VH161-K2 Series

HD 2MP IR IP Box Camera

Infinova®

- With a built-in 20X HD camera module
- 1/2.8" progressive scanning CMOS sensor
- IR-Cut Removable (ICR) filter for auto D/N switching
- Extra-low light sensitivity: 0.0005lux
- Efficient IR LEDs, with a wavelength of 850nm, delivering a long and stable service period with reasonable price
- Night illumination distance up to 100m
- Smart IR is provided to adjust the IR LEDs outputting power automatically as per the lighting conditions on-site
- Support WDR functions, with a dynamic range up to 120Db
- H.265/H.264/M-JPEG coding format and three-stream
- Smart H.265/Smart H.264 encoding is enabled to utilize the bandwidth effectively
- HD network video signal output: 1920x1080 @ 30fps
- Multiple smart analysis functions:
  - General functions: Defocus detection, color cast detection, high brightness detection, low brightness detection, anomaly detection, fighting detection and motion detection
  - Behavior Analysis: Cross-wire detection, region intrusion detection, loitering detection, motion detection, target stop-moving detection.
  - Density detection and crowd detection
  - Counting Application: counting for heads/pedestrians/faces/vehicles, queue length detection and dwelling detection
- NAS storage
- Bi-directional audio, with G.711-A/G.711-U/ G.726/AAC optional
- 2 alarms input and 1 alarm output
- Multiply alarm triggering methods, such as IO input, Smart Detection, SD card removal, SD card full recording, SD card full image storage, network disconnection, and heartbeat loss
- Support up to 8 definable ROI areas
- OSD text color optional

- Real-time access and parameter configuration via Web Server for multiply users is enabled
- Compatible with Infinova digital video surveillance software, easy integration with other sets of video surveillance software
- ONVIF Profile S/ G/ Q/ T compatible
- SDK is provided for integration with other digital systems
- IP66 environmental rating and fog can be removed effectively with the inbuilt air circulation system
- Provide Network Remote Updating

Infinova VH161-K2 Series HD IR Box Camera, based on AI deep learning algorithms, which is an advanced product ever launched in the surveillance market.

The camera outputs a HD network signal up to 1920x1080 @30fps. With H.256/H.264/M-JPEG coding and three code streams, it has a sterling quality on image definition and color restoration, able to acquire more accurate details, providing precise intelligent analysis. Besides, IR LEDs are inbuilt with a wavelength of 850nm and night illumination distance up to 100m. The camera is also applied with Smart IR technology, thus, the power of IR LEDs can be auto adjusted as per the lighting conditions on site and presenting an ideal night operation performance.

It is suitable for prisons, buildings, banks, airports, stations, factories, enterprises, metro, intelligent traffic, highway and other surveillance sites needing HD imaging.

Technical specifications

Lens

Optical Zoom	20X
Image Sensor	1/2.8" progressive scanning CMOS
Iris/Focal Length	F1.5~F3.8, f=5~100mm
Min. Work Distance	0.1m(W)~1.5m(T)
S/N Ratio	>62dB
Shutter	Auto, Manual (1/1-1/32000 selectable)
DSS	Available
Day/Night Switch	ICR
Sensitivity	Color mode: 0.01 lux @ F1.5 (AGC ON); B/W mode: 0.001 lux @ F1.5 (AGC ON); 0 lux (IR ON)

Video

Compression	H.265/H.264/M-JPEG
Max Resolution	1080P@30fps+720P@30fps+M-JPEG1080P@30fps
Multi-stream	Independent three-stream outputting
Encoding Capability	Variable bit rate: Fixed bit rate: Major Stream:256Kbps~10000Kbps Minor Stream:256Kbps~2000Kbps

Audio

Compression	G.711-A/G.711-U/G.726/AAC
Sampling rate	8KHz (for G.711-A/G.711-U/G.726) 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
OI	Up to 8 regions

Smart Video Analysis

General Functions	Defocus detection, color cast detection, high brightness detection, low brightness detection, anomaly detection, fighting detection and motion detection
Density Detection	Density detection and crowd detection
Counting Application	Queue length detection, dwelling detection
Behavior Analysis	Cross-line detection, region intrusion detection, loitering detection, motion detection and target stop-moving detection

Storage

Internal Storage	A built-in storage slot, compatible with Micro SD/SDHC/SDXC card (with max. storage capacity up to 256GB)

Alarm

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

IR Lamp

Wave Length	850nm
Night Vision Distance	100m

System Functions

Operating System	Windows XP, Windows Vista, Win7, Win8, Win10
Browser	IE8, IE9, IE10, IE11
Access Protocol	ONVIF Profile S / G/ Q/ T, Infinova CGI
Web Server	Available
Remote Upgrade	Available
Password Protection	Available
Black & White List	Available
Analog Video Output	N/A

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, TSL, SSL, QoS, PPPoE, DNS, DDNS, ARP, ICMP, UPnP

Mechanical

Mounting	Wall, pendant mount

Electrical

Power Supply	12VDC（±10%）
Power Consumption	<12W

Reliability

Anti-Static	Air discharge 8KV, Contact discharge 8KV
Surge Protection	Differential mode: ±2KV; Common mode: ±4KV
Environmental Rating	IP66

Environmental

Operating Temp.	-22°F ~ +140°F (-30°C ~ +60°C)
Operating Humidity	0 ~ 95%RH (non-condensing)

Certifications and Approval

Product Certifications	CE, FCC

Ordering information

VH161-K220-F0W	HD IR IP Box Camera, Smart, Starlight, WDR, 2.0M, 20X, 1/2.8"CMOS, Day/Night, H.265/H.264/MJPEG, IR illumination distance up to 100m, with audio alarm, outdoor, bracket mounts, 12VDC

Accessories

V1573	Housing bracket for vertical/horizontal adjustment, bearing 97lbs
V1573A	Wall-mounted bracket, aluminum die casting, for outdoor/indoor installation, bearing 97lbs