

# DHI-NVR616DR-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. 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.

## 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.

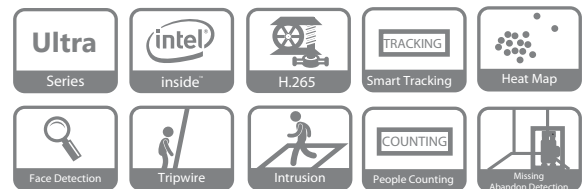
### Fisheye Dewarping

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
- iSCSI and Mini SAS for Expanded Storage Space
- Smart Tracking and Intelligent Video
- Redundant Power&7-inch HD LCD Monitor



### 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            |

### Audio and Video

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

### Display

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

### Recording

|                 |                                                                                     |
|-----------------|-------------------------------------------------------------------------------------|
| Compression     | H.265/H.264/MJPEG                                                                   |
| Resolution      | 12MP, 8MP, 6MP, 5MP, 4MP, 3MP, 1080P, 1.3MP,<br>720P etc.                           |
| Record Rate     | 384Mbps                                                                             |
| Bit Rate        | 16Kbps ~ 20Mbps Per Channel                                                         |
| Record Mode     | Manual, Schedule (Regular, MD (Motion Detection),<br>Alarm, IVS), Holiday, Stop     |
| Record Interval | 1 ~ 120 min (default: 60 min), Pre-record: 1 ~ 30<br>sec, Post-record: 10 ~ 300 sec |

### Video Detection and Alarm

|                        |                                                                                              |
|------------------------|----------------------------------------------------------------------------------------------|
| Trigger Events         | Recording, PTZ, Tour, Alarm Out, Video Push, Email,<br>FTP, Snapshot, Buzzer and Screen Tips |
| Video Detection        | Motion Detection, MD Zones: 396 (22 x 18), Video<br>Loss and Tampering                       |
| Alarm input            | 16 Channel, Low Level Effective, Green Terminal<br>Interface                                 |
| Relay Output           | 8 Channel, NO/NC Programmable, Green Terminal<br>Interface                                   |
| Tracking Trigger Event | Zoom, Tracking, Recording, Preset, Snapshot, Alarm,<br>etc.                                  |

### Playback and Backup

|                   |                                                                                                                                                                                |
|-------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Playback          | 128 Mbps in Raid 5 Mode;<br>64 Mbps in single HDD Mode                                                                                                                         |
| Search Mode       | Time /Date, Alarm, MD and Exact Search (accurate<br>to second)                                                                                                                 |
| Playback Function | Play, Pause, Stop, Rewind, Fast play, Slow Play, Next<br>File, Previous File, Next Camera, Previous Camera,<br>Full Screen, Repeat, Shuffle, Backup Selection,<br>Digital Zoom |
| Backup Mode       | USB Device/Network/eSATA Device                                                                                                                                                |

### Third-party Support

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

### Network

|                         |                                                                                                                                                                                |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Interface               | 4 RJ-45 Ports (10/100/1000Mbps)                                                                                                                                                |
| Ethernet Port           | 4 Ethernet Ports Joint Working or 4 Independent<br>1000Mbps Ethernet Ports                                                                                                     |
| PoE                     | N/A                                                                                                                                                                            |
| Network Function        | HTTP, HTTPs, TCP/IP, IPv4/IPv6, UPnP, RTSP, UDP,<br>SMTP, NTP, DHCP, DNS, IP Filter, PPPoE, DDNS, FTP,<br>Alarm Server, IP Search (Support Dahua IP camera,<br>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                                                                                                                                                      |

### Storage

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

### Auxiliary Interface

|             |                                                                            |
|-------------|----------------------------------------------------------------------------|
| Front Cover | Support Hot-swap, 7-inch HD LCD (1920 x 1080 ,<br>1280 x 1024, 1024 x 768) |
| 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 |
| 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 529.9mm x 133.2mm (19.1" x 20.9"<br>x 5.2") |
| Net Weight   | 19.6kg (43.2 lb) (without HDD)                          |
| Gross Weight | 29kg (63.9 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-NVR616DR-64-4KS2  | 64 Channel Ultra 4K H.265 Network Video Recorder with Redundant Power and LCD Monitor  |
| 128 Channel NVR | DHI-NVR616DR-128-4KS2 | 128 Channel Ultra 4K H.265 Network Video Recorder with Redundant Power and LCD Monitor |
| Accessories     | ESS3116S-J(R)         | 16 HDDs SAS Storage Cabinet                                                            |

### Accessories



ESS3116S-J(R)

### Dimensions (mm)

