

DS-96000NI-F16 (/H) (/I)

Series NVR



Introduction:

The DS-96000NI-F16 (/H) (/I) 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-96000NI-F16 (/H) (/I) series NVR can be widely applied in the areas of finance, public security, military, communication, transportation, education, etc.

Available Models:

DS-96128NI-F16, DS-96256NI-F16

DS-96128NI-F16/H, DS-96128NI-F16/I, DS-96128NI-F16/H/I

DS-96256NI-F16/H, DS-96256NI-F16/I, DS-96256NI-F16/H/I

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.
- Support live view, storage, and playback of the connected camera at up to 8 megapixels resolution.

HD Output

- Simultaneous HDMI1/VGA output as the main output and the HDMI2 works as the auxiliary output.
- Video outputs at up to 1920×1080 resolution.
- Powerful decoding capacity: DS-96000NI-F16/H and DS-96000NI-F16/H/I support decoding up to 44 channels at 1080P resolution.

HD Storage

- Up to 16 SATA hard disks can be connected, for both recording and backup.

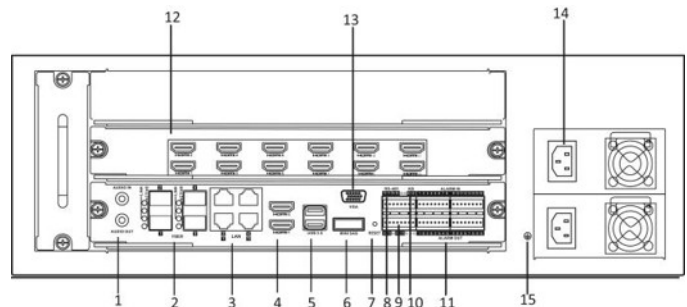
HD Transmission

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

Various Applications

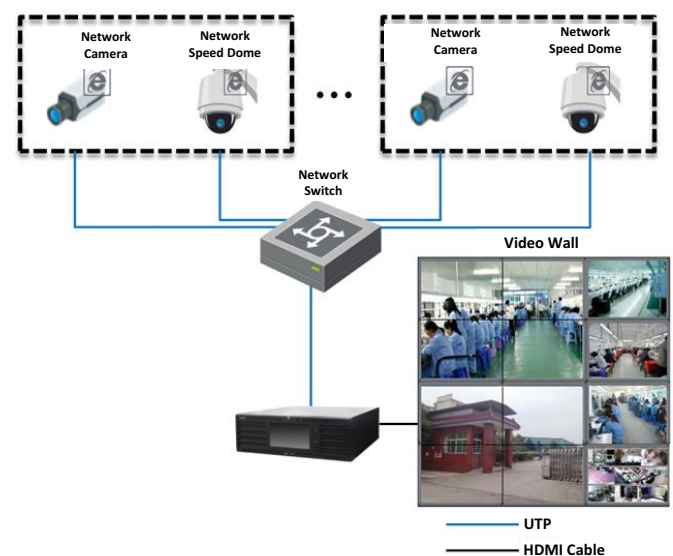
- Centralized management of IP cameras is supported, including configuration, information import/export, real-time information display, two-way audio, upgrade, etc.
- Connectable to smart IP cameras from Hikvision and the recording, playing back, and backing up of VCA alarms can be realized.
- VCA detection alarm is supported.
- VCA search for face detection, behavior analysis, people counting and heat map.
- 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.

Physical Interfaces:



Index	Name
1	RCA connector for audio output and output
2	4 Fiber Optic Interfaces
3	4 LAN network interfaces
4	2 HDMI video output connectors
5	USB 3.0 Interfaces
6	miniSAS Interface (optional)
7	Reset the device.
8	RS-485 Interface
9	RS-232 Interface
10	Controller Port
11	ALARM IN and ALARM OUT
12	HDMI Output Extension Board (for DS-96000NI-F16/H and DS-96000NI-F16/H/I only)
13	VGA Interface
14	100~240VAC Power Input
15	GND

Typical Application:



Note: The /H and /H/I models provide 12 HDMI outputs for video wall display.

Specifications:

Model		DS-96128NI-F16, DS-96128NI-F16/H, DS-96128NI-F16/I, DS-96128NI-F16/H/I	DS-96256NI-F16, DS-96256NI-F16/H, DS-96256NI-F16/I, DS-96256NI-F16/H/I
Video/Audio input	IP video input	128-ch Up to 6MP resolution	256-ch
	Two-way audio	1-ch, RCA (2.0 Vp-p, 1kΩ)	
Network	Incoming bandwidth	400Mbps	640Mbps, or 400Mbps (when RAID is enabled)
	Outgoing bandwidth	400Mbps	400Mbps
	Remote connection	256	
Video/Audio output	Recording resolution	6MP/5MP/3MP/1080P/UXGA/720P/VGA/4CIF/DCIF/2CIF/CIF/QCIF	
	HDMI/VGA1 output resolution	1-ch, 1920 × 1080P /60Hz, 1600 × 1200 /60Hz, 1280 × 1024 /60Hz, 1280 × 720 /60Hz, 1024 × 768 /60Hz	
	HDMI2 output	1-ch, 1920 × 1080P /60Hz, 1600 × 1200 /60Hz, 1280 × 1024 /60Hz, 1280 × 720 /60Hz, 1024 × 768 /60Hz	
	HDMI outputs (on HDMI Output Extension Board)	12-ch (for /H and /H/I models only), 1920 × 1080P /60Hz, 1600 × 1200 /60Hz, 1280 × 1024 /60Hz, 1280 × 720 /60Hz, 1024 × 768 /60Hz	
	LCD Screen	Available for /H and /H/I models only	
	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	
	Synchronous playback	16-ch	
	Capability	DS-96000NI-F16 and DS-96000NI-F16/I: 8-ch@1080P DS-96000NI-F16/H and DS-96000NI-F16/H/I: 44-ch@1080P	
Hard disk	SATA	16 SATA interfaces for 16HDDs	
	miniSAS (Optional)	1 miniSAS interface	
	Capacity	Up to 6TB capacity for each HDD	
Disk array	Array type	RAID0, RAID1, RAID5, RAID10	
	Number of arrays	16	
External interface	Network interface	4, RJ-45 10 /100 /1000 Mbps self-adaptive Ethernet interface	
	Optic fiber interface	4, 1000 Mbps optic fiber interface	
	Serial interface	RS-232; RS-485; Keyboard	
	USB interface	Front panel: 2 × USB 2.0; Rear panel: 2 × USB 3.0	
	Alarm in/out	16 / 8	
General	Power supply	100 ~ 240 VAC, 50 ~ 60 Hz	
	Max. Power	300 W	
	Consumption (without hard disk)	≤100 W	
	Working temperature	-10°C ~ +55°C (14°F ~ 131°F)	
	Working humidity	10 % ~ 90 %	
	Chassis	19-inch rack-mounted 3U chassis	
	Dimensions(W × D × H)	442 × 494 × 146 mm (17.4" × 19.4" × 5.7")	
	Weight(without hard disk)	≤ 15.5Kg (34.2 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-F16 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=400Mbps, C=4Mbps, D=1Mbps and $A = B/(C+D) = 400 / (4+1) = 80$. So the number of IP cameras can be connected with is 80.