

## DS-9600NI-RT Series NVR



### Introduction:

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

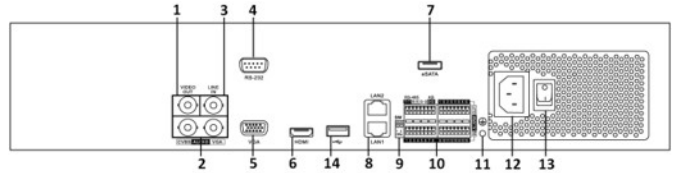
### Available Models:

DS-9608NI-RT, DS-9616NI-RT, DS-9632NI-RT, and DS-9664NI-RT.

### Main Features:

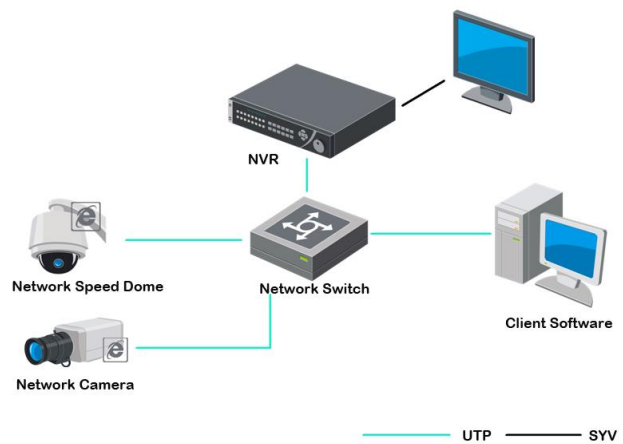
- Connectable to the third-party network cameras like ACTI, Arecont, AXIS, Bosch, Brickcom, Canon, PANASONIC, Pelco, SAMSUNG, SANYO, SONY, Vivotek and ZAVIO, and cameras that adopt ONVIF or PSIA protocol.
- Up to 64 network cameras can be connected.
- Support live view, storage, and playback of the connected camera at up to 5 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.
- Realize instant playback for assigned channel during multi-channel display 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 8 SATA hard disks and 1 eSATA disk can be connected, for both recording and backup.
- Hot-swappable HDD supporting RAID0, RAID1, RAID5, RAID10 storage scheme. And 8 virtual disks 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 working modes configurable: multi-address, load balance, 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-9608NI-RT   | DS-9616NI-RT                   | DS-9632NI-RT              | DS-9664NI-RT              |
|--------------------|--|--|--------------------------------|---------------------------|---------------------------|
| Video/Audio input  | IP video input                             | 8-ch   | 16-ch                          | 32-ch                     | 64-ch                     |
|                    | Two-way audio                              | 1-ch, BNC (2.0 Vp-p, 1kΩ)  |                                |                           |                           |
| Network            | Incoming bandwidth                         | 50Mbps   | 100Mbps                        | 200Mbps                   | 200Mbps                   |
|                    |  | 50Mbps (when RAID is enabled)  | 100Mbps (when RAID is enabled) |                           |                           |
|                    | Outgoing bandwidth                         | 240Mbps  | 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)<br>Resolution: 704 × 576 (PAL); 704 × 480 (NTSC)  |                                |                           |                           |
|                    | HDMI output                                | 1-ch, resolution:<br>1920 × 1080P /60Hz, 1920 × 1080P /50Hz, 1600 × 1200/60Hz, 1280 × 1024 /60Hz, 1280 × 720 /60Hz, 1024 × 768 /60Hz |                                |                           |                           |
|                    | VGA output                                 | 1-ch, resolution:<br>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,<br>5-ch@1080P  | 10-ch@720P,<br>5-ch@1080P      | 16-ch@720P,<br>8-ch@1080P | 16-ch@720P,<br>8-ch@1080P |
| Hard disk          | SATA                                       | 8 SATA interfaces for 4 HDDs + 1 DVD-R/W (default), or 8HDDs   |                                |                           |                           |
|                    | eSATA                                      | 1 eSATA interface  |                                |                           |                           |
|                    | Capacity                                   | Up to 4TB capacity for each HDD  |                                |                           |                           |
| Disk array         | Array type                                 | RAID0, RAID1, RAID5, RAID10  |                                |                           |                           |
|                    | Number of array                            | 4  |                                |                           |                           |
|                    | Number of virtual disk                     | 8  |                                |                           |                           |
| 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, 6.3 A, 50 ~ 60 Hz   |                                |                           |                           |
|                    | Consumption (without hard disk or DVD-R/W) | ≤ 35 W   | ≤ 40 W                         | ≤ 45 W                    | ≤ 45 W                    |
|                    | Working temperature                        | -10 °C ~ +55 °C (14 F ~ 131 F)   |                                |                           |                           |
|                    | Working humidity                           | 10 % ~ 90 %  |                                |                           |                           |
|                    | Chassis                                    | 19-inch rack-mounted 2U chassis  |                                |                           |                           |
|                    | Dimensions (W × D × H)                     | 445 × 470 × 90 mm (17.5" × 18.5" × 3.5")   |                                |                           |                           |
|                    | Weight (without hard disk or DVD-R/W)      | ≤ 8 Kg (17.64 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-RT 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.