alhua
TECHNOLOGY

DHI-NVR616R-64/128-4KS2
64/128 Channel Ultra 4K H.265 Network Video Recorder

• Intel Processor
• Max 64/128 IP Camera Inputs
• Max 512Mbps Total Bandwidth
• Up to 12MP Resolution for Preview and Playback
• Supports RAID 0/1/5/6/10
• iSCSI and Mini SAS for Expanded Storage Space
• Smart Tracking and Intelligent Video
• Redundant Power

Ultra Series	intel inside	H.265	TRACKING Smart Tracking	Heat Map
Face Detection	Tripwire	Intrusion	COUNTING People Counting	Missing Abandon Detection

System Overview

Dahua's next generation network video recorder offers unparalleled recording technology for IP video surveillance applications. For applications where details are critical for identification, this enterprise-level NVR provides a powerful Intel processor 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.

This NVR is ideal for a wide range of applications such as public safety, transportation stations, government institutions, hotel resorts, shopping malls, city centers, and financial institutions, where demand expansion flexibility, high reliability and centralized storage management.

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 4K cameras.

Function

RAID 0/1/5/6/10
Offering a balance between storage performance, storage capacity, and data integrity, the NVR features Fruitfull RAID 0/1/5/6/10 for faster and safer recording.
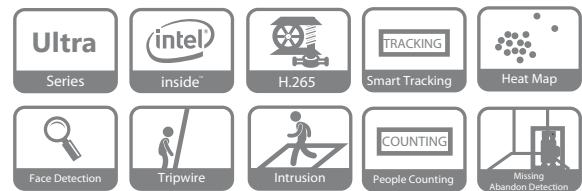
Fisheye Dewarping
The NVR features multiple fisheye dewarping modes to make viewing video easy whether its live or during playback.

N+M Hot Standby
The highly reliable redundancy N+M Hot Standby design provides a secure, failover technique ensuring immediate backup. In the event of a system failure, the slave instantly takes over the master ensuring no data is lost.

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

Intelligent Video System (IVS)
With built-in intelligent video analytics, 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 Facial Detection, for searching or identification of individuals.

Heat Map
The NVR's Heat Map option highlights the areas with the highest concentration of people. This information can then be exported into a customized report to assist in business or forensic analysis.

Point of Sale (POS)
Ideal for grocery and retail stores, the optional POS solution allows the NVR to receive a POS transaction via corresponding video. This feature allows merchants to analyze specific transactions via the Fuzzy search Algorithm.

Smart Tracking
The auto tracking PTZ feature automatically tracks a moving target throughout the camera's field of view. This function is ideal for following an object as it moves through airports, parking lots, city centers, or other applications.

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.

ONVIF

Technical Specificatio

System

Main Processor	Intel Quad-core Processor
Operating System	Embedded LINUX

Audio and Video

IP Camera Input	64/128 Channel
Two-way Talk	1 Channel Input, 1 Channel Output, RCA
Audio Compression	G.711a; G.711Mu; G726; AAC; G.723

Display

Interface	2 HDMI (up to 3840 x 2160 , Different Source), 1 VGA
Resolution	3840 × 2160 , 1920 × 1080 , 1280 × 1024, 1280 × 720 , 1024 × 768
Multi-screen Display	1st Screen: 1/4/8/9/16/25/36 2nd Screen: 1/4/8/9/16
OSD	Camera title, Time, Video loss, Camera lock, Motion detection, Recording

Recording

Compression	H.265/H.264/MJPEG
Resolution	12MP, 8MP, 6MP, 5MP, 4MP, 3MP, 1080P, 1.3MP, 720P etc.
Record Rate	384Mbps
Bit Rate	16Kbps ~ 20Mbps Per Channel
Record Mode	Manual, Schedule (Regular, MD (Motion Detection), Alarm, IVS), Holiday, 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, Alarm Out, Video Push, Email, FTP, Snapshot, Buzzer and Screen Tips
Video Detection	Motion Detection, MD Zones: 396 (22 × 18), Video Loss and Tampering
Alarm input	16 Channel, Low Level Effective, Green Terminal Interface
Relay Output	8 Channel, NO/NC Programmable, Green Terminal Interface
Tracking Trigger Event	Zoom, Tracking, Recording, Preset, Snapshot, Alarm, etc.

Playback and Backup

Playback	128 Mbps in Raid 5 Mode; 64 Mbps in single HDD Mode
Search Mode	Time /Date, Alarm, MD and Exact Search (accurate to second)
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/eSATA Device

Third-party Support

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

Network

Interface	4 RJ-45 Ports (10/100/1000Mbps)
Ethernet Port	4 Ethernet Ports Joint Working or 4 Independent 1000Mbps Ethernet Ports
PoE	N/A
Network Function	HTTP, HTTPs, TCP/IP, IPv4/IPv6, UPnP, RTSP, UDP, SMTP, NTP, DHCP, DNS, IP Filter, PPPoE,DDNS, FTP, Alarm Server, Unicast, Multicast, IP Search (Support Dahua IP camera, DVR, NVS, etc.)
Optical Fiber Interface	2 Giga Optical Fiber Interface
Max. User Access	128 users
Smart Phone	iPhone, iPad, Android
Interoperability	ONVIF (profile T/S/G), ONVIF 4.0, CGI, SDK

Storage

Internal HDD	16 SATA III Ports, Up to 10 TB capacity for each HDD
HDD Mode	Single, Raid 0/1/5/6/10(Enterprise-level HDDs are recommended), Support Global HDD Hot-spare
eSATA	1 eSATA Port (Please contact technical engineer to confirm the compatible device)
SAS	1 Mini SAS Port, for Storage Expansion

Auxiliary Interface

Front Cover	Support Hot-swap
USB	4 USB Ports (2 USB 2.0 , 2 USB 3.0)
RS232	1 Port, for PC Communication and Keyboard
RS485	1 Port, for PTZ Control

Electrical

Power Supply	AC100V ~ 240V, 50 ~ 60 Hz, Redundant (Hot-swap)
Power Consumption	<51W (Without HDD)

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	3U, 485mm x 512.9mm x 133.2mm (19.1" x 20.2" x 5 .2")
Net Weight	19.1kg (42.1 lb) (without HDD)
Gross Weight	28.5kg (62.8 lb)
Installation	Rack-mounted

Certifications

CE	EN55022, EN55024, EN50130-4, EN60950-1
FCC	Part 15 Subpart B, ANSI C63.4-2014
UL	UL 60950-1 and CAN/CSA C22.2 No.60950-1

Ordering Informatio

Type	Part Number	Description
64 Channel NVR	DHI-NVR616R-64-4KS2	64 Channel Ultra 4K H.265 Network Video Recorder with Redundant Power
128 Channel NVR	DHI-NVR616R-128-4KS2	128 Channel Ultra 4K H.265 Network Video Recorder with Redundant Power

Dimensions (mm)