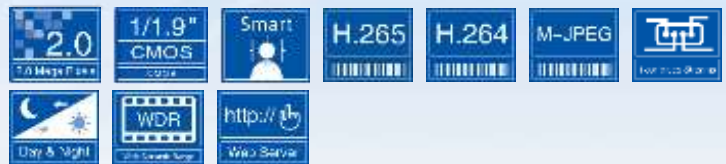


VS231-P2 Series

H265 HD 2MP Smart Starlight WDR Face Capture IR IP PTZ Dome Camera

Infinova[®]
The Integrator's Manufacturer



- Built-in 30X HD integrated camera module
- Large area progressive scanning CMOS sensor
- ICR infrared filter type automatic switch to realize true day/night surveillance
- Starlight-level ultra-low illumination
- Supports frame integration WDR, with dynamic range up to 120dB
- Inbuilt efficient infrared lamps of 850nm wave length to ensure stable long-term use and reduce maintenance cost
- Night vision distance up to 300 meters
- The ways of turning on the infrared lamps can be flexible to meet diversified surveillance environment demands
- The infrared power is adjusted automatically based on dome drive zooming or manually to optimize the night vision fill-in light effects
- HD network video output: 1920x1080@60fps
- H.265/H.264/M-JPEG video encoding, quad video streams
- Features rich smart functions:
 - 5 video anomaly detection: camera tampering, high brightness, low brightness, video loss and color cast
 - 10 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
 - 1 statistics detection: crowd density detection
 - 3 feature detection: face detection, vehicle detection, and human body detection
- Supports deep-learning based face detection, face tracking and capturing
- Supports snapshots priority selection and duplicate deletion as per the face angle and the image definition so as to ensure the captured images can be recognized and reduce the number of the invalid images to upload to the server
- Supports image matting to provide small face image or large panoramic images to be uploaded to the platform for secondary analysis and retrieval
- Able to detect human face when tilting up or down $\pm 20^\circ$, turning right or left $\pm 40^\circ$, or leaning right or left $\pm 30^\circ$
- Able to detect human face with the minimum pupil distance of 20 pixels
- Able to detect 32 human faces simultaneously in a scene
- Effectively cover the width of major entrance/exit up to 8m, greatly reducing the deployment cost
- Supports intelligent exposure on faces
- Supports intelligent tracking
- Supports embedded storage/NAS storage
- Bi-directional audio, G.711-A/G.711-U/AAC standard optional
- Two alarm inputs and one alarm output
- Supports multiple ways to trigger alarms, such as I/O input, intelligent detection, SD card removal, SD card full, network disconnection, heartbeat loss, etc.; supports flexible alarm associated configurations, such as I/O output, email, FTP uploading, audio, SD card recording, SD card snapshot, alarm info push and PTZ tracking; supports arming by time
- Supports Region of Interest (ROI), 8 regions dividable
- Supports preset, autopan, pattern, autoscan, timed tour, normal tour, scene tour, power-on return, etc.
- Allows multiple users to perform live access and parameters settings via Web Server
- Compatible with Infinova digital video surveillance software and convenient to integrate with other video surveillance software
- Standard SDK, easy to integrate with other digital system
- Supports ONVIF Profile S & Profile G standard
- Supports RS485 control and analog video output for easy debugging
- IP66 protection rate, inbuilt a heater and air circulation system to avoid icing
- Supports water-proof breather valve
- Rugged designed (IK10)
- Supports remote network upgrade

Technical specifications

Lens

Optical Zoom	30X
Image Sensor	30X (-A): 1/1.9" CMOS; 30X (-C): 1/2" CMOS
Aperture/Focal Length	F1.6~F4.7, f=4.3~129mm
Angle of View	58.71° (W) ~ 2.15° (T)
Min. Work Distance	0.01m (Wide) ~ 1.5m (Tele)
S/N Ratio	>62dB
Shutter	Auto, Manual (1/1-1/32000)
DSS	Available
Day/Night Switch	ICR
Sensitivity	30X (-A): Color mode: 0.001 lux @ F1.6 (AGC ON); B/W mode: 0.0001 lux @ F1.6 (AGC ON); 0 lux (IR ON) 30X (-C): Color mode: 0.0003 lux @ F1.6 (AGC ON); B/W mode: 0.0001 lux @ F1.6 (AGC ON); 0 lux (IR ON)

Video

Compression	H.265/H.264/M-JPEG
Encoding Capability	H.265/H.264 -60fps@1920x1080
Multiple Streams	Quad video streams
Network Delay	160ms

Audio

Compression	G.711-A/G.711-U/AAC
Sampling rate	8KHz (for G.711-A/G.711-U) 16KHz, 32KHz, 44.1KHz or 48KHz (for AAC)
Port	1 input, linear level, impedance: 1kΩ 1 output, linear level, impedance: 600Ω

Camera

White Balance	Auto/Manual/Outdoor
WDR	Supports multi-frame composite pattern wide dynamic with a range up to 120dB
Video Adjustment	Brightness, contrast, saturation, chroma, sharpness
Noise Reduction	3D
Defog	Available
EIS	Available
Mirror	Horizontal, vertical
BLC	Available
HLC	Available
Privacy Mask	Up to 4 privacy areas
ROI	Up to 8 regions

Smart Video Analysis

Video anomaly detection: camera tampering, high brightness, low brightness, video loss and color cast;
 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;
 Statistics detection: crowd density detection;
 Feature detection: face detection, vehicle detection, and human body detection
 Supports deep-learning based face detection, tracking and capturing;
 Supports snapshots priority selection and duplicate deletion;
 Supports image matting to provide small face image or large panoramic images to be uploaded to the platform for secondary analysis and retrieval;
 Supports intelligent exposure on faces;
 Supports intelligent tracking;

Storage

Internal Storage	Supports dual cards, compatible with Micro SD/SDHC/SDXC card (single card up to 256GB)
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Alarm

Port	2 alarm inputs, 1 on/off output
Input	I/O input, smart analysis, SD card removal, SD card full, network disconnection, heartbeat loss
Link	I/O output, email, FTP picture uploading, audio, SD card recording, SD card snapshot, alarm info push, PTZ tracking

IR Lamp

Wave Length	850nm
Night Vision Distance	300m

Pan/Tilt Functions

Preset	1024
Pattern	12
Autopan	12
Normal Tour	16 groups (each tour can link to 14 actions, optional with Presets 1~32, Patterns 1~4 and Autopans 1~4)
Home Return	Available
Timing Tour	Available
Autoscan	Available
Area Zoom	Available

System Functions

Operating System	Windows XP, Win7, or Win8
Browser	IE8, IE9, IE10, IE11
Access Protocol	ONVIF Profile S& Profile G, Infinova CGI2.7
Web Server	Available
Remote Upgrade	Available
Password Protection	Available
Black & White List	Available
RS485 Port	Supports 1*RS485
Analog Video Output	Supports 1*BNC port

IP

Port	1*RJ45 10/100M self-adaptive Ethernet port
Protocol	IPv6, TCP, UDP, IGMP, DHCP, FTP, SNMP (V3), SMTP, NTP, RTP, RTSP, RTCP, HTTP, HTTPS, TLS, SSL, QoS, PPPoE, DNS, DDNS, ARP, ICMP, UPnP

Mechanical

Manual Speed	Pan: 0.01° ~ 1000°/s; Tilt: 0.01° ~ 300°/s
Preset Speed	Up to 400°/s
Rotation Angle	Pan: 360°; Tilt: -4° ~ 90° (auto-flip)
Preset Accuracy	<±0.1°
Electric Motor	Stepping motor

Electrical

Power Supply	PoE+ (IEEE802.3at type2 Class4, power over pairs 1/2(-), 3/6(+), 4/5(+) and 7/8(-))/ 24VAC (-25%~+35%) / 24VDC (±35%) self-adaptive
Power	<17W (idle state) <55W (max., heater on, IR lamp manually adjusted to maximum) <50W (PoE+)

Reliability

Anti-Static	Air discharge 14KV Contact protection 8KV
Surge Protection	±8KV
Environmental Rating	IP66
Impact Resistance	IK10

Environmental

Operating Temp.	-49°F ~ +158°F (-45°C ~ +70°C) (outdoor) -4°F ~ +140°F (-20°C ~ +60°C) (PoE+, outdoor)
Operating Humidity	0 ~ 90%RH (non-condensing)
Mounting	Wall, pole and corner mount

Physical

Product Dimension (H x D)	14.6" x Φ9.04" (370mm x Φ229.6mm)
Package Dimension (L x W x H)	19.09" x 11.02" x 11.81" (485mm x 280mm x 300mm)
Unit Weight	12.79 lbs (5.8kg)
Shipping Weight	16.76 lbs (7.6kg)

Certifications and Approval

Product Certifications	CE, FCC, IP66, IK10, UL
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Descriptions

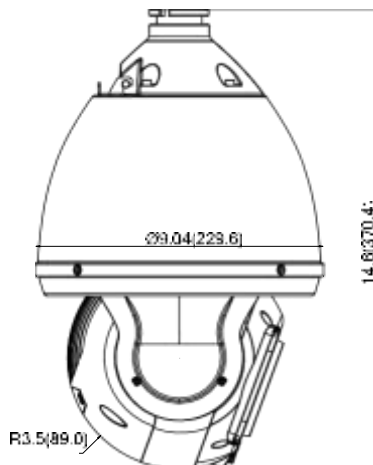
Based on deep-learning algorithm, VS231-P2 series HD IR IP dome camera is specially designed for intelligent face capturing and recognition. The camera has a built-in HD integrated camera module, utilizes large size progressive scanning CMOS sensor and has an internal 30X optical zoom lens. It provides high quality video with the resolution up to 1920x1080@60fps, adopts H.265/H.264/M-JPEG compression formats, outputs four video streams and boasts of excellent resolution and color reproduction ability to ensure richer and more accurate details to be acquired and also guarantee the accuracy of intelligent analysis in a more effective way.

The camera has rich smart functions, including face detection, face capturing, etc. Face detection acts as an alarm event to trigger the image capturing for whole scene picture and human face picture and upload these pictures to Infinova's V2233 Intelligent Platform for secondary recognition and analysis.

The camera adopts large power LED infrared lamps, with infrared wave length of 850nm, covering up to 300m for night view. The IR lamps can turn on or off automatically based on environmental lighting conditions or can be adjusted manually. The IR illumination allows flexible adjustment so as to reduce IR lamp calorific value and extend its service life.

VS231-P2 can be widely used in city surveillance, road monitoring, entrance surveillance for subways, shopping mall/supermarket and large venues, crowded places like train stations/airports and other demanding applications.

Dimensions



(Unit: inch, in the parentheses is mm)

Ordering information

VS231-P230-A061	HD IR IP dome camera, intelligent face capture, starlight, WDR, 2.0M, 30X, 1/1.9" CMOS, day/night, H.265/H.264/MJPEG, with audio alarm, outdoor, bracket mount, PoE/24VDC/24VAC
VS231-P230-C061	HD IR IP dome camera, intelligent face capture, starlight, WDR, 2.0M, 30X, 1/2" CMOS, day/night, H.265/H.264/MJPEG, with audio alarm, outdoor, bracket mount, PoE/24VDC/24VAC
LAS60-57CN-RJ45-F	PoE power sourcing equipment, 100-240VAC inputs, 60W output

Accessories

V1761K	Wall Mount, bayonet, 10 inches
V1762K	Corner Mount, bayonet, 10 inches
V1763K	Pole-side Mount, bayonet, 10 inches

Mounting

