HDS-N7700I-POE Series

Introduction:

HDS-N7700I-POE NVR (Network Video Recorder) is a new generation recorder developed by HDPARAGON 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 HDS-N7700I-POE NVR can be widely applied in the areas of finance, public security, military, communication, transportation, education, etc..

Available Models:

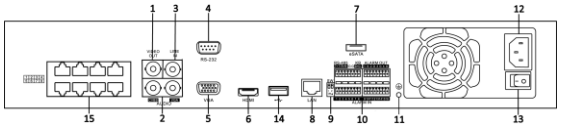
HDS-N7708I-POE, HDS-N7716I-POE, HDS-N7732I-SE.

Main Features:

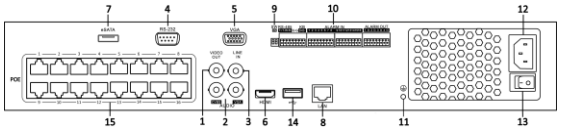
- Connectable to the third-party network cameras like ACTI, Arecont, AXIS, Bosch, Brickcom, Canon, PANASONIC, Pelco, SAMSUNG, SANYO, SONY, Vivotek and ZAVIO, and cameras that adopt ONVIF or PSIA protocol.
- Up to 32 network cameras can be connected.
- Support live view, storage, and playback of the connected camera at up to 6 megapixels resolution.
- Simultaneous HDMI and VGA output 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 live view mode.
- 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 4 SATA hard disks and 1 eSATA disk can be connected, for both recording and backup.
- Either normal or hot spare working mode is configurable to constitute an N+1 hot spare system.
- 1 self-adaptive 10M/100M/1000M network interface.
- Up to 16 independent PoE network interfaces are provided.
- Support DDNS (Dynamic Domain Name System).
- Support Channel-zero encoding, which enables you to get a view in the remote client or web browser of 16 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:

HDS-N7708I-POE

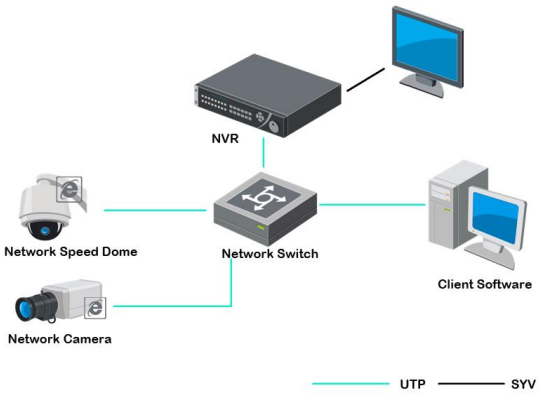


HDS-N7716/7732I-POE



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	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
15	Network Interfaces with PoE function

Typical Application:



Specifications:

Model		HDS-N7708I-POE	HDS-N7716I-POE	HDS-N7732I-SE
Video/Audio input	IP video input	8-ch	16-ch	32-ch
	Two-way audio	1-ch, BNC (2.0 Vp-p, 1kΩ)		
Network	Incoming bandwidth	50Mbps	100Mbps	200Mbps
	Outgoing bandwidth	240Mbps	240Mbps	160Mbps
	Remote Connection	128		
Video/Audio output	Record 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	10-ch@720P, 5-ch@1080P	16-ch@720P, 8-ch@1080P
Hard disk	SATA	4 SATA interfaces for 2 HDDs + 1 DVD-R/W (default), or 4HDDs		
	eSATA	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; RS-485; Keyboard		
	USB interface	3 ×USB 2.0		
	Alarm in	16		
	Alarm out	4		
PoE	Interface	8 independent 100 Mbps PoE network interfaces	16 independent 100 Mbps PoE network interfaces	
	Max. Power	180W	200W	
	Supported standard	AT and AF		
Others	Power supply	100 ~ 240 VAC, 6.3 A, 50 ~ 60 Hz		
	Consumption (without hard disk, DVD-R/W or PoE)	≤ 35W	≤ 40W	≤ 45W
	Working temperature	-10 ℃ ~ +55 ℃ (14 ℉ ~ 131 ℉)		
	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 (8.8 lb)		

Note:

- Each PoE port supports 30W power at most.
- 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-7708NI-SP provides 180W power for the PoE connection, and we assume it has already connected 4 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, $C_1 = 20W$, $N_1 = 4$, $C_2 = 25W$, and $T = 180W$. Then $20W * 4 + 25W * N_2 \leq 180W$, $N_2 = 4$.

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-SP 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.