VK2000

CCTV KIT – 4CHPOE NVR 1TBHDD 2 X 4MP IR DOME IP CAMERAS + 2X 30M CABLES

SMARTVIEW
alhua TECHNOLOGY

KIT INCLUDES

1 X **DC9112037** - 4 Channel Smart 1U 4PoE NVR
2 X **DC9158047** - 4MP WDR IR Mini-Dome Camera
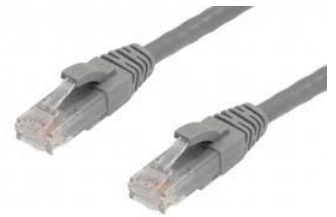2 X 30m Cat5 Cables

DC9112037 - 4 Channel Smart 1U 4PoE NVR

· H.265/H.264 codec decoding
· Max 80Mbps Incoming Bandwidth
· Up to 8MP Resolution for Preview and Playback
· HDMI/VGA simultaneous video output
· Support IPC UPnP, 4PoE ports
· Support ANR technology to enhance the storage reliability when the network breaks down

DC9158047 - 4MP WDR IR Mini-Dome Camera

·1/3" 4Megapixel progressive CMOS
·H.265& H.264 dual-stream encoding
·20fps@4M(2688×1520) &25/30fps@3M(2304×1296)
·WDR(120dB), Day/Night(ICR), 3DNR, AWB, AGC, BLC
·Multiple network monitoring: Web viewer, CMS(DSS/PSS) &DMSS
·Micro SD card slot, up to 128GB
·2.8 mm fixed lens
·Max IR LEDs Length 30m
·IP67, IK10, PoE

30m Cat5 Cables

DC9112037

4/8 Channel Smart 1U 4PoE 4K&H.265 Lite Network Video Recorder

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8Mp	H.265	Heat Map	Tripwire	Intrusion	COUNTING People Counting

System Overview

Dahua's NVR4000-4KS2 is the first Lite series NVRs which can support 4K and H.265. And, it has the most reasonable price and best quality. This Lite NVR provides up to 8MP resolution. For applications where details are critical for identification, it provides a powerful image performace with up to 4K resolution. Additionally, the NVR features a mouse shortcut operation menu, remote management and control, centre storage, edge storage, and back up storage.

Designed as a cost-effective, easy installation, this NVR is ideal for a wide range of applications such as public safety, water conservancy, transportation, city centers, education, and financial institutions.

The NVR is compatible with numerous third-party devices making it the perfect solution for surveillance systems with or without a video management system (VMS). Its open architecture supports multi-user access and is compatible with ONVIF 2.4, enabling interoperability when combined with IP cameras.

Functions

4K Resolution

The NVR supports 4K ultra HD resolution (3840 x 2160) for recording, live viewing and playback.

Intelligent Video System (Optional)

Working with built-in intelligent video analytics IP cameras, the NVR has the ability to detect and analyze moving objects for improved video surveillance. The NVR provides optional standard intelligence at the edge allowing detection of multiple object behaviors such as abandoned or missing objects. IVS also supports Tripwire analytics, allowing the camera to detect when a pre-determined line has been crossed, People Counting, ideal for business intelligence, and Face Detection, for searching or identification of individuals.

Smart Add

With the Smart Add function, the installation of IP system is as easy as an analog system, no matter the NVR with or withou a PoE switch embeded. It should be noted that the NVR has to be in the same router as cameras.

ANR (Automatic Network Replenishment Technology)

Video record in SD card in IP cameras when the network breaks down, and after the network recovered, the video will be transferred to NVR and then recorded in it.

Easy4ip

You can monitor at anytime and anywhere with Easy4ip. With this function, you can manage your devices more convenient.

DC9112037

Technical Specification

System

Main Processor	Quad-core embedded processor
Operating System	Embedded LINUX

Display

Interface	1 HDMI, 1 VGA
Resolution	3840×2160, 1920×1080, 1280×1024, 1280×720, 1024×768
Multi-screen Display	4CH: 1/4
	8CH: 1/4/8/9
OSD	Camera title, Time, Video loss, Camera lock, Motion detection, Recording

Video Detection and Alarm

Trigger Events	Recording, PTZ, Tour, Video Push, Email, FTP, Snapshot, Buzzer and Screen Tips
Video Detection	Motion Detection, MD Zones: 396 (22 × 18), Video Loss and Tampering
Alarm input	N/A
Relay Output	N/A

Playback and Backup

Playback	4CH: 1/4
	8CH: 1/4/8
Search Mode	Time /Date, MD and Exact Search (accurate to second), Smart search
Playback Function	Play, Pause, Stop, Rewind, Fast play, Slow Play, Next File, Previous File, Next Camera, Previous Camera, Full Screen, Repeat, Shuffle, Backup Selection, Digital Zoom
Backup Mode	USB Device/Network

Storage

Internal HDD	1 SATA III Port, Up to 6 TB capacity for each HDD
HDD Mode	Single
eSATA	N/A

Auxiliary Interface

USB	2 USB Ports (2 USB2.0)
RS232	N/A
RS485	N/A

Third-party Support

Third-party Support	Dahua, Arecont Vision, AXIS, Bosch, Brickcom, Canon, CP Plus, Dynacolor, Honeywell, Panasonic, Pelco, Samsung, Sanyo, Sony, Videotec, and more

Audio and Video

IP Camera Input	4/8 Channel
Two-way Talk	1 Channel Input, 1 Channel Output, RCA

Recording

Compression	H.265/H.264
Resolution	8Mp/ 6Mp/ 5MP/ 4MP/ 3MP/ 1080P/ 1.3MP/ 720P etc.
Record Rate	80Mbps
Bit Rate	16Kbps ~ 20Mbps Per Channel
Record Mode	Manual, Schedule (Regular, Continuous), MD (Video detection: Motion Detection, Tampering, Video Loss), Stop
Record Interval	1 ~ 120 min (default: 60 min), Pre-record: 1 ~ 30 sec, Post-record: 10 ~ 300 sec

Network

Interface	1 RJ-45 Port (10/100Mbps)
Ethernet Port	1 Independent 100Mbps Ethernet Port
PoE	4 ports (IEEE802.3at/af)(4Mbps is recommended per channel)
Network Function	HTTP, HTTPS, TCP/IP, IPv4/IPv6, UPnP, RTSP, UDP, SMTP, NTP, DHCP, DNS, IP Filter, PPPoE,DDNS, FTP, IP Search (Support Dahua IP camera, DVR, NVS, etc.), Easy4ip
Max. User Access	128 users
Smart Phone	iPhone, iPad, Android
Interoperability	ONVIF 2.4, CGI Conformant

Electrical

Power Supply	DC48V/1.5A
Power Consumption	NVR: <7.5W (Without HDD)
	PoE: Max 25.5w for single port, 50w in total

Environmental

Operating Conditions	-10°C ~ +55°C (+14°F ~ +131°F), 86 ~ 106kpa
Storage Conditions	-20°C ~ +70°C (-4°F ~ +158°F), 0 ~ 90% RH

Construction

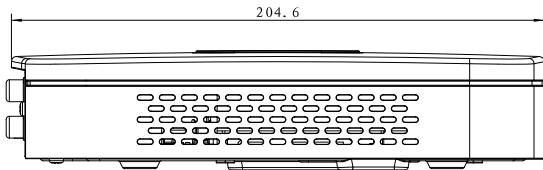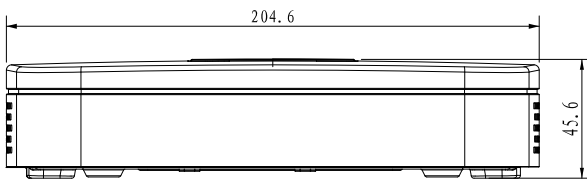|	
Dimensions	Smart 1U, 204.6mm×204.6mm×45.6mm (8.1" x 8.1" x 1.8")
Net Weight	0.45kg (0.99 lb) (without HDD)
Gross Weight	1.5kg(3.31 lb)(without HDD)

Certifications

CE	EN55032, EN55024, EN50130-4, EN60950-1
FCC	Part 15 Subpart B, ANSI C63.4-2014
UL	UL60950-1+CAN/CSA C22.2 No.60950-1

DC9112037

Ordering Information

Type	Part Number	Description
4 Channel NVR	DHI-NVR4104-P-4KS2	4 Channel Smart 1U 4PoE 4K&H.265 Lite Network Video Recorder
8 Channel NVR	DHI-NVR4108-P-4KS2	8 Channel Smart 1U 4PoE 4K&H.265 Lite Network Video Recorder
Accessories	N/A	N/A

Dimensions (mm)

DC9158047

4MP WDR IR Mini-Dome Network Camera

- · 1/3" 4Megapixel progressive CMOS
- · H.265& H.264 dual-stream encoding
- · 20fps@4M(2688×1520) &25/30fps@3M(2304×1296)
- · WDR(120dB), Day/Night(ICR), 3DNR, AWB, AGC, BLC
- · Multiple network monitoring: Web viewer, CMS(DSS/PSS) & DMSS
- · Micro SD card slot, up to 128GB
- · 2.8 mm fixed lens (3.6 mm optional)
- · Max IR LEDs Length 30m
- · IP67, IK10, PoE

System Overview

The IR Megapixel Fixed camera delivers 2MP/4MP/5MP resolution with a 2.8mm/3.6mm fixed lens.The camera's elegant blend of aesthetics combined with a range of easy mounting solutions provides an excellent choice for a variety of small to mid-size applications at an affordable price.

Functions

Smart H.265+
Smart H.265+ is the optimized implementation of the H.265 codec that uses a scene-adaptive encoding strategy, dynamic GOP, dynamic ROI, flexible multi-frame reference structure and intelligent noise reduction to deliver high-quality video without straining the network. Smart H.265+ technology reduces bit rate and storage requirements by up to 70% when compared to standard H.265 video compression.

Wide Dynamic Range (WDR)
The camera achieves vivid images, even in the most intense contrast lighting conditions, using industry-leading wide dynamic range (WDR) technology. For applications with both bright and low lighting conditions that change quickly, true WDR (120 dB) optimizes both the bright and dark areas of a scene at the same time to provide usable video.

Smart IR Technology
With IR illumination, detailed images can be captured in low light or total darkness. The camera's Smart IR technology adjusts the intensity of camera's infrared LEDs to compensate the distance of an object. Smart IR technology prevents IR LEDs from whitening out images as they come closer to the camera. The camera's integrated infrared illumination provides high performance in extreme low-light environments up to 30m (98ft).

Protection (IP67, IK10, wide voltage)
The camera allows for ±10% input voltage tolerance, suitable for the

most unstable conditions for outdoor applications. Its 2KV lightning rating provides effective protection for both the camera and its structure against lightning. Subjected and certified to rigorous dust and immersion tests (IP67) and impact tests (IK10), the camera is the choice for installation in even the most unforgiving environments.

Environmental
Dahua cameras operate in extreme temperature environments, rated for use in temperatures from-30° C to +60° C (-22° F to +140° F) with 95% humidity.

Image flip
Capturing unnecessary data such as surrounding hallway walls can increase storage requirements without any added value. The image flip feature allows the camera's image to be rotated in 90° increments for better video optimization.

Interoperability
The camera conforms to the ONVIF (Open Network Video Interface Forum) specifications, ensuring interoperability between network video products regardless of manufacturer.

DC9158047

Technical Specification

Camera

Image Sensor	1/3" 3Megapixel progresive CMOS
Effective Pixels	2688(H)x1520(V)
RAM/ROM	512MB/32MB
Scanning System	Progressive
Electronic Shutter Speed	Auto/Manual, 1/3~1/100000s
Minimum Illumination	0.08Lux/F2.0(Color,1/3s,30IRE) 0.3Lux/F2.0(Color,1/30s,30IRE) 0Lux/F2.0(IR on)
S/N Ratio	More than 50dB
IR Distance	Distance up to 30m(98ft)
IR On/Off Control	Auto/ Manual
IR LEDs	24

Lens

Lens Type	Fixed
Mount Type	Board-in
Focal Length	2.8mm (3.6mm optional)
Max. Aperture	F2.0/F2.0
Angle of View	H:104°/87°, V:57°/48°
Focus Control	Fixed
Close Focus Distance	N/A

	Lens	Detect	Observe	Recognize	Identify
DORI Distance	2.8 mm	63(207ft)	25(82ft)	13(43ft)	6(20ft)
	3.6 mm	80(262ft)	32(105ft)	16(52ft)	8(26ft)

PTZ

Pan/Tilt Range	Pan:0° ~355° ;Tilt:0° ~65° ;Rotation:0° ~355°

Video

Compression	H.265+/H.265/H.264+/H.264
Streaming Capability	2 Streams
Resolution	4M(2688x1520/2560x1440)/3M(2304×1296)/ 1080P(1920×1080)/720P(1280×720)/ D1(704×576/704×480)/ CIF(352×288/352×240)
Frame Rate	4M(1 ~ 20fps)/3M (1 ~ 25/30fps)
	D1/CIF(1 ~ 25/30fps)
Bit Rate Control	CBR/VBR
Bit Rate	H.265: 12K ~ 8448Kbps H.264: 32K ~ 10240Kbps
Day/Night	Auto(ICR) / Color / B/W
BLC Mode	BLC / HLC / WDR(120dB)

White Balance	Auto/Natural/Street Lamp/Outdoor/Manual
Gain Control	Auto/Manual
Noise Reduction	3D DNR
Motion Detetion	Off / On (4 Zone, Rectangle)
Region of Interest	Off / On (4 Zone)
Electronic Image Stabilization (EIS)	N/A
Smart IR	Support
Digital Zoom	16x
Flip	0°/90°/180°/270°
Mirror	Off / On
Privacy Masking	Off / On (4 Area, Rectangle)

Audio

Compression	N/A

Network

Ethernet	RJ-45 (10/100Base-T)
Protocol	HTTP;TCP;ARP;RTSP;RTP;UDP;RTCP;SMTP;FTP;DHCP;DNS;DDNS;PPPOE;IPv4/v6;SNMP;QoS;UPnP;NTP
Interoperability	ONVIF, PSIA, CGI
Streaming Method	Unicast / Multicast
Max. User Access	10 Users / 20 Users
Edge Storage	NAS Local PC for instant recording Micro SD Card 128GB
Web Viewer	IE, Chrome, Firefox, Safari
Management Software	Smart PSS, DSS,Easy4ip
Smart Phone	IOS, Android

Certifications

Certifications	CE (EN 60950:2000) UL:UL60950-1 FCC: FCC Part 15 Subpart B

Interface

Video Interface	N/A
Audio Interface	N/A
RS485	N/A
Alarm	N/A

Electrical

Power Supply	DC12V PoE(802.3af)(Class 0)
Power Consumption	<4.6W

DC9158047

Environmental

Operating Conditions	-30° C ~ +60° C (-22° F ~ +140° F) / Less than 95% RH
Strorage Conditions	-30° C ~ +60° C (-22° F ~ +140° F) / Less than 95% RH
Ingress Protection	IP67
Vandal Resistance	IK10

Construction

Casing	Metal
Dimensions	Φ109.9mm × 81mm (4.33" x 3.19")
Net Weight	0.34Kg (0.75lb)
Gross Weight	0.47Kg (1.04lb)

Accessories

Optional:

| PFA136 Function Box | PFB203W Wall mount | PFA152-E Pole mount | PFA200W Rain Shade |

Junction Mount	Pole Mount
PFA136	PFB203W + PFA152-E

Wall Mount	
PFB203W	

	Pole Mount with Rain Shade
	PFB203W + PFA152-E+PFA200W

Wall Mount with Rain Shade	
PFB203W+PFA200W	

Dimensions (mm/inch)

109.9 [4.33"]
81.0 [3.19"]
⌀109.9 [⌀4.33"]
⌀98.2 [⌀3.87"]
3-⌀4.7 [⌀0.19"]