

# NVR 128CH RAID INT 4K 16 SATA

## 128 Channel Super 4K Network Video Recorder



- Intel Processor
- Max 128 IP Camera Inputs with IVS Recording
- Max 384 Mbps Incoming Bandwidth
- Up to 12 MP Resolution for Preview and Playback
- 16 Hot-swap HDDs, Up to 96 TB
- Supports RAID 0 /1/5 /6/10 /50 /60
- iSCSI and Mini SAS for Expanded Storage Space
- Smart Tracking
- Intelligent Video System with Business Analytics (two IP channels)



### 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.

#### 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 (on two IP channels), the NVR has the ability to detect and analyze moving objects for improved video surveillance. The NVR provides standard intelligence features 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, Heat Map, 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.

#### Automatic Network Replenishment (ANR) 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.



## 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
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 to a 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/Internal SATA burner/eSATA Device

### Storage

Internal HDD	16 SATA III Ports, Up to 96 TB
HDD Mode	Single, Raid 0/1/5/6/10/50/60 (Support Global HDD Hot-spare)
eSATA	1 eSATA Port

### Auxiliary Interface

Front Cover	Support Hot-swap, 7-inch HD LCD (1920 x 1080 / 1280 x 1024 / 1024 x 768) (Model – D and DR)
USB	4 USB Ports (3 USB 2.0 , 1 USB 3.0 )
SAS	1 Mini SAS Port, for Storage Expansion
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	128 Channel
Two-way Talk	1 Channel Input, 1 Channel Output, RCA

### Recording

Compression	H.264/MJPEG
Resolution	12 MP, 8 MP, 6 MP, 5 MP, 4 MP, 3 MP, 1080p, 1.3 MP, 720p
Record Rate	384 Mbps
Bit Rate	1 Kbps to 20 Mbps per Channel
Record Mode	Manual, Schedule (Regular, Continuous), MD (Video detection: Motion Detection, Camera Blank Video Loss), Alarm, Stop
Record Interval	1 to 120 min (default: 60 min), Pre-record: 1 to 30 sec, Post-record: 10 to 300 sec

### Network

Interface	4 RJ-45 Ports (10/100/1000 Mbps)
Ethernet Port	4 Ethernet Ports Joint Working or 4 Independent 1000 Mbps Ethernet Ports
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	100 to 240 VAC, 50/60 Hz, Redundant
Power Consumption	< 51 W, without HDD

### Environmental

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

## Construction

Dimensions	543.40 mm x 485.0 mm x 133.20 mm (21.4 in. x 19.1 in. x 5.2 in.)
Net Weight	17.50 kg (38.60 lb), without HDD
Gross Weight	28.0 kg (61.70 lb)
Installation	Rack-mounted

## Certifications

FCC	SEFD1411089-B
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## Intelligence

IVS triggers an alarm and takes a defined action for the following events:

### Premium Features

<b>Motion</b>	An object moves through any part of the scene.
<b>Tripwire</b>	A target crosses a user-defined line.
<b>Intrusion</b>	A target enters or exits a defined perimeter.
<b>Scene Change</b>	A person or object moves the camera to change the scene or covers the camera to obscure the scene.
<b>Abandoned/Missing Object</b>	A target leaves an object in designated area, or a target removes an object from the same designated area.

### Advanced Features

<b>Facial Detection</b>	Detects and captures a snapshot of a human face in a defined area within a scene.
<b>Heat Map</b>	Generates a visual representation of data.

## Accessories

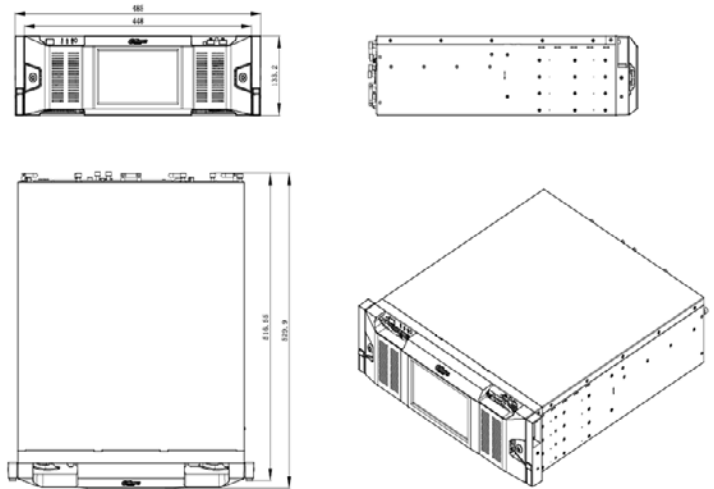


ESS1504C



ESS1508C

## Dimensions (mm)



## Ordering Information

Type	Part Number	Description
128 Channel NVR	DHI-NVR6A16DR-128-4KS2	128 Channel Super 4K Network Video Recorder with redundant power and LCD monitor
Accessories	ESS1504C	External HDD accessories
	ESS1508C	External HDD accessories