

DS-7700NI-E4/P Series NVR

Introduction:

DS-7700NI-E4/P series NVR (Network Video Recorder) is a new generation recorder developed by Hikvision independently. Combined with multiple advanced technologies, such as audio and video encoding & 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-7700NI-E4/P series NVR can be widely applied in the areas of finance, public security, military, communication, transportation, education, etc..

Available Models:

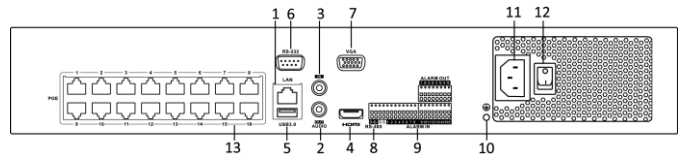
DS-7708NI-E4/8P, DS-7716NI-E4/16P and DS-7732NI-E4/16P.

Main Features:

- 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 32 network cameras can be connected.
- Support live view, storage, and playback of the connected camera at up to 5 megapixels resolution.
- Simultaneous HDMI and VGA at 1920 × 1080 resolution.
- New GUI and support starting record with one key.
- Redundant recording, holiday recording and capture schedule configuration.
- Realize instant playback for assigned channel during multi-channel display mode.
- Up to 16-ch synchronous playback at 4CIF resolution.
- Smart search for the selected area in the video.
- Customization of tags, searching, and playing back by tags.
- Locking and unlocking record files.
- Support HDD quota and group modes; different capacity can be assigned to different channel.
- Up to 4 SATA hard disks and 1 eSATA disk (optional) can be connected, for both recording and backup.
- 1 self-adaptive 10M/100M/1000M network interface.
- Up to 16 independent PoE network interfaces are provided;
- Support Hikvision DDNS (Dynamic Domain Name System);
- Support network detection, including network delay, packet loss, etc.

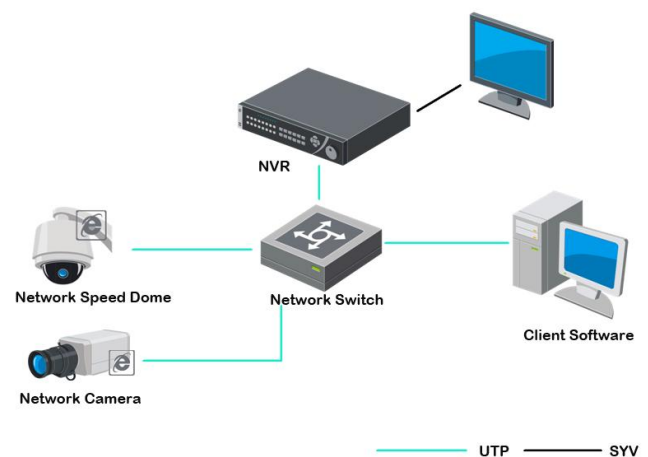


Physical Interfaces:



Index	Name
1	LAN Network Interface
2	AUDIO OUT
3	AUDIO IN
4	HDMI Interface
5	USB 3.0 Interface
6	RS-232 Serial Interface
7	VGA Interface
8	RS-485 Serial Interface
9	ALARM IN and ALARM OUT
10	GND
11	100~240VAC Power Input
12	Power Switch
13	Network Interfaces with PoE Function

Typical Application:



Specifications:

Model		DS-7708NI-E4/8P	DS-7716NI-E4/16P	DS-7732NI-E4/16P
Video/Audio input	IP video input	8-ch	16-ch	32-ch
	Two-way audio	1-ch, RCA (2.0 Vp-p, 1kΩ)		
Network	Incoming bandwidth	50Mbps	100Mbps	200Mbps
	Outgoing bandwidth	80Mbps		
	Remote connection	128		
Video/Audio output	Recording resolution	5MP/3MP/1080p/UXGA/720p/VGA/4CIF/DCIF/2CIF/CIF/QCIF		
	Frame rate	Main stream: 50 fps (P) / 60 fps (N)		
		Sub-stream: 50 fps (P) / 60 fps (N)		
	HDMI/VGA output	1-ch, resolution: 1920 × 1080P /60Hz, 1600 × 1200 /60Hz, 1280 × 1024 /60Hz, 1280 × 720 /60Hz, 1024 × 768 /60Hz		
Audio output	1-ch, RCA (Linear, 1KΩ)			
Decoding	Live view / Playback resolution	5MP/3MP/1080p/UXGA/720p/VGA/4CIF/DCIF/2CIF/CIF/QCIF		
	Capability	8-ch@720P, 6-ch@1080P	16-ch@4CIF, 12-ch@720P, 6-ch@1080P	16-ch@4CIF, 12-ch@720P, 6-ch@1080P
Hard disk	SATA	4 SATA interfaces for 2 HDDs + 1 DVD-R/W (default), or 4HDDs		
	eSATA (Optional)	1 eSATA interface		
	Capacity	Up to 4TB capacity for each HDD		
External interface	Network interface	1 RJ-45 10 /100 /1000 Mbps self-adaptive Ethernet interface		
	Serial interface	RS-232 and RS-485		
	USB interface	2 × USB 2.0 + 1 × USB 3.0		
	Alarm in / out	16 / 4 (optionally can be expanded to 16 / 8)		
PoE	Interface	8 independent 100 Mbps PoE network interfaces	16 independent 100 Mbps PoE network interfaces	
	Max. Power	200W		
	Supported standard	AF and AT		
Others	Power supply	100 ~ 240 VAC		
	Consumption (without hard disk, DVD-R/W, or PoE)	≤ 20 W	≤ 20 W	≤ 20 W
	Working temperature	-10 °C ~ +55 °C (14 °F ~ 131 °F)		
	Working humidity	10 % ~ 90 %		
	Chassis	19-inch rack-mounted 1.5U chassis		
	Dimensions (W × D × H)	445 × 390 × 70 mm (17.5" × 15.3" × 2.8")		
Weight (without hard disk or DVD-R/W)	≤ 4 Kg (8.82 lb)			

Note:

- Each PoE port supports the AF and AT standard.
- The total consumption of connected IP cameras cannot exceed the power provided by NVR.

The formula to calculate the cameras to connect via the PoE interface is: $C_1 * N_1 + C_2 * N_2 + \dots + C_n * N_n \leq T$.

C_n refers to the power consumption of an IP camera.

N_n refers to the number of camera(s) which has the C_n consumption.

T refers to the PoE power provided by NVR.

Example:

The DS-7716NI-E4/16P provides 200W power for the PoE connection, and we assume it has already connected 5 IP cameras through the PoE interfaces with each consumption of 20W. If you want to connect more IP cameras with each consumption of 25W, how many cameras can be connected?

In this example, $C_1 = 20W$, $N_1 = 5$, $C_2 = 25W$, and $T = 200W$. Then $20W * 5 + 25W * N_2 \leq 200W$, $N_2 = 4$.

Note:

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-7716NI-E4/16P NVR is 100Mbps and the IP camera to connect is with resolution of 1080P (1280*720) / 25 (30) fps.

The bitrate for the main stream and sub-stream of the IP camera is set as 6Mbps and 1Mbps respectively.

In this example, $B=100Mbps$, $C=6Mbps$, $D=1Mbps$ and $A = B/(C+D) = 100 / (6+1) = 14$. So the number of IP cameras can be connected with is 14.