

# Innovative NVR Solutions

(For Enterprise, SMB, SOHO, Home Applications)



- PC-less network surveillance by HD local display
- 128-channel multi-server monitoring
- Megapixel recording

## QNAP VioStor NVR

NVR Innovative Network Video Recorder

### VS-8040U-RP/8032U-RP/8024U-RP

- 8-bay, 16TB, 2U chassis, 40/32/24-channel
- Intel® Core™ 2 Duo 2.8GHz CPU, 2GB DDRII memory
- Redundant power supply available
- High quality megapixel recording
- Max network throughput: 300 Mbps\*



NVR Innovative Network Video Recorder

### VS-6020/6016/6012 Pro

- 6-bay, 12TB, 2U chassis, 20/16/12-channel
- Dual-core Intel® Atom™ CPU, 1GB memory
- PC-less network surveillance by HD local display
- High quality megapixel recording
- Max network throughput: 176 Mbps\*



NVR Innovative Network Video Recorder

### VS-4016/4012/4008 Pro

- 4-bay, 8TB, 16/12/8-channel
- Dual-core Intel® Atom™ CPU, 1GB memory
- PC-less network surveillance by HD local display
- High quality megapixel recording
- Max network throughput: 176 Mbps\*
- Power-saving design, consumes only 35W



NVR Innovative Network Video Recorder

### VS-2008L/2004L

- 2-bay, 4TB, 8/4-channel
- Marvell 1.2GHz CPU, 256MB DDRII memory
- Max network throughput: 28 Mbps\*
- Power-saving design, consumes only 13W



NVR Innovative Network Video Recorder

### VS-8040/8032/8024

- 8-bay, 16TB, 40/32/24-channel
- Intel® Core™ 2 Duo 2.8GHz CPU, 2GB DDRII memory
- High quality megapixel recording
- Max network throughput: 300 Mbps\*



NVR Innovative Network Video Recorder

### VS-4016U-RP/4012U-RP/4008U-RP Pro

- 4-bay, 8TB, 1U chassis, 16/12/8-channel
- Dual-core Intel® Atom™ CPU, 1GB memory
- PC-less network surveillance by HD local display
- Redundant power supply available
- PC-less network surveillance by HD local display
- High quality megapixel recording
- Max network throughput: 176 Mbps\*



NVR Innovative Network Video Recorder

### VS-2012/2008/2004 Pro

- 2-bay, 4TB, 12/8/4-channel
- Dual-core Intel® Atom™ CPU, 1GB memory
- PC-less network surveillance by HD local display
- High quality megapixel recording
- Max network throughput: 176 Mbps\*
- Power-saving design, consumes only 25W



QNAP is a member of ONVIF

The standard system is shipped without hard drives.

\*Based on QNAP's laboratory tests. Actual performance may vary depending on the network environment.



www.use-ip.co.uk  
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## Why QNAP NVR?

### 1 Supports a Broad Range of IP Cameras

The VioStor NVR supports H.264, MPEG-4, M-JPEG, and MxPEG recording from over 1,000 network camera models of many popular brands.

### 2 PC-less Network Surveillance by HD Local Display

The VioStor NVR supports PC-less system configuration, monitoring of IP cameras over the network, and video playback by a monitor or high-definition TV, a USB mouse, and a USB keyboard.

\* For VioStor Pro series NVR only.

### 3 Multi-server Monitoring

You can connect to the VioStor NVR and add other QNAP NVR servers to monitor up to 128 channels on a PC over LAN or WAN.

### 4 Intelligent Video Analytics (IVA) for Fast Video Retrieval

The VioStor NVR supports intelligent video analytics (IVA), such as motion detection, missing object, foreign object, out of focus, and camera occlusion to provide fast video retrieval.

### 5 Advanced Event Management

The compatibility between the NVR and the surveillance devices are strengthened to provide more event handling options when events are detected or alarms are triggered on the IP cameras.

### 6 Live View on Mobile Devices by VMobile

With VMobile installed on your Android phone, iPad, iPhone, iPod touch, or Windows PDA phone, you can monitor your home and office and receive instant event alert anytime, anywhere.

### 7 RAID Data Protection

The VioStor NVR supports RAID 1, 5, 6, 5+hot spare, 6+hot spare to protect the recording data against hard drive failure. Single disk, JBOD, and RAID 0 are also offered.

\* The RAID levels supported depend on the number of hard drives installed.

### 8 Convenient Video Backup to External USB Storage

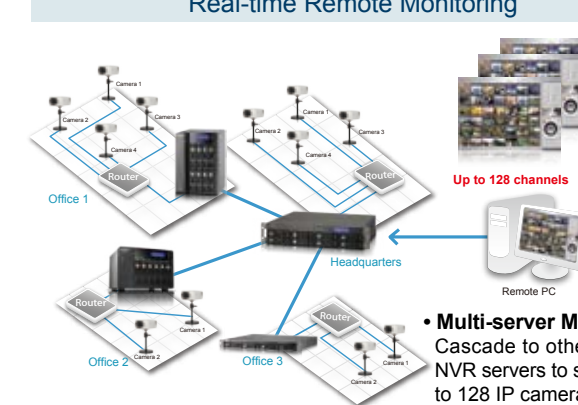
You can press the one-touch-auto-video-backup button on the front of the NVR to copy the data from the NVR to an external storage device.

### 9 Linux-embedded System

The VioStor NVR is a Linux-embedded system which is more power-saving and less vulnerable to virus attack compared to PC-based surveillance solutions.

## Powerful Surveillance Features

### Real-time Remote Monitoring



Up to 128 channels

**Multi-server Monitoring**  
Cascade to other VioStor NVR servers to support up to 128 IP cameras.

### Diversified Remote Monitoring Modes

- 1, 4, 6, 8, 9, 10, 12, 16, 20, 25, 36, 42-channel display mode
- Sequential display mode
- Exclusive Picture-in-Picture mode
- Dual display mode

### Smart Control of PTZ & Speed Dome Cameras

You can adjust the PTZ cameras directly by the web-based and local display interface of the NVR.

### Preset Position Control and Auto Cruising

You can view different preset positions of the IP cameras and configure auto cruising settings on the VioStor NVR for periodic monitoring of the preset positions of the PTZ cameras.

### Event Notification on Monitoring

When alarm recording is enabled and an event occurs, an alarm icon is shown instantly on the monitoring page. You can click the icon to view the alert details.

### Digital Zoom

The VioStor NVR supports digital zoom for flexible monitoring and playback. It is a powerful function for megapixel IP cameras.

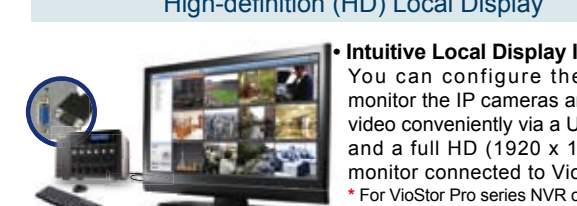
### Video Snapshot

The VioStor NVR provides real-time monitoring and snapshot. You can take a snapshot of the monitoring screen anytime.

### E-map for Easy Preview of the Camera Location

The VioStor NVR provides the E-map function for you to upload the electronic maps of the monitoring locations.

### High-definition (HD) Local Display



#### Intuitive Local Display Interface

You can configure the system, monitor the IP cameras and play the video conveniently via a USB mouse and a full HD (1920 x 1080) VGA monitor connected to VioStor NVR.

\* For VioStor Pro series NVR only.

### Most Complete Recording Functions

#### High Quality H.264, MPEG-4, M-JPEG, and MxPEG Recording

Simultaneous multi-channel H.264, MPEG-4, M-JPEG, and MxPEG video recording of IP cameras.

#### Various Recording Functions

- Continuous, manual, scheduled recording
- Alarm recording (by multiple alarm events)
- Multiple alarm recording schedules
- Pre-alarm and post-alarm recording
- Audio recording

#### High Performance Megapixel Recording

The VioStor NVR supports high performance megapixel recording (up to 10-megapixel cameras supported) from various IP cameras.

#### Generic IP Cameras Support

The VioStor NVR provides an interface for the users to enter the JPEG CGI command to support monitoring, video recording, and playback of their own IP cameras on the NVR.

#### Auto Snapshot

You can specify maximum 15 schedules for automatic snapshot taking or configure the NVR to take snapshots (max 60) of an IP camera automatically every hour.

### Convenient Backup Solution

#### Scheduled Remoted Replication

The VioStor NVR supports scheduled remote replication for secure recording backup to a remote NAS on LAN.

#### Convenient Video Backup to External USB Storage by One-touch-auto-video-backup Button\*

The recording data on the NVR can be copied to an external storage device via the one-touch-auto-video-backup button.

\* VS-8040U-RP/8032U-RP/8024U-RP do not support this feature.

## Advanced Event Management

Advanced event management can be divided into two parts:



### Events

The VioStor NVR supports different event types, including motion detection, alarm input, connection failure, recording failure, and user-defined event to trigger follow-up actions.

#### Motion Detection

When the camera detects any movement, the defined actions will be activated.

#### Alarm Input

When the VioStor NVR receives a signal from the IP camera's alarm input, the defined actions will be activated.

#### Connection Failure

When the VioStor NVR fails to connect to the IP camera, the defined actions will be triggered.

#### Recording Failure

When the VioStor NVR fails to record due to hard drive failure or system crash, the defined actions will be triggered.

#### User-defined Event\*

The VioStor NVR supports user-defined events. You can enter the CGI command in the browser to trigger the event, and the defined actions will be activated.

\* You can enter the following URL in the browser to trigger the event:  
http://NVR.IP/cgi-bin/logical\_input.cgi?name=User-defined Event Name

### Actions

The NVR supports different actions when an event is triggered. These actions include multi-channel recording, adjusting the PTZ camera to the preset position, alarm output, built-in buzzer, email & SMS alert, and user-defined action.

#### Recording

When an event is triggered, the VioStor NVR starts recording one or more channels at the same time.

#### Camera Control

When an event occurs, the PTZ camera will be adjusted to the specified preset position for monitoring and recording. You can use HTTP URL to activate further action.

#### Alarm Output

When an event occurs, the alarm output from the IP cameras will trigger other alert systems, such as lighting system, auto phone dialing system, security system and so on.

#### SMS

The VioStor NVR sends an SMS message to inform the specified recipients when an event occurs.

#### Email

When an event occurs, the VioStor NVR sends an email with snapshot to notify the specified recipients.

#### Buzzer

The buzzer in the VioStor NVR will sound when an event occurs.

#### User-defined Action

The VioStor NVR supports user-defined actions. You can enter the HTTP URL from other surveillance systems. When an alert occurs, the NVR will activate other systems, such as extinguishing system, electronic control system, and air-conditioning control system.

### Example

When a moving object is detected by IP camera 1, the VioStor NVR triggers the alarm sensor connected to IP camera 1, adjusts the monitoring angle of IP camera 2 to the specified preset position, enables alarm recording on both cameras, and delivers email and SMS alert instantly to the administrator.

## Playback Features

### Multi-view Playback

You can use the multi-view playback feature to divide a video equally into multiple sessions for playback in a multi-view window, or play the videos of multiple IP cameras in the multi-view window simultaneously.

### Digital Watermarking

The VioStor NVR supports digital watermarking to protect the exported videos and snapshots from unauthorized modification.

### Data Search by Date & Time, Timeline, Event, and Intelligent Video Analytics (IVA)

The VioStor NVR supports quick search of recording data by date and time, timeline, event, and intelligent video analytics (IVA), including motion detection, foreign object, missing object, out of focus, and camera occlusion.

### Motion Detection:

Detects movement in the video. The moving objects of the search area are highlighted in red brackets.

### Foreign Object:

Detects a new object in the video. The foreign objects of the search area are highlighted in yellow brackets.

### Missing Object:

Detects a missing object in the video. The missing objects of the search area are highlighted in yellow brackets.

### Out of Focus:

Detects if the IP camera is out of focus.

### Camera Occlusion:

Detects if the IP camera is obstructed.

## Security Control

### Authority Management

Up to 32 users can be created on the VioStor NVR. The users can be classified as administrator, system manager, or general users with specified rights of monitoring, video playback, PTZ camera control, and audio monitoring.

### Auto Logoff

The VioStor NVR supports automatic user logoff from idling configuration pages. The administrator can set the timeout period to log off the users when the idling time has reached.

### Host Access Control

You can specify the host or IP connections to be allowed and denied to access the NVR.

### Detailed Event Logs

The VioStor NVR provides detailed event logs, such as system warning, hard disk error, network disconnection, motion detection and recordings access record.

### On-line User List

You can view the record of users currently logged on and previously logged on to the VioStor NVR.

### Intelligent Auto Power on after Power Recovery

The VioStor NVR turns on automatically when the power recovers after an outage.

### UPS Support for 24/7 Service

The VioStor NVR supports APC, CyberPower, MGE, and YEC UPS devices to enable stable and continuous recording 24/7.

### Advanced RAID Management

The VioStor NVR supports RAID 0, 1, 5, 6, 5+hot spare, 6+hot spare, single, and JBOD disk configurations.

### Online RAID Capacity Expansion

The storage capacity of a RAID disk volume of the NVR can be expanded by replacing the hard drives with larger ones.

### Online RAID Level Migration

You can upgrade the disk volume of the NVR to a higher RAID level with the data retained. There is no need to turn off the server during the process.

## Network Services

### Dual Gigabit LAN Ports for Failover, Load Balancing, or Multi-IP Settings\*

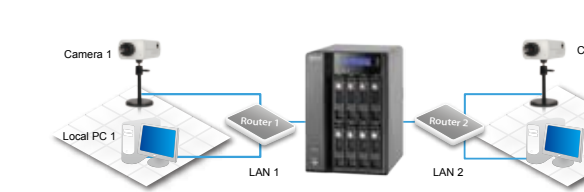
**Failover**  
Failover allows the VioStor NVR to sustain the failure of one network port to provide continuous services.

### Load Balancing

Bandwidth aggregation is supported to boost the file transfer speed (works with managed Ethernet switch with 802.3ad configured).

### Multi-IP Settings

Two IP settings can be configured on the NVR to allow network access from two different subnets.



\* VS-2008L/2004L support one Gigabit RJ-45 Ethernet port only.

### Built-in DDNS Support

The VioStor NVR supports dynamic DNS (DDNS). You can register a unique domain name from a DDNS service provider and assign it to your NVR.

### Built-in NTP Server

The date and time of the IP cameras can be synchronized with the VioStor NVR.

### Convenient Data Access

You can access the recording data and snapshots on the VioStor NVR by Network Neighborhood (SMB/ CIFS), web file management (HTTP), or FTP server.

### Easy System Setup in Simple Steps

The VioStor NVR provides quick setup for you to complete installation in simple steps.

### Intuitive User Interface

All the functions of the VioStor NVR can be managed anytime, anywhere via the web interface.

### IP Cameras Search for Quick Settings

The VioStor NVR supports searching the IP cameras on the local network for quick configuration via the web-based management interface.

### Quick Links to IP Cameras

Besides configuring the IP cameras by the administration interface of the VioStor NVR, you can also click the quick link buttons to connect to the management interface of the IP cameras.

## High Reliability and Smart Features

### UPS Support

The VioStor NVR supports APC, CyberPower, MGE, and YEC UPS devices to enable stable and continuous recording 24/7.

### RAID 0, 1, 5, 6, 5+hot spare, 6+hot spare, single, and JBOD disk configurations.

\* The RAID levels supported depend on the NVR models.

### Online RAID Capacity Expansion

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