

# DS-9600NI-E(/H) Series NVR



## Introduction:

DS-9600NI-E(/H) series NVR (Network Video Recorder) is a new generation recorder developed by Hikvision independently. Combined with multiple advanced technologies, such as audio and video decoding technology, embedded system technology, storage technology, network technology and intelligent technology, it can both work alone as a recorder and cooperate with other device to build a comprehensive surveillance system.

The DS-9600NI-E(/H) series NVR can be widely applied in the areas of finance, public security, military, communication, transportation, education, etc..

## Available Models:

DS-96128NI-E16(/H), DS-96128NI-E24(/H);  
DS-96256NI-E16(/H), DS-96256NI-E24(/H);

## Main Features:

### Professional and Reliable

- Pluggable HDD design provides a convenient HDD installation and maintenance way; Unique chassis based on patented design ensures environmental friendly and low-noise running.
- Adopt professional embedded hardware and software, and pioneering dual-OS design to ensure the reliability of system running.
- Support redundant power supply to improve the system stability.
- Adopt ANR technology to enhance the storage reliability when the network disconnected.
- Supports HDD hot swap with RAID0, RAID1, RAID5, RAID10 storage scheme configurable.
- Either normal or hot spare working mode is configurable to constitute an N+1 hot spare system.

### HD Input

- Connectable to the third-party network cameras like ACTI, Arecont, AXIS, Bosch, Brickcom, Canon, ONVIF, PANASONIC, Pelco, PSIA, SAMSUNG, SANYO, SONY, Vivotek and ZAVIO.
- Up to 128/256 IP cameras can be connected with 400M/640M incoming bandwidth.
- Support live view, storage, and playback of the connected camera at up to 8 megapixels resolution.

### HD Output

- Up to 64-window division display mode for the HDMI1/VGA/LCD output, and 16-window division display mode for HDMI2-6 outputs. The display sequence of channels is adjustable.
- Multi-screen display supported by the HDMI 3-6 outputs of /H models.

### HD Storage

- Up to 16/24 SATA hard disks and 1 miniSAS (optional) can be connected, for both recording and backup.

### HD Transmission

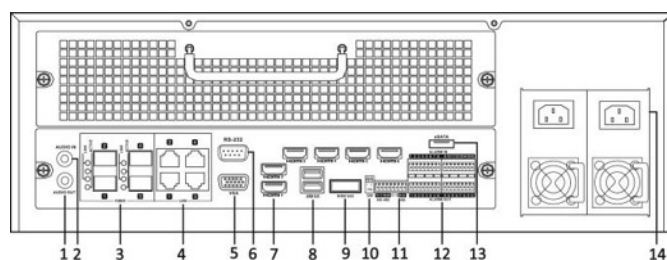
- 4 self-adaptive 10M/100M/1000M network interfaces and 4 1000M optical fiber interfaces.

### Various Applications

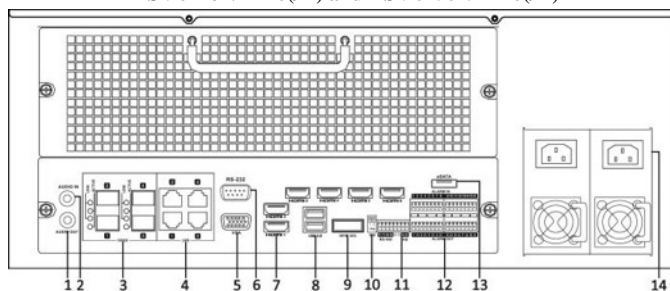
- Centralized management of IP cameras is supported, including configuration, information import/export, real-time information display, two-way audio, upgrade, etc.
- Connectable to smart IP cameras from Hikvision and the recording, playing back, and backing up of VCA alarms can be realized.

- New GUI and support starting record with one key;
- Realize instant playback for assigned channel during multi-channel display mode.
- Smart search for the selected area in the video; and smart playback to improve the playback efficiency.
- Support HDD quota and group modes; different capacity can be assigned to different channels.
- Support USB 3.0 and eSATA interface to fulfill the requirement of high-speed backup.

## Physical Interfaces:



DS-96128NI-E16(/H) and DS-96256NI-E16(/H)



DS-96128NI-E24(/H) and DS-96256NI-E24(/H)

Index	Name
1	AUDIO OUT
2	AUDIO IN
3	4 Fiber Optic Interfaces
4	4 LAN Network Interfaces
5	VGA Interface
6	RS-232 Serial Interface
7	HDMI Interfaces
8	USB 3.0 Interfaces
9	miniSAS Interface
10	Termination Switch
11	RS-485 Serial Interface and Keyboard Interface
12	ALARM IN and ALARM OUT
13	eSATA Interface
14	100~240VAC Power Input

## Specifications:

Model		DS-96128NI-E16	DS-96256NI-E16	DS-96128NI-E24	DS-96256NI-E24
Video/Audio input	IP video input	128-ch	256-ch	128-ch	256-ch
	Two-way audio	1-ch, RCA (2.0 Vp-p, 1kΩ)			
Network	Incoming bandwidth	400Mbps	640Mbps	400Mbps	640Mbps
	Outgoing bandwidth	400Mbps	640Mbps or 320Mbps (when RAID is enabled)	400Mbps	640Mbps or 320Mbps (when RAID is enabled)
	Remote connection	256			
Video/Audio output	Recording resolution	6MP/5MP/3MP/1080P/UXGA/720P/VGA/4CIF/DCIF/2CIF/CIF/QCIF			
	HDMI™ output	2-ch HDMI™ 1 supports 64-window division, and HDMI™ 2 supports 16-window division.			
	VGA output	1-ch			
	LCD/HDMI™/VGA output resolution	HDMI™ 3-6: 1920 × 1080P /60Hz LCD/VGA/ HDMI™ 1-2: 1920 × 1080P /60Hz, 1600 × 1200 /60Hz, 1280 × 1024 /60Hz, 1280 × 720 /60Hz, 1024 × 768 /60Hz			
	Audio output	1-ch, RCA (2.0Vp-p, 1KΩ)			
Decoding	Live view / Playback resolution	6MP/5MP/3MP/1080P/UXGA/720P/VGA/4CIF/DCIF/2CIF/CIF/QCIF			
	Capability	8-ch@1080P			
Hard disk	SATA	16 SATA interfaces for 16 HDDs		24 SATA interfaces for 24 HDDs	
	eSATA	1 eSATA interface			
	miniSAS (Optional)	1 miniSAS interface			
	Capacity	Up to 6TB capacity for each HDD			
Disk array	Array type	RAID0, RAID1, RAID5, RAID10			
External interface	Network interface	4 RJ-45 10 /100 /1000 Mbps self-adaptive Ethernet interfaces			
	Optic fiber interface	4 1000 Mbps optic fiber interfaces			
	Serial interface	RS-232; RS-485; Keyboard			
	USB interface	Front panel: 2 × USB 2.0 Rear panel: 2 × USB 3.0		Front panel: 1 × USB 2.0 Rear panel: 2 × USB 3.0	
	Alarm in/out	16 / 8			
Others	Power supply	100 ~ 240 VAC, 6.3 A, 50 ~ 60 Hz			
	Consumption (without hard disk)	≤ 300 W		≤ 450 W	
	Working temperature	-10°C ~ +55°C (14°F ~ 131°F)			
	Working humidity	10 % ~ 90 %			
	Chassis	19-inch rack-mounted 3U chassis		19-inch rack-mounted 4U chassis	
	Dimensions (W × D × H)	442 × 494 × 146 mm (17.4" × 19.4" × 5.7")		447 × 528 × 172mm (17.6" × 20.8" × 6.8")	
	Weight (without hard disk)	≤ 15.86 Kg (31.79 lb)		≤ 20.80 Kg (45.76 lb)	

Model		DS-96128NI-E16/H	DS-96256NI-E16/H	DS-96128NI-E24/H	DS-96256NI-E24/H
Video/Audio input	IP video input	128-ch	256-ch	128-ch	256-ch
	Two-way audio	1-ch, RCA (2.0 Vp-p, 1kΩ)			
Network	Incoming bandwidth	400Mbps	640Mbps	400Mbps	640Mbps
	Outgoing bandwidth	400Mbps	640Mbps or 320Mbps (when RAID is enabled)	400Mbps	640Mbps or 320Mbps (when RAID is enabled)
	Remote connection	256			
Video/Audio output	Recording resolution	6MP/5MP/3MP/1080P/UXGA/720P/VGA/4CIF/DCIF/2CIF/CIF/QCIF			
	LCD output	7" LCD touch screen			
	HDMI™ output	6-ch HDMI™ 1 supports 64-window division, and HDMI™ 2-6 support 16-window division.			
	VGA output	1-ch			
	LCD/HDMI™/VGA output resolution	HDMI™ 3-6: 1920 × 1080P /60Hz LCD/VGA/ HDMI™ 1-2: 1920 × 1080P /60Hz, 1600 × 1200 /60Hz, 1280 × 1024 /60Hz, 1280 × 720 /60Hz, 1024 × 768 /60Hz			
	Audio output	1-ch, RCA (2.0Vp-p, 1KΩ)			
Decoding	Live view / Playback resolution	6MP/5MP/3MP/1080P/UXGA/720P/VGA/4CIF/DCIF/2CIF/CIF/QCIF			
	Capability	24-ch@1080P			
Hard disk	SATA	16 SATA interfaces for 16 HDDs		24 SATA interfaces for 24 HDDs	
	eSATA	1 eSATA interface			
	miniSAS (Optional)	1 miniSAS interface			
	Capacity	Up to 6TB capacity for each HDD			
Disk array	Array type	RAID0, RAID1, RAID5, RAID10			
External interface	Network interface	4 RJ-45 10 /100 /1000 Mbps self-adaptive Ethernet interfaces			
	Optic fiber interface	4 1000 Mbps optic fiber interfaces			
	Serial interface	RS-232; RS-485; Keyboard			
	USB interface	Front panel: 2 × USB 2.0 Rear panel: 2 × USB 3.0		Front panel: 1 × USB 2.0 Rear panel: 2 × USB 3.0	
	Alarm in/out	16 / 8			
Others	Power supply	100 ~ 240 VAC, 6.3 A, 50 ~ 60 Hz			
	Consumption (without hard disk)	≤ 300 W		≤ 450 W	
	Working temperature	-10°C ~ +55°C (14°F ~ 131°F)			
	Working humidity	10 % ~ 90 %			
	Chassis	19-inch rack-mounted 3U chassis		19-inch rack-mounted 4U chassis	
	Dimensions (W × D × H)	442 × 494 × 146 mm (17.4" × 19.4" × 5.7")		447 × 528 × 172mm (17.6" × 20.8" × 6.8")	
	Weight (without hard disk)	≤ 15.86 Kg (31.79 lb)		≤ 20.80 Kg (45.76 lb)	

**Notes:**

The formula to calculate the incoming bandwidth and the IP camera connected is:  $A = B/(C+D)$ .

A refers to the number of IP camera you connected.

B refers to the value of the incoming bandwidth.

C refers to the bitrate value of the main stream of the connected IP camera.

And D refers to the bitrate value of the sub-stream of the connected IP camera.

**Example:** The incoming bandwidth of DS-96128NI-E16 NVR is 400 Mbps and the IP camera to connect is with resolution of 720P (1280\*720) / 25 (30) fps. The bitrate for the main stream and sub-stream of the IP camera is set as 4Mbps and 1Mbps respectively.

In this example,  $B=400\text{Mbps}$ ,  $C=4\text{Mbps}$ ,  $D=1\text{Mbps}$  and  $A = B/(C+D) = 400 / (4+1) = 80$ . So the number of IP cameras can be connected with is 80.