HIKVISION

DS-7600NI-E1/4P and DS-7600NI-E2/8P series NVR

Introduction:

DS-7600NI-E1/4P and DS-7600NI-E2/8P 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 form a comprehensive surveillance system.

The DS-7600NI-E1/4P and DS-7600NI-E2/8P series NVR are widely applied in the areas of finance, public security, military, communication, transportation, education, etc..

Available Models:

DS-7604NI-E1/4P;
DS-7608NI-E2/8P, DS-7616NI-E2/8P and DS-7632NI-E2/8P.

Main Features:

- Connectable to the third-party network cameras like like ACTI, Arecont, AXIS, Bosch, Brickcom, Canon, ONVIF, PANASONIC, Pelco, PSIA, SAMSUNG, SANYO, SONY, Vivotek and ZAVIO.
- Up to 16 network cameras can be connected.
- Support live view, storage, and playback of the connected camera with up to the resolution of 5 megapixels.
- Simultaneous HDMI and VGA outputs at up to 1920×1080 resolution.
- New GUI and support starting record with one key;
- Holiday recording;
- Realize instant playback for assigned channel during multi-channel display mode.
- Up to 16-ch synchronous playback at 4CIF resolution.
- Customization of tags, searching, and playing back by tags.
- Locking and unlocking record files.
- Support HDD quota mode; different capacity can be assigned to different channel.
- Up to 2 SATA hard disks can be connected.
- 1 self-adaptive 10M/100M/1000M network interface is provided;
- Up to 8 independent PoE network interfaces are provided;
- Support Hikvision DDNS (Dynamic Domain Name System);
- Support network detection, including network delay, packet loss, etc.
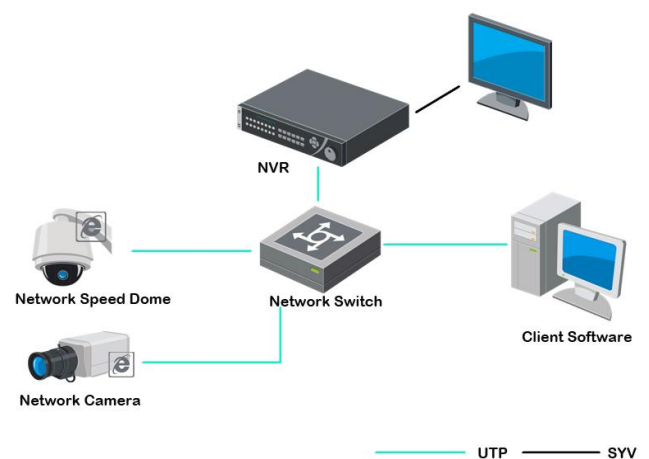
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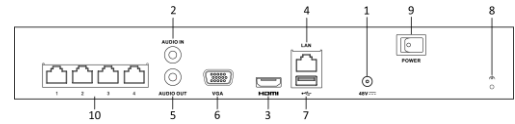
DS-7600NI-E1/4P
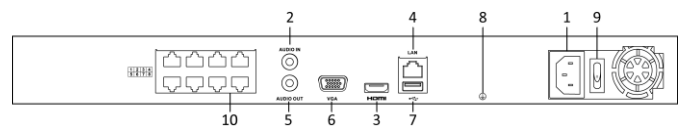
DS-7600NI-E2/8P

Index	Name
1	Power Supply
2	Audio In
3	HDMI Interface
4	LAN Network Interface
5	Audio Out
6	VGA Interface
7	USB Interface
8	Ground
9	Power Switch
10	Network Interfaces with PoE Function

Typical Application:

Specifications:

Model		DS-7604NI-E1/4P	DS-7608NI-E2/8P	DS-7616NI-E2/8P	DS-7632NI-E2/8P
Video/Audio input	**IP video input**	4-ch	8-ch	16-ch	32-ch
	Two-way audio input	1-ch, RCA (2.0 Vp-p, 1kΩ)			
Network	**Incoming bandwidth**	25Mbps	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	4-ch@1080P	8-ch@720P, 6-ch@1080P	16-ch@4CIF, 12-ch@720P, 6-ch@1080P	
Hard disk	**SATA**	1 SATA interface for 1 HDD	2 SATA interface for 2 HDDs		
	Capacity	Up to 4TB for each disk			
External interface	**Network interface**	1 RJ-45 10 /100 /1000 Mbps self-adaptive Ethernet interface			
	USB interface	1 ×USB 2.0 and 1 ×USB 3.0			
	Alarm in/out (Optional)	4 / 1			
PoE	**Interface**	4 independent 100 Mbps PoE network interfaces	8 independent 100 Mbps PoE network interfaces		
	Max. Power	50W	120W		
	Supported standard	AF and AT			
Others	**Power supply**	48V DC	220V AC		
	Consumption (without hard disk and PoE)	≤ 10W	≤ 10W	≤ 10W	≤ 10W
	Working temperature	-10 ℃ ~ +55 ℃ (+14 ℉~ + 131 ℉)			
	Working humidity	10 % ~ 90 %			
	Chassis	1U chassis	19-inch rack-mounted 1U chassis		
	Dimensions (W ×D ×H)	315 ×230 ×45mm (12.4 ×9.1 ×1.8 inch)	445 ×290 ×45mm (17.5 ×11.4 ×1.8 inch)		
	Weight (without hard disk)	≤ 1 Kg (2.2 lb)			

Note:

- Each PoE port supports the AF ad 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: $C_1 * N_1 + C_2 * N_2 + \ldots + C_n * N_n \leq T$.

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-7616NI-E2/8P provides 120W power for the PoE connection, and we assume it has already connected 4 IP cameras through the PoE interfaces with each consumption of 15W. If you want to connect more IP cameras with each consumption of 20W, how many cameras can be connected?

In this example, $C_1 = 15W$, $N_1 = 4$, $C_2 = 20W$, and $T = 120W$. Then $15W * 4 + 20W * N_2 \leq 120W$, $N_2 = 3$.

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-7616NI-E2/8P NVR is 100Mbps and the IP camera to connect is with resolution of 1080P (1920*1080) / 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 $A = B/(C+D) = 100 / (6+1) \approx 14$. So the number of IP cameras can be connected with is 14.