

# DHI-NVR616R-64/128-4KS2

## 64/128 Channel Ultra 4K H.265 Network Video Recorder



### 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. It supports 128 channels of IP camera inputs, and 16 playback channels. Additionally, the NVR features a mouse shortcut operation menu, remote management and control, centre storage, edge storage, and back up storage.

Designed as a low-cost, 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 4K cameras

### Functions

#### RAID 0/1/5/6/10/50/60

Offering a balance between storage performance, storage capacity, and data integrity, the NVR features Fruitfull RAID 0/1/5/6/10/50/60 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.

- Intel Processor
- Max 64/128 IP Camera Inputs
- Max 384Mbps Incoming Bandwidth
- Up to 12MP Resolution for Preview and Playback
- Supports RAID 0/1/5/6/10/50/60
- iSCSI and Mini SAS for Expanded Storage Space
- Smart Tracking and Intelligent Video
- Redundant Power



#### 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.



## Technical Specification

### System

Main Processor	Intel Quad-core Processor
Operating System	Embedded LINUX

### Display

Interface	2 HDMI (up to 3840 x 2160 , Different Source), 1 VGA 4 HDMI (Optional)
Resolution	3840 x 2160 , 1920 x 1080 , 1280 x 1024, 1280 x 720 , 1024 x 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

### 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 x 18), Video Loss and Camera Blank
Alarm input	16 Channel, Low Level Effective, Green Terminal Interface
Relay Output	8 Channel, NO/NC Programmable, Green Terminal Interface
Tracking Trigger Event	Targeting, Zoom, Tracking, Recording, 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 tosecond)
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/Internal SATA burner/eSATA Device

### Storage

Internal HDD	16 SATA III Ports, Up to 6 TB capacity for each HDD
HDD Mode	Single, Raid 0/1/5/6/10/50/60 (Support Global HDD Hot-spare)
eSATA	1 eSATA Port
SAS	1 Mini SAS Port, for Storage Expansion

### Auxiliary Interface

Front Cover	Support Hot-swap
USB	4 USB Ports (3 USB 2.0 , 1 USB 3.0 )
RS232	1 Port, for PC Communication and Keyboard
RS485	1 Port, for PTZ Control

### 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
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### Audio and Video

IP Camera Input	64/128 Channel
Two-way Talk	1 Channel Input, 1 Channel Output, RCA

### 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, Continuous), MD (Video detection: Motion Detection, Camera Blank, Video Loss), Alarm, Stop
Record Interval	1 ~ 120 min (default: 60 min), Pre-record: 1 ~ 30 sec, Post-record: 10 ~ 300 sec

### 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, TCP/IP, IPv4/IPv6, UPnP, RTSP, UDP, SMTP, NTP, DHCP, DNS, IP Filter, PPPoE, DDNS, FTP, Alarm Server, 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 2.4, CGI Conformant

### Electrical

Power Supply	AC100V ~ 240V, 50 ~ 60 Hz, Redundant
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(WxDxH)	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

Ordering Information

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
Accessories	ESS3116S-J(R)	16 HDDs SAS Storage Cabinet

Accessories



ESS3116S-J(R)

Dimensions (mm)

