlight WDR Intelligent IR IP Mini-dome Camera, based on the algorithm of deep learning, allows output quad streams with image resolution up to 1920×1080@60fps. With progressive scan CMOS sensor, and H.265 / H.264 / M-JPEG video compression formats, the camera provides excellent resolution and color reproduction, acquires richer and more accurate details and guarantees intelligent analysis accuracy in a more effective way, which caters for different application needs.

VS221 Series boasts of specific intelligent functions as well as face detection and snapshots. Functions of people detection and face 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 Series camera is widely used in city public security, highway, metro, station, exhibition hall, etc

Technical specifications

Image Sensor		1/2.8" progressive scan CMOS
Lens Configuration		Motorized vari-focus lens, F1.4, f=2.8-12mm
Lens Mount		Ø14
FOV	H	35°-94°
	V	19°-48°
	D	41°-102°
IR Wavelength		850nm
IR Illumination Distance		30m
Day/Night Switching		ICR
Camera Angle Adjustment		X (Panning): 0°~360°; Y (Tilting): 0°~75°; Z (Rotating): 0°~360°
Sensitivity		Color mode:0.002@F1.4, AGC ON B/W mode:0.0002@F1.4, AGC ON
Exposure		Scene, Manual, Shutter
Shutter		Auto/Manual (adjustment range 1/1s~1/32000s)
AGC		Auto/Manual adjustable, max. 64X
White Balance		Auto/Manual/Outdoor
WDR		Supports multi-frame integration mode wide dynamic range up to 132dB
Video Adjustment		Brightness, contrast, saturation, chroma, sharpness
Noise Reduction		3D
Defog		Available
EIS		Available
Corridor Mode		Available
Image Mirror		Horizontal/Vertical mirror
Video Compression		H.265, H.264, M-JPEG independent
Video Rotation		90°, 180°, 270°clockwise rotation
Max. Encoding Capacity		H.264/H.265 -60fps@1920×1080
Video Bit Rate		256 Kbps – 10 Mbps
Multi-stream		Quad streams independent
Network Delay		140ms
Audio		Compression: G.711A/G.711U/AAC Sampling rate: 8KHz (for G.711A, G.711U), 16KHz 32 KHz, 44 KHz, 48 KHz optional (for ACC) Port: 1 linear input, 1 linear output; built-in Mic
Audio Bit Rate		32 Kbps- 128 Kbps
Smart Video Analysis		Anomaly detections: camera tampering, scene change, defocus, low brightness, high brightness, video loss, and color cast
		Behavior-analysis detections: 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
		Statistics detections: people counting, density detection, queue length detection, and dwelling detection
		Feature detections: face detection, vehicle detection, and humanoid detection
		Supports face detection, face tracking and face capture on the basis of deep learning

	Able to select an optimized capture face and delete the duplicate. The image of the scene and faces can be uploaded to the platform for secondary analysis and research.
	Supports intelligent exposure
Alarm Input	2 alarm inputs, 1 on-off output
Alarm Association	I/O input, motion detection, smart alarm, SD card removal, network disconnection, heartbeat loss
Alarm Association	I/O output, mail, snapshot, FTP upload, audio, SD card recording, sending alarm, TF card snapshot
Privacy Mask	Up to 4 masks
ROI	Up to 8 regions
Internal Storage	Supports dual storage cards, compatible with Micro SD/SDHC/SDXC card (single 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, PPPoE, DNS, DDNS, ARP, UPnP, IP Filter, TLS, DES, Multicast
IP Address Filter	Available
Operating System	Supports Windows XP, Win7, Win8, Win10 operating system
Browser	IE8, IE9, IE10, IE11
Access Protocol	ONVIF Profile S& Profile G, CGI2.7
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
Vandal Protection	IK10 Rated
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 (H×Ø)	4.76"×5.91" (121mm×150mm)
Packing Dimension (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: 4.23 lbs (1.95kg)
Shipping Weight	Surface mount: 3.42lbs (1.55kg) Ceiling mount: 3.20lbs (1.45kg) Bracket mount: 5.20lbs (2.40kg)
Certifications and Approval	
Product Certifications	CE/EMC ¹ : EN 55032, EN 55035, EN 61000-3-2, EN 61000-3-3; FCC ² : CFR Title 47 Part 15 Subpart B;

Certificate No.: ¹GTI20180821C; ²GTI20180822C

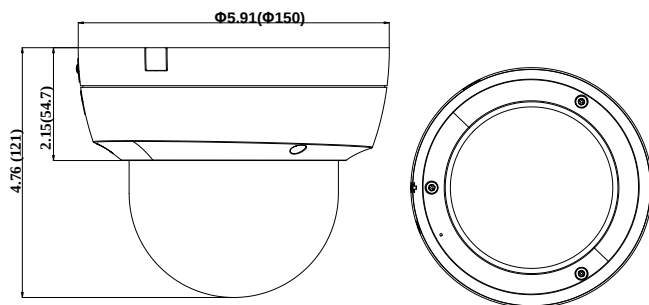
Ordering information

VS221-A20B-B012	HD Megapixel IR IP mini-dome camera, Starlight, WDR, Intelligent, Day/night, 1/2.8 inch CMOS sensor, H.265/ H.264 /M-JPEG, 2.0Mpx, PoE/12VDC/24VAC, Indoor, Surface mount, Clear Bubble, 2.8~12mm motorized Vari-focus lens
VS221-A20B-B022	HD Megapixel IR IP mini-dome camera, Starlight, WDR, Intelligent, Day/night, 1/2.8 inch CMOS sensor, H.265/ H.264 /M-JPEG, 2.0Mpx, PoE/12VDC/24VAC, Outdoor, Surface mount, Clear Bubble, 2.8~12mm motorized Vari-focus lens
VS221-A20B-B032	HD Megapixel IR IP mini-dome camera, Starlight, WDR, Intelligent, Day/night, 1/2.8 inch CMOS sensor, H.265/ H.264 /M-JPEG, 2.0Mpx, PoE/12VDC/24VAC, Indoor, Ceiling mount, Clear Bubble, 2.8~12mm motorized Vari-focus lens
VS221-A20B-B062	HD Megapixel IR IP mini-dome camera, Starlight, WDR, Intelligent, Day/night, 1/2.8 inch CMOS sensor, H.265/ H.264 /M-JPEG, 2.0Mpx, PoE/12VDC/24VAC, Outdoor, Bracket mount, Clear Bubble, 2.8~12mm motorized Vari-focus lens

Accessories

V1761MT-W1	Wall Mount, 6 inches, glossy white
V1762MT-W1	Corner Mount, 6 inches, glossy white
V1763MT-W1	Pole Mount, 6 inches, glossy white

Dimension



(Unit: inch, in the parentheses is mm)