



**DS-9500NI-ST Series NVR**  
**Technical Specification**

## Notices

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## Main Features

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- **Connectable to the third-party network cameras with up to 5 Megapixels resolution.**
- **Support storage of video at 5.0 Megapixels resolution.**
- **Searching record files and captured pictures by events (alarm input/motion detection).**
- **Holiday recording schedule configuration.**
- **HDD quota management; different capacity can be assigned to different channel.**
- **Redundant recording and capturing.**
- **8 SATA interfaces available.**
- **Support eSATA disk for recording or backup.**
- **Dual system design ensures high reliability and stability.**
- **2 self-adaptive 10M/100M/1000M network interfaces, with working modes configurable: multi-address, load balance, network fault tolerance, etc.**
- **IPv6 is supported.**
- **TCP/IP protocol, PPPoE, DHCP, DNS, DDNS, NTP, SADP, SMTP, SNMP, NFS, UPnP™ and iSCSI are supported.**

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## Functions & Performances

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### General

- Connectable to the third-party IP cameras, IP dome and DVS.
- Each channel supports dual-stream.
- Up to 32 network cameras can be added.
- Independent configuration for each channel, including resolution, frame rate, bit rate, image quality, etc.
- The quality of the imported and exported record is configurable.

### HDD Management

- Up to 8 SATA hard disks, 8 network disks (8 NAS disks, or 7 NAS disks+1 iSCSI disk) and 1 eSATA disk can be connected, each disk with a maximum of 4TB storage capacity.
- Support eSATA disk for recording or backup.
- Support S.M.A.R.T. and bad sector detection.
- HDD group management.
- Support HDD standby function.
- HDD property: redundancy, read-only, read/write (R/W).
- HDD quota management; different capacity can be assigned to different channel.

### Recording and Capturing

- Holiday recording schedule configuration.
- Cycle and non-cycle recording mode.
- Multiple recording types: manual, continuous, alarm, motion, motion | alarm, motion & alarm.
- 8 recording time periods with separated recording types.
- Pre-record and post-record for alarm, motion detection for recording or capture, and pre-record time for schedule and manual recording.
- Searching record files and captured pictures by events (alarm input/motion detection).
- Locking and unlocking record files.
- Local redundant recording and capturing.
- Manual capture and continuous capture are supported.

### Backup

- Support one-touch backup.
- Support NTFS and FAT32 formatted backup devices.
- Export data by USB, or eSATA disk.
- Management and maintenance of backup devices.

### Alarm and Exception

- Configurable arming time of alarm input/output.

- Alarm for video loss, motion detection, tampering, abnormal signal, different input and output video standard, illegal login, network disconnected, IP confliction, abnormal record/capture, Video Signal Exception, Resolution Mismatch, HDD error, and HDD full, etc.
- Alarm triggers full screen monitoring, audio alarm, notifying surveillance center, sending email and alarm output.
- Automatic restore when system is abnormal.

## Network Functions

- 2 self-adaptive 10M/100M/1000M network interfaces, with working modes configurable: multi-address, load balance, network fault tolerance, etc.
- IPv6 is supported.
- TCP/IP protocol, PPPoE, DHCP, DNS, DDNS, NTP, SADP, SMTP, SNMP, NFS, and iSCSI are supported.
- TCP, UDP and RTP for unicast.
- Auto/Manual port mapping by UPnP™.
- Remote web browser access by HTTPS ensures high security.
- Remote reverse playback through RTSP.
- Support accessing by the platform through ONVIF.
- Remote search, playback and download, lock/unlock of video files; support breakpoint resume.
- Remote parameters setup; remote import/export of device parameters.
- Remote viewing of the device status, system logs and alarm status.
- Remote keyboard operation.
- Remote HDD formatting and program upgrading.
- Remote system restart and shutdown.
- RS-232, RS-485 transparent channel transmission.
- Alarm and exception information can be sent to the remote host
- Remotely start/stop recording.
- Remotely start/stop alarm output.
- Remote PTZ control.
- Remote JPEG capture.
- Embedded WEB server.

## Other Functions

- Control via remote control and special keyboard.
- Three-level user management; admin user is allowed to create many operating accounts and define their operating permissions, which includes the limit to access any channel.
- Powerful recording and search for logs of operation, alarm and exceptions.
- Import/export of device configuration files.

## ● Development Scalability

- SDK for Windows and Linux system.
- Source code of application software for demo.
- Development support and training for application system.

## Panels & Interfaces

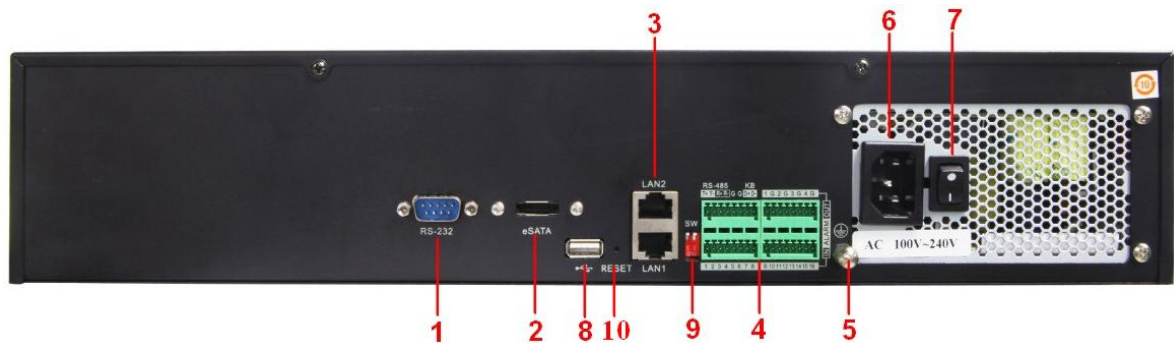
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### Front Panel



- ① Status Indicator(Power, Alarm, Tx/Rx, HDD, Ready, Backup)
- ② Backup Button
- ③ USB Interface
- ④ Power Button
- ⑤ Channel Status Indicators

## Rear Panel of DS-9500NI-ST



- ① RS-232 Serial Interface
- ② eSATA Interface
- ③ LAN1, LAN2 Network Interface
- ④ RS-485 Serial Interface, Keyboard Interface, ALARM IN and ALARM OUT
- ⑤ GND
- ⑥ 100~240VAC Power Input
- ⑦ Power Switch
- ⑧ USB Interface
- ⑨ Terminal Switch
- ⑩ Reset



## Specifications

| Model                |  | DS-9508NI<br>-ST   | DS-9516NI<br>-ST | DS-9532NI<br>-ST |
|----------------------|--|--|------------------|------------------|
| Video input          | IP video input                             | 8-ch   | 16-ch            | 32-ch            |
| Recording Parameters | Recording resolution                       | 5MP/3MP/1080p/UXGA/720p/VGA/4CIF/DCIF/2 CIF/CIF/QCIF         |                  |                  |
| Bandwidth            | Incoming Bandwidth                         | 20Mbps   | 40Mbps           | 80Mbps           |
| Hard disk            | SATA                                       | 8 SATA interfaces  |                  |                  |
|                      | eSATA                                      | 1 eSATA interface  |                  |                  |
|                      | Capacity                                   | Up to 4TB capacity for each HDD                              |                  |                  |
| 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                                   | 16   |                  |                  |
|                      | Alarm out                                  | 4  |                  |                  |
| General              | Power supply                               | 100 ~ 240 VAC, 6.3 A, 50 ~ 60 Hz                             |                  |                  |
|                      | Consumption (without hard disk or DVD-R/W) | ≤ 45 W   |                  |                  |
|                      | Working temperature                        | -10 °C ~ +55 °C  |                  |                  |
|                      | Working humidity                           | 10 % ~ 90 %  |                  |                  |
|                      | Chassis                                    | 19-inch rack-mounted 2U chassis                              |                  |                  |
|                      | Dimensions (W × D × H)                     | 445 × 470 × 90 mm (17.52" × 18.5" × 3.54")                   |                  |                  |
|                      | Weight                                     | ≤ 8 Kg (17.64 lb) ( without hard disk or DVD-R/W )           |                  |                  |

**Note:**

The formula to calculate the incoming bandwidth and the IPC 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 IPC.

And D refers to the bitrate value of the sub-stream of the connected IPC.

**Example:** The incoming bandwidth of 9016HFI-XT HDVR is 80Mbps and the IPC to connect is with resolution of 720P (1280\*720) / 25 (30) fps. The bitrate for the main stream and sub-stream of the IPC is set as 4Mbps and 1Mbps respectively.

In this example, B=80Mbps, C=4Mbps, D=1Mbps and  $A = B/(C+D) = 80 / (4+1) = 16$ . So the

number of IP cameras can be connected with is 16.