DS-96064NI-F16
Series NVR

Introduction:

The DS-96064NI-F16 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-96064NI-F16 series NVR can be widely applied in the areas of finance, public security, military, communication, transportation, education, etc.

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 64 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-96064NI-F16 support decoding up to 8 channels at 1080P resolution.

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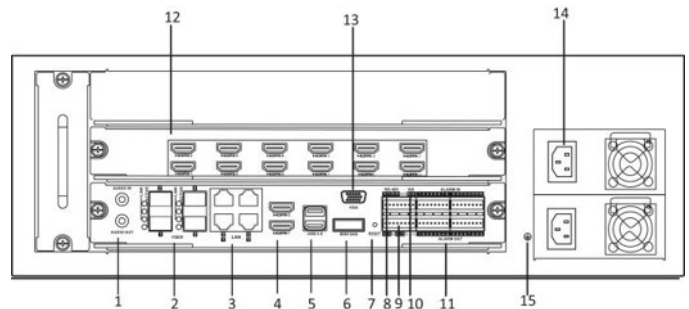- Up to 16 SATA hard disks can be connected, for both recording and backup.

HD Transmission
- 4 self-adaptive 10M/100M/1000M network interfaces and 4 1000M optical fiber interfaces.
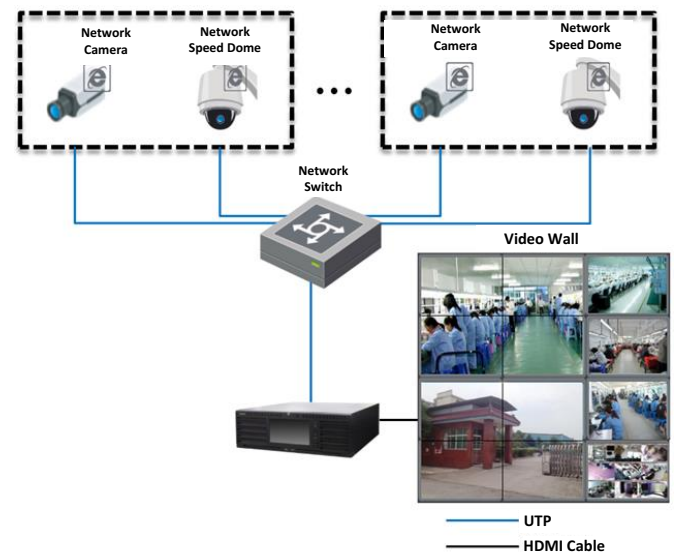
Various Applications
- Centralized management of IP cameras is supported, including configuration, information import/export, real-time information display, two-way audio, upgrade, etc.
- Connectable to smart IP cameras from Hikvision and the recording, playing back, and backing up of VCA alarms can 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:

Specifications:

Model		DS-96064NI-F16
Video/Audio input	**IP video input**	64-ch
		Up to 6MP resolution
	Two-way audio	1-ch, RCA (2.0 Vp-p, 1kΩ)
Network	**Incoming bandwidth**	400Mbps
	Outgoing bandwidth	400Mbps
	Remote connection	256
Video/Audio output	**Recording resolution**	6MP/5MP/3MP/1080P/UXGA/720P/VGA/4CIF/DCIF/2CIF/CIF/QCIF
	HDMI1/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
	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	8-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	-10ºC ~ +55ºC (14ºF ~ 131ºF)
	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.