DS-9600NI-XT Series NVR

Introduction:

The DS-9600NI-XT 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-9600NI-XT series NVR can be widely applied in the areas of finance, public security, military, communication, transportation, education, etc..
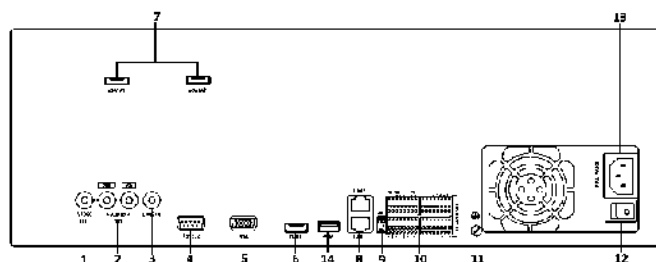
Available Models:

DS-9616NI-XT, DS-9632NI-XT, and DS-9664NI-XT.

Main Features:

- Connectable to the third-party network cameras like ACTI, Arecont, AXIS, Bosch, Brickcom, Canon, PANASONIC, Pelco, SAMSUNG, SANYO, SONY, Vivotek and ZAVIO, and cameras that adopt ONVIF or PSIA protocol.
- Up to 64 network cameras can be connected.
- Support live view, storage, and playback of the connected camera at up to 6 megapixels resolution.
- Simultaneous HDMI, VGA and CVBS outputs; and respective live view and playback via VGA and HDMI outputs.
- New GUI and support starting record with one key.
- Redundant recording, holiday recording and capture schedule configuration.
- Up to 16-ch synchronous playback at 720P resolution.
- Smart playback to quick get through the less effective information.
- Connectable to the smart IP cameras from Hikvision, and VCA functions can be realized.
- 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 16 SATA hard disks and 2 eSATA disks can be connected, for both recording and backup.
- Hot-swappable HDD supporting RAID0, RAID1, RAID5, RAID10 storage scheme. And 16 arrays can be configured.
- Either normal or hot spare working mode is configurable to constitute an N+1 hot spare system.
- 2 self-adaptive 10M/100M/1000M network interfaces, with 3 working modes: multi-address, load balance and network fault tolerance.
- Support Hikvision DDNS (Dynamic Domain Name System).
- Support Channel-zero encoding, which enables you to get a view in the remote client or web browser of all the channels in one screen.
- Support network detection, including network delay, packet loss, etc.
- Adopt pioneering dual-OS design to ensure the security of system running.
- VCA detection alarm is supported.
- VCA search for face detection, behavior analysis, people counting and heat map.
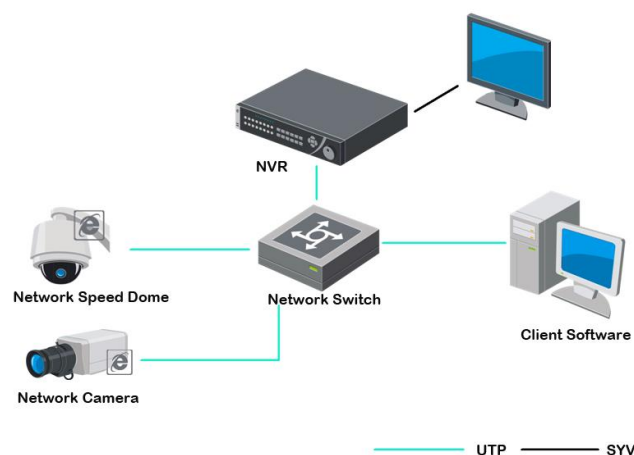
Physical Interfaces:

Index	Name
1	VIDEO OUT
2	CVBS AUDIO OUT and VGA AUDIO OUT
3	LINE IN
4	RS-232 Serial Interface
5	VGA Interface
6	HDMI Interface
7	eSATA Interfaces
8	LAN1, LAN2 Network Interface
9	Termination Switch
10	RS-485 Serial Interface, Keyboard Interface, ALARM IN and ALARM OUT
11	GND
12	100~240VAC Power Input
13	Power Switch
14	USB Interface

Typical Application:

Specifications:

Model		DS-9616NI-XT	DS-9632NI-XT	DS-9664NI-XT
Video/Audio input	**IP video input**	16-ch	32-ch	64-ch
	Two-way audio	1-ch, BNC (2.0 Vp-p, 1kΩ)		
Network	**Incoming bandwidth**	100Mbps	200Mbps	200Mbps
		100Mbps (when RAID is enabled)		
	Outgoing bandwidth	240Mbps	160Mbps	160Mbps
		100Mbps (when RAID is enabled)		
	Remote connection	128		
Video/Audio output	**Recording resolution**	6MP /5MP /3MP /1080P /UXGA /720P /VGA /4CIF /DCIF /2CIF /CIF /QCIF		
	CVBS output	1-ch, BNC (1.0 Vp-p, 75 Ω) Resolution: 704 ×576 (PAL); 704 ×480 (NTSC)		
	HDMI output	1-ch, resolution: 1920 × 1080P /60Hz, 1920×1080P /50Hz, 1600 × 1200/60Hz, 1280 × 1024 /60Hz, 1280 ×720 /60Hz, 1024 ×768 /60Hz		
	VGA output	1-ch, resolution: 1920 × 1080P /60Hz, 1600 × 1200 /60Hz, 1280 × 1024 /60Hz, 1280 × 720 /60Hz, 1024 ×768 /60Hz		
	Audio output	2-ch, BNC (Linear, 600Ω)		
Decoding	**Live view / Playback resolution**	6MP /5MP /3MP /1080P /UXGA /720P /VGA /4CIF /DCIF /2CIF /CIF /QCIF		
	Capability	10-ch@720P, 5-ch@1080P	16-ch@720P, 8-ch@1080P	16-ch@720P, 8-ch@1080P
Hard disk	**SATA**	16 SATA interfaces for 16 HDDs		
	eSATA	2 eSATA interfaces		
	Capacity	Up to 4TB capacity for each HDD		
Disk array	**Array type**	RAID0, RAID1, RAID5, RAID10		
	Number of array	16		
External interface	**Network interface**	2 RJ-45 10 /100 /1000 Mbps self-adaptive Ethernet interfaces		
	Serial interface	RS-232; RS-485; Keyboard;		
	USB interface	3 ×USB 2.0		
	Alarm in/out	16/4		
Others	**Power supply**	100 ~ 240 VAC, 50 ~ 60 Hz		
	Consumption (without hard disks)	≤ 45 W		
	Working temperature	-10 ℃ ~ +55 ℃ (14 ℉ ~ 131 ℉)		
	Working humidity	10 % ~ 90 %		
	Chassis	19-inch rack-mounted 3U chassis		
	Dimensions (W ×D ×H)	445 ×496 ×146 mm (17.5" ×19.5" ×5.7")		
	Weight (without hard disks)	≤ 12.5 Kg (27.56 lb)		

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-9632NI-XT NVR is 200Mbps 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=200Mbps, C=6Mbps, D=1Mbps and $A = B/(C+D) = 200 / (6+1) \approx 28$. So the number of IP cameras can be connected with is 28.