DH-IPC-HDW4631EM-ASE

6MP IR Eyeball Network Camera

- 1/2.9" 6Megapixel progressive scan STARVIS™ CMOS
- H.265&H.264 triple-stream encoding
- 20fps@6MP(3072x2048), 25/30fps@4MP(2688x1520)
- Smart detection supported
- WDR(120dB), Day/Night(ICR), 3DNR,AWB,AGC,BLC
- Multiple network monitoring: Web viewer, CMS(DSS/PSS) & DMSS
- 2.8mm fixed lens (3.6mm optional)
- Built-in Mic
- Max. IR LEDs Length 50m
- Micro SD memory, IP67, PoE

System Overview

With upgraded H.265 encoding technology, Eco-savvy series brings high efficient video compression capability. It can save bandwidth and storage. Meanwhile, the series features starlight, smart IR technology and intelligent image analysis techniques. This series supports reminder function, meanwhile fully protected from dust and water, certified to IP67 and vandal resistant to IK10 standard.

Functions

ePoE technology

The ePoE technology of Dahua, designed internally, adopts advanced 2D-PAM3 coding modulation from physical layer, and realizes full duplex transmission over 800 meters at the speed of 10Mbps, or 300 meters at the speed of 100Mbps via Cat 5 or coaxial cable media. Besides, it supports PoE and PoC power supply technology which has greatly simplified construction and wiring. Dahua ePoE technology offer a new way to accomplish long distance transmission between IP camera and network switch. It allows more flexible surveillance system design, improves reliability and saves construction and wiring cost.

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.

Intelligent Video analysis (IVS)

IVS is a built-in video analytic algorithm that delivers intelligent functions to monitor a scene for Tripwire violations, intrusion detection, and abandoned or missing objects. A camera with IVS quickly and accurately responds to monitoring events in a specific area. In addition to scene analytics, the camera supports face detection to quickly capture a face and upload the image to a server. The camera also offers tamper detection by recognizing a dramatic scene change and generating a warning message to inspect the camera.

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, allowing the camera to operate in the harshest environments.

Protection (IP67, wide voltage)

The camera allows for ±30% input voltage tolerance, suitable for the most unstable conditions for outdoor applications. Its 6KV lightning rating provides effective protection for both the camera and its structure against lightning. Subjected and certified to rigorous dust and immersion tests (IP67), the camera is the choice for installation in even the most unforgiving environments.

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.

Technical Specification

System

Main Processor	Quad-core embedded processor
Operating System	Embedded LINUX

Aduio and Video

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

Display

Interface	1 HDMI, 1 VGA
Resolution	HDMI: 3840×2160, 1920×1080, 1280×1024, 1280×720
	VGA: 1920×1080, 1280×1024, 1280×720
Decoding Capacity	2ch@4K(30fps)/8ch@1080P(30fps)
Multi-screen Display	4CH: 1/4
	8CH: 1/4/8/9
OSD	Camera title, Time, Camera lock, Motion detection, Recording

Recording

Compression	Smart H.265+/H.265/Smart H.264+/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

Video Detection and Alarm

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

Playback and Backup

Playback	4CH: 1/4
	8CH: 1/4/9
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, Backup Selection, Digital Zoom
Backup Mode	USB Device/Network

Third-party Support

Third-party Support	Arecont Vision, Airlive, AXIS, Canon, Dynacolor, JVC, LG, Panasonic, Pelco, PSIA, Samsung, Sanyo, Sony, Watchnet and more

Network

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

Storage

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

Auxiliary Interface

USB	2 ports (1 Rear USB2.0, 1 Front USB2.0)
RS232	N/A
RS485	N/A

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	Compact 1U, 260mm×224.9mm×47.6mm (10.2" x 8.9" x 1.9")
Net Weight	0.8kg (1.76 lb) (without HDD)
Gross Weight	1.6kg(3.53 lb)(without HDD)

Certifications

CE	EN55032, EN55024, EN50130-4, EN60950-1
FCC	Part 15 Subpart B, ANSI C63.4-2014
UL	UL60950-1

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	N/A

Construction

Casing	Metal
Dimensions	Φ106mm×93.7mm (4.17”×3.69”)
Net Weight	0.47Kg (1.04lb)
Gross Weight	0.65Kg (1.43lb)

Ordering Information

Type	Part Number	Description
6MP camera	DH-IPC-HDW4631EMP-ASE-0360B	6MP IR Eyeball Network Camera, PAL
	DH-IPC-HDW4631EMN-ASE-0360B	6MP IR Eyeball Network Camera, NTSC
	IPC-HDW4631EMP-ASE-0360B	6MP IR Eyeball Network Camera, PAL
	IPC-HDW4631EMN-ASE-0360B	6MP IR Eyeball Network Camera,NTSC
	DH-IPC-HDW4631EMP-ASE-0280B	6MP IR Eyeball Network Camera, PAL
	DH-IPC-HDW4631EMN-ASE-0280B	6MP IR Eyeball Network Camera, NTSC
	IPC-HDW4631EMP-ASE-0280B	6MP IR Eyeball Network Camera, PAL
	IPC-HDW4631EMN-ASE-0280B	6MP IR Eyeball Network Camera, NTSC
Accessories (optional)	PFB204W	Wall mount
	PFA130-E	Junction box
	PFA152-E	Pole Mount
	LR1002	ePoE Over Coax Converter

Accessories

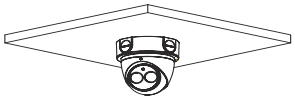
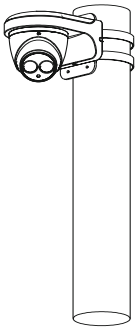
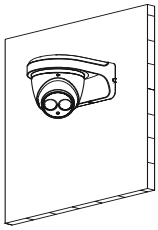
Optional:

PFA130-E
Junction Box

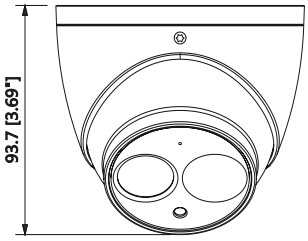
PFB204W
Wall Mount

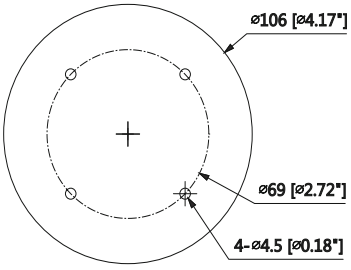
PFA152-E
Pole Mount

LR1002
ePoE Over Coax Converter

Junction Mount	Pole Mount
PFA130-E	PFB204W + PFA152-E
	
Wall Mount	
PFB204W	
	

Dimensions (mm/inch)





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DHI-NVR4104/4108HS-P-4KS2

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

- Smart H.265+/H.265/Smart H.264+/H.264
- Max 80Mbps Incoming Bandwidth
- Up to 8MP Resolution for Preview and Playback
- Up to 2ch@4K/8ch@1080P decoding
- HDMI/VGA simultaneous video output
- Support IPC UPnP, 4PoE ports

System Overview

Dahua NVR4000-4KS2 is introduced as the first Lite series NVR that supports for 4K and H.265 encoding technology with excellent performance at an affordable price. For applications where image details are highly required, it delivers the capability of 4K resolution processing. The NVR can be served as edge storage, central storage or backup storage with an intuitive shortcut operation menu for remote management and control.

Due to its cost-effective and easy-to-install design, 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 that work independently of video management system (VMS). It features an open architecture that supports for multi-user access and is compatible with ONVIF 2.4 protocol, enabling interoperability with IP cameras.

Functions

4K Resolution

4K resolution is a revolutionary breakthrough in image processing technology. 4K delivers four times the resolution of standard HDTV 1080p cameras and offers superior picture quality and image details. 4K resolution improves the clarity of a magnified scene to view or record crisp forensic video from large areas.

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.

Intelligent Video System

Working with IVS-enabled IP cameras, the NVR recognizes and records video that contains IVS data on all IP channels. The NVR records standard intelligence at-the-edge features, as well as premium IVS features that detect abandoned or missing objects, Tripwire violations, and intrusion violations. The NVR is also capable of recording business analysis data – Facial Detection, People Counting, and Heat Map – from IP cameras with built-in Intelligent Business Analytics.

ANR (Automatic Network Replenishment Technology)

Network Video Recorders with the ANR function automatically store video data on an IP camera SD card when the network is disconnected. After recovery of the network, the NVR automatically retrieves the video data stored on the camera.

DMSS

The DMSS app is available on the iOS App Store and Google Play. It makes surveillance easy and simple, allowing you to remotely access NVR devices, view live video, receive event push notifications, and search for recorded videos from an iPhone, iPad, or Android phone at anytime from virtually anywhere!

Technical Specification

Camera

Image Sensor	1/2.9" 6Megapixel progressive scan CMOS
Effective Pixels	3072(H) x 2048(V)
RAM/ROM	512MB/32MB
Scanning System	Progressive
Electronic Shutter Speed	Auto/Manual, 1/3(4)~1/100000s
Minimum Illumination	0.04Lux/F1.6(Color,1/3s,30IRE) 0.4Lux/F1.6(Color,1/30s,30IRE) 0Lux/F1.6(IR on)
S/N Ratio	More than 50dB
IR Distance	Distance up to 50m (164ft)
IR On/Off Control	Auto/ Manual
IR LEDs	1

Lens

Lens Type	Fixed
Mount Type	Board-in
Focal Length	2.8mm (3.6mm optional)
Max. Aperture	F1.6(F1.6)
Angle of View	H: 98° (69°), V: 67° (48°)
Optical Zoom	N/A
Focus Control	Fixed
Close Focus Distance	0.9m (1.7m)

	Lens	Detect	Observe	Recognize	Identify
DORI Distance	2.8 mm	69m(226ft)	28m(92ft)	14m(46ft)	7m(23ft)
	3.6 mm	89m(292ft)	36m(118ft)	18m(59ft)	9m(30ft)

Pan/Tilt/Rotation

Pan/Tilt/Rotation Range	Pan:0°~360°; Tilt:0°~78°; Rotation:0°~360°

Intelligence

IVS	Tripwire, Intrusion, Object Abandoned/Missing
Advanced Intelligent Functions	Face Detection

Video

Compression	H.265+/H.265/H.264+/H.264
Streaming Capability	3 Streams
Resolution	(3072×2048)/(3072×1728)/(2592×1944)/ (2688×1520)/(2560×1440)/ (2304×1296)/1080P(1920×1080)/ SXGA(1280×1024)/1.3M(1280× 960)/720P(1280×720)/D1(704×576/704×480)/ CIF(352×288/352×240)
Frame Rate	Main Stream: 6MP (1~20fps), 4MP(1~25/30fps)
	Sub Stream: D1(1~25/30fps)
	Third Stream: 1080P(1~25/30fps)
Bit Rate Control	CBR/VBR
Bit Rate	H.264: 24K ~ 10240Kbps H.265: 14K ~ 9984Kbps
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
Defog	N/A
Digital Zoom	16x
Flip	0°/90°/180°/270°
Mirror	Off / On
Privacy Masking	Off / On (4 Area, Rectangle)

Audio

Compression	G.711a/ G.711Mu/ AAC/ G.726

Network

Ethernet	RJ-45 (10/100Base-T)
Protocol	HTTP; HTTPs; TCP; ARP; RTSP; RTP; UDP; SMTP; FTP; DHCP; DNS; DDNS; PPPOE; IPv4/v6; QoS; UPnP;NTP; Bonjour; 802.1x; Multicast; ICMP; IGMP; SNMP
Interoperability	ONVIF, PSIA, CGI
Streaming Method	Unicast / Multicast
Max. User Access	10 Users /20 Users
Edge Storage	NAS Local PC for instant recording Mirco 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	Built-in Mic
RS485	N/A
Alarm	N/A

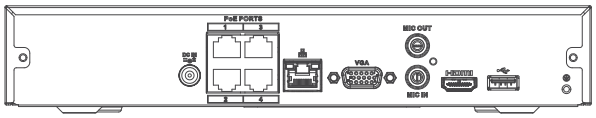
Electrical

Power Supply	DC12V, PoE (802.3af)(Class 0)
Power Consumption	<6W

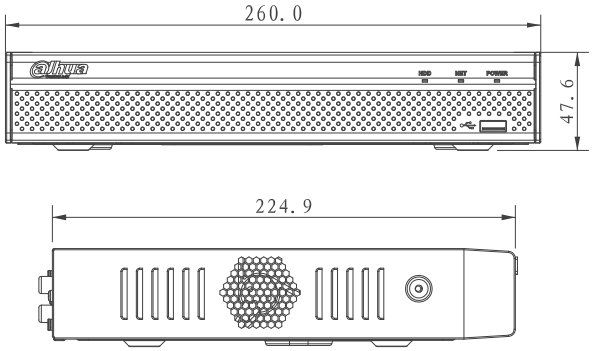
Ordering Information

Type	Part Number	Description
4 Channel NVR	DHI-NVR4104HS-P-4KS2	4 Channel Compact 1U 4PoE 4K&H.265 Lite Network Video Recorder
8 Channel NVR	DHI-NVR4108HS-P-4KS2	8 Channel Compact 1U 4PoE 4K&H.265 Lite Network Video Recorder

Rear Panel



Dimensions (mm)



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