

**QNAP**

# Network Surveillance System

Professional Network Video Recorder (NVR) for IP Camera



VioStor-101



NVR-201



NVR-101



VioStor-201



VioGate Master

**Real-time monitoring  
over the Internet anytime, anywhere !**

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## About QNAP

QNAP Systems, Inc. is a professional provider of network video recorder (NVR) surveillance solutions that integrate advanced surveillance and storage technologies. As our daily lives become increasingly digitalized and the network evolves, the IP surveillance technology has been growing rapidly. More and more IP cameras and network surveillance solutions are developed to meet the increasing trend of use of IP surveillance and digital data recording and processing. With the solid expertise in Linux, video encoding, and decoding technologies, QNAP has successfully developed Linux-embedded NVR surveillance solutions with comprehensive monitoring, recording, and playback functions.

QNAP's Linux-based NVR products have surpassed traditional analog systems and Windows-based monitoring by allowing a complete security system to be set up by hooking on an Ethernet-ready environment. The audio and video monitoring, recording, and playback can all be carried out remotely on Internet Explorer without any complicated wiring and software. The Linux-embedded platform of QNAP's products ensures higher system stability with less virus attacks or hacking than Windows-based monitoring solutions.

QNAP has developed a close cooperative relationship with the leading network surveillance distributors and successfully established its influential role in the market of major European cities. QNAP is also a leader in introducing the world's first green NVR which is built on the Linux OS with proven low power consumption. The one-bay NVR models (VioStor-101, NVR-101) consume less than 18W; the two-bay NVR models (VioStor-201, NVR-201) consume less than 30W, which is more energy-saving than a general PC-based surveillance system (consumes about 250-350W). Our NVR supports a wide range of IP camera brands and centralized system management of the cameras to minimize system setup and maintenance cost. QNAP strives to provide the best Linux-based, high performance NVR solutions yet environment-friendly and affordable to secure your life and property.

## QNAP Innovative Network Video Recorder

NVR (Network Video Recorder) provides complete network video recording functions to enable users to manage network cameras collectively via the operation interface, and capture the video data of network camera (IP camera) actively and save it to the hard disks of NVR. NVR also supports synchronized recording, monitoring and playback by remote login to enhance the efficiency and convenience of network cameras.

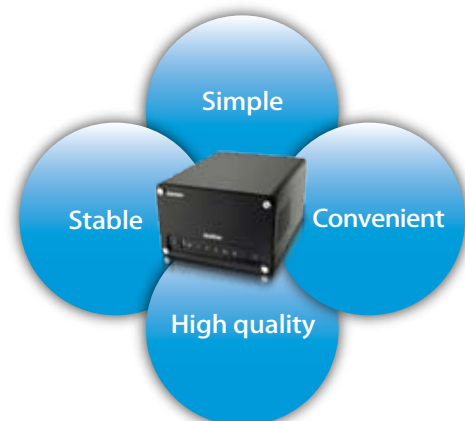
### QNAP NVR: A simple to use, convenient to manage, stable system with high quality video storage

QNAP NVR high-performance, embedded solution differs from complex and error-prone traditional PC-based structure, provides reliable RAID subsystem that stores high quality videos from our selected compatible IP cameras and makes simple surveillance environment feasible for home, SOHO and SMB users now.

You can set up your NVR in only 6 steps followed by the instructions of the QNAP Quick Setup Wizard. QNAP NVR adopts the most innovative technology for recording real-time video data from network cameras. It also integrates many advanced recording functions, such as PTZ models of famous network camera. With the user-friendly web UI, you can monitor up to 8 IP cameras simultaneously in one page regardless of the separated locations.

QNAP NVR actively records video from the IP cameras located in LAN or remote sites through the Internet to a two-bay, hot-swappable RAID storage\*. It allows advanced user management for authorized persons to access the network cameras.

### ↓ Innovative active storage technology



\* Supported by VioStor-201 series only.

## The Advantages of NVR System

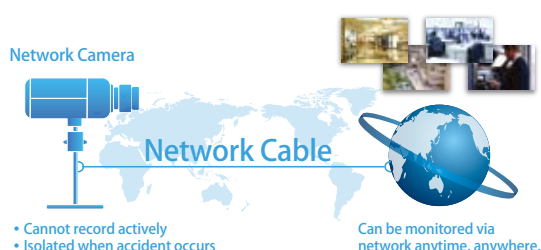
What are the advantages and disadvantages of network camera?

### Advantages:

- The IP cameras can be set up in any Ethernet-ready environment.
- Users can view the monitoring video from the IP cameras by IE browser.
- Remote monitoring and recording are supported.

### Disadvantages:

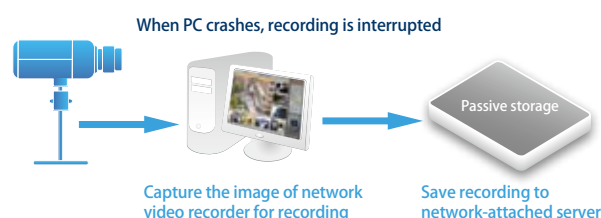
- Lack of complete recording and playback solutions.
- PC-based recording solution is too costly and complicated to set up.



### The drawbacks of PC-based solution

- Extra complicated software is required.
- When the PC or the peripheral network devices encounter errors, the recording process will be terminated.
- There are still risks from the Internet, such as virus attack and hacking which may interfere the system stability.
- The users have to possess professional network knowledge and skills to complete the complicated installation process.
- It is hard to identify the source of the problem by scanning and checking the PC components and peripherals when recording error occurs.

### ↓ IP Camera + PC-based solution



## Windows-based Solution vs. Linux-based Solution

### Limitations of Windows-based Solution

Complicated software configuration is required

More power-consuming, about 250-350W

Unreliable system performance: When PC crashes or power outage occurs, recording is interrupted.

Insecure data protection: When the hard drive or PC crashes, all recording data are gone.

More vulnerable to virus & hacker attack

Need professional knowledge to set up

Noisy and space-occupying

Higher maintenance cost

### Advantages of QNAP Surveillance Solution

Install in a breeze. System can be set up in 6 steps within 5 minutes!

Energy-saving, requires only 15W-25.2W!

Reliable system performance:  
Redundant storage directory is supported for continuous recording should the primary one fails.  
The NVR restarts automatically and continues recording when power resumes after a power outage.  
Support UPS (Uninterruptible Power Supply) system for 24x7 service

Secure data protection: RAID 1 mirroring is supported for higher level of data protection.

Embedded-Linux design: Less vulnerable to virus & hacker attack

Intuitive installation, even novice can set up the system.

No fan design (one-bay VioStor-101 series) and low noise fan design (two-bay NVR) guarantee absolutely quiet operation.  
Compact server: Occupies much less space than a PC server does.

Lower maintenance cost

## VioStor-201P Network Video Recorder

QNAP VioStor-201P is a professional Linux-based network surveillance system designed to support the monitoring and recording functions of the most popular IP cameras in the market, namely Panasonic BB/ BL/ i-Pro, Sony, Canon, Sanyo, TOSHIBA and Arecont etc. Real-time monitoring, recording, and other system configurations can all be carried out from any Ethernet-ready location remotely. The VioStor-201P supports two high-speed SATA hard drives to provide up to 2TB internal storage capacity in single disk configuration. Advanced RAID 1 or RAID 0 configurations are also available for enhanced data protection.

### Supported Camera Brands

- ✓ *Panasonic*
- ✓ *Sony*
- ✓ *Canon*
- ✓ *Sanyo*
- ✓ *Arecont*

MegaPixel GigaLAN RAID1/0 Hot-Swap MJPEG/MPEG4

Supported camera brands are subject to change without notice. Please contact QNAP for updated information.



## Outstanding Product Features

### Best Hardware Design

#### • Embedded system with lowest power consumption

QNAP NVR products are built on Linux OS which is secure, stable, power-saving, and less liable to PC crash and virus attack. Also, there is no need to install extra software or perimeter devices as PC solutions do. The reliability of system performance is guaranteed. (The power consumption of VioStor-201 is only 25.2W and that of PC-based solution is 250-300W!)

#### • Supports 2 high-speed SATA hard drives

SATA hard drives are faster than IDE hard drives, which enhance the recording and playback performance of QNAP NVR.

#### • Small-sized, easy to deploy

VioStor is compact and occupies little space. It is easy to install and maintain.

### Powerful Surveillance Features

#### • High quality Motion-JPEG and MPEG-4 recording (for particular camera models only)

VioStor supports high quality monitoring, recording, and playback.

#### • All-in-one recording functions:

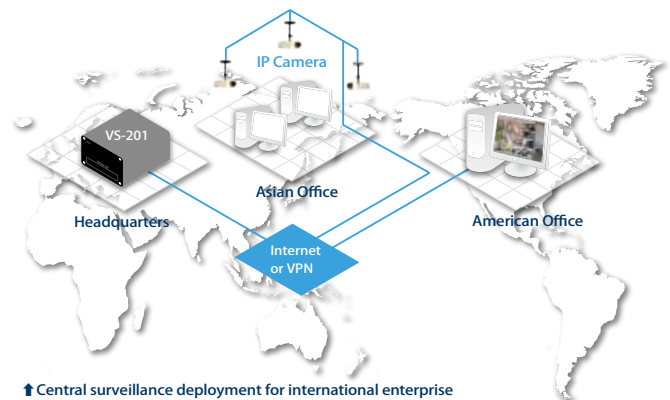
- Continuous/ manual/ schedule recording.
- Alarm recording (by motion detection and sensor triggering).

QNAP VioStor supports versatile recording functions. By manual recording, users can enable recording in urgent situation. VioStor provides schedule recording for users to set up to 15 recording schedules for each camera. Alarm recording is also supported which recording is activated when a moving object is detected or a sensor is triggered.

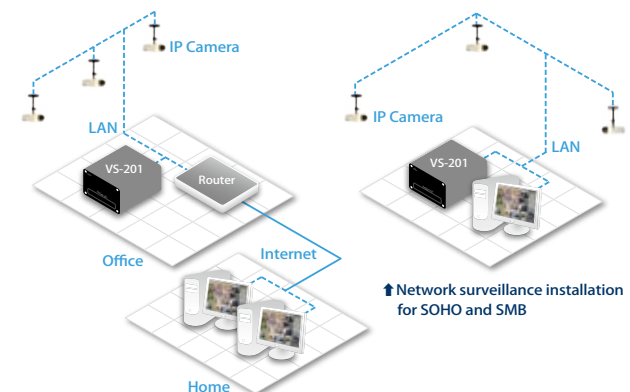
#### • Remote replication

The recording data can be copied to remote QNAP storage devices by remote replication from LAN.

#### • VioStor Network Architecture



↑ Central surveillance deployment for international enterprise



↑ Remote monitoring and playback over the Internet



each camera at maximum. VioStor also provides alarm recording that recording starts automatically when motion detection or camera sensor is triggered. No important events will be missed under the secure monitoring of VioStor!

#### • Variety live video monitoring:

- Single/Quad/Octave/Sequential mode
- Exclusive Picture-in-Picture mode

VioStor is the world's only system that supports picture-in-picture mode. Variety monitoring combinations are also provided. Users can adjust the monitoring modes according to their own demand.

#### • Real-time monitoring everywhere

By web-based monitoring and management interface, you can manage recording, live monitoring and playback video anytime, anywhere.

#### • Smart control of PTZ (Pan, Tilt, Zoom) & speed dome camera by direct clicking on video screen

If the network camera supports PTZ camera, VioStor enables users to click on the PTZ control on the web interface directly to adjust the direction and zooming angle of the camera.

#### • E-map function for easy preview of the camera location

VioStor is the world's only NVR that provides exclusive E-map function. Users can upload the pictures of the location that the cameras are installed. In case of emergency, they can refer to the E-map to indicate the location and adjust the monitoring direction.

#### • Supports video snapshot

VioStor provides real-time monitoring as well as real-time snapshot. Users can take a snapshot of the monitoring screen anytime.

#### • Real-time e-mail notification to user upon alert events

VioStor supports e-mail alert feature that warning e-mails will be sent to the administrator immediately in case of system error or error or emergent events.

#### • Powerful pre-alarm and post-alarm recording

VioStor supports pre-alarm and post-alarm recording, which is used to record additional details before and after an event occurs.

#### • Easy playback searching by date & time and alarm event

VioStor enables searching recording data by date and time, and also by alert events. This reduces the time and enhances the efficiency of searching recording.

#### • Recordings can be easily downloaded to remote computer for playback

VioStor supports complete network-based management interface that users can download recording data via the web and play the files from remote computer. This largely increases the convenience of accessing recording data.

#### • Recordings can be played by Windows Media Player

The file format of VioStor recording data is avi. Users can play the files by popular video playing applications. There is no need to install unique program or convert the files to other formats to view the video.

#### • Flexible adjustment of the length of recording files

VioStor enables users to adjust the length of the recording files, which is more flexible than general NVR that recording length is fixed.

#### • Supports monitoring preset position control

You can view different preset positions of the camera by clicking the number buttons on monitoring page.

➡ E-map preview



#### • Audio recording function (option)

VioStor supports powerful audio recording. When recording, monitoring or playing videos, audio function can be enabled for complete surveillance.

#### ↓ Octave live video monitoring



#### ↓ Picture-in-Picture mode live video monitoring



## High Performance

#### • Video recording frame rate\*:

- Up to 240 frames at QVGA (320x240) or CIF (352x240 in NTSC, 352x288 in PAL)
- Up to 80 frames at VGA (640x480)
- Support mega pixels recording

\* Real performance may vary in different environment.

VioStor provides outstanding recording quality. In purely independent network environment, QVGA or CIF can reach 240 frames/sec.

#### • High-speed Gigabit LAN interface

VioStor is equipped with Gigabit LAN port to largely enhance the network access performance.

## High Reliability and Smart Features

#### • Extra secure data protection by RAID 1 Mirroring

To enhance data security and protection, VioStor provides RAID 1 (mirroring) configuration. Recording data is highly secured and the reading rate is also increased. VioStor also provides hot swap function. When a hard disk fails, the failed disk can be replaced by a new one immediately without shutting down the system, and the recording data can be reserved.

#### • Supports RAID 0, JBOD (Just a Bunch of Disks/ Linear)

In addition to RAID 1 (mirroring) function, VioStor supports RAID 0 and JBOD configurations for larger storage capacity and higher reading and writing performance.

#### • Intelligent automatic system startup when power resumes after power outage

VioStor supports intelligent power-on support. When enabled, the system can turn on automatically when power resumes after power outage.

#### • Supports UPS (Uninterruptible Power Supply) for 24x7 service

VioStor supports UPS to enable stable and continuous recording 24x7. With UPS, the system can function normally in case of power outage or unstable power supply.

#### • Convenient video backup to external USB storage by one touch auto video backup button

VioStor supports exclusive USB auto video backup button. By pressing the button once, all recording data on VioStor will be copied to external USB storage device immediately.

#### • Detailed record of all events

VioStor provides detailed event logs covering system warning, hard disk error, network disconnection, and UPS status etc. for users to maintain and manage VioStor. The logs can be classified to all events, warning & errors, and errors for quick searching.

## Powerful Network Services

- **Powerful authority management.** The right to monitor and play back the recordings of each camera can be separately defined for individual user

VioStor enables administrator to configure monitoring and playback authority of specified cameras for different users. The authority can be set for up to 32 users. Different monitoring and playback rights can be assigned for individual user.

- **Provide on-line user list**

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

- **Powerful host access control**

Specify the connections to be allowed and denied to access NVR.

- **Built-in NTP server.** Date and time of the network cameras are synchronized with this NVR

VioStor has built-in NTP server feature. All the network cameras connected to the VioStor can synchronize the time settings with VioStor. Users do not need to establish another NTP server or adjust the time of the cameras one by one.

## Functions supported by QNAP VioStor-201P corresponding to the IP camera models

	MJPEG	MPEG4	Motion Detection	Sensor Triggered Alarm	PTZ	Audio
<b>Panasonic</b>						
BB-HCM515	○		○	○	PT	○
BB-HCM527	○	*	○	○	PTZ	○
BB-HCM5x1	○		○	○	PT	○
BB-HCM58x	○		○	○	PTZ	○
BL-C1	○	*		○		○
BL-C10	○	*		○	PT	○
BL-C111	○			○	PT	○
BL-C131	○			○	PT	○
BL-C20	○	*		○		○
BL-C30	○	*		○	PT	○
<b>Generic JPEG series</b>						
NF282/ 284	○		○	○		○
NP1000/ 1004	○		○	○		○
NP244	○		○	○		○
NS202(A)	○		○	○	PTZ	○
NW484	○		○	○		○
<b>SONY</b>						
SNC-CS10	○	○	○	○		○
SNC-CS11	○	○	○	○		○
SNC-CS50	○	○	○	○		○
SNC-DF40	○	○	○	○		○
SNC-DF50	○	○	○	○		○
SNC-DF70	○	○	○	○		○
SNC-DF80	○	○	○	○		○
SNC-P1	○	○	○	○		○
SNC-P5	○	○	○	○	PTZ	○
SNC-RX530/ 550/ 570	○	○	○	○	PTZ	○
SNC-RZ25	○	○	○	○	PTZ	○
SNC-RZ30	○	*	○	○	PTZ	○
SNC-RZ50	○	○	○	○	PTZ	○
SNC-Z20	○	*	○	○	Z	○
<b>Canon</b>						
VB-C300 series	○			○	PTZ	○
VB-C50 series	○			○	PTZ	○
<b>SANYO</b>						
VCC-P450/ VCC-P470	○	*	○	○		○
VCC-PT490/ PT500	○	*	○	○	PT	○
<b>Arecont</b>						
AV1300M	○	*	○	○		
AV2100M	○	*	○	○		
AV3130	○	*	○	○		

\* Function not supported by the camera.

For latest information about supported camera models, please visit QNAP website at <http://www.qnapsecurity.com>

- **The world's only NVR with NAS features embedded**

- Network Neighborhood (SMB/CIFS)
- FTP server
- Web File Management (HTTP)

## Software specification

<b>Video</b>	
Display Mode	1, 4, 8, Picture in Picture, Sequential mode
Recording Cameras Number	8 (maximum)
Network Camera Support	Panasonic BB , BL and iPRO Series PTZ camera/ Canon VB-series/ Vivotek IP camera & video server/ SONY/ TOSHIBA IP camera More brands and series will be supported in the future * For the information of supported camera models, please visit QNAP website, <a href="http://www.qnapsecurity.com">www.qnapsecurity.com</a>
Compression Format	Motion JPEG/ MPEG 4 (depend on IP Camera)
Video Setting	Resolution, Quality, Frame Rate
E-map	Upload E-map
<b>Recording</b>	
Recording Mode	Continuous, Manual, Schedule, Alarm, Motion, Snapshot
Buffer Storage for Alarm Images (before and post events)	Pre-recording: 300 Seconds/ Post-recording: 300 Seconds (Total 600 Seconds/ 10 Minutes)
Recording Performance	Up to 240 frames at QVGA (320 x 240) or CIF (352 x 240 in NTSC, 352x 288 in PAL)/ Up to 80 frames at VGA (640 x 480) * Real performance varies in different environment
File format	AVI (Recordings can be played by Windows Media Player)
<b>Playback</b>	
Playback Mode	Play, Pause, Stop, Fast forward, Full screen display
Video Search	Search by Date, Time
Video Player	Immediately playback by default video player
Download	Click to download recorded files from web page
<b>Storage</b>	
Disk Mode	Single, RAID 0, RAID 1, JBOD/ Linear
Capacity	Support 2 x 3.5" SATA I/II HDD, Up to 2TB
Services	Web File Manager , FTP , SMB/CIFS
<b>Network</b>	
Support	HTTP, TCP/ IP, SMTP, DHCP, Static IP, DNS, DDNS, FTP, NTP, UPnP
Camera IP address & Port	Allow setting LAN/ WAN IP address of each camera
Utility Software	
QNAP Finder	Discovery and quick setup
<b>Security</b>	
Operation system	Linux embedded, free from PC crash and virus attack
User Management	The right to monitor and play back the recordings of each camera can be separately defined for individual user (up to 32 users)
On-line Users List	Records of users currently logged on and previously logged on to the NVR
Host Access Control	Specify the connections to be allowed and denied to access NVR.
Alert Notification	E-mail, Buzzer, Event logs
UPS	Support APC (USB type of UPS )
Event Log	Detailed record of all events
<b>Client PC Requirement</b> (Suggested system requirement for better video performance)	
CPU	Pentium 4 CPU 2 GHz or higher
Memory	512 MB or above
Operation system	Windows XP or later
Browser	Internet Explorer 6.0 or later
Network interface	10/ 100 Mbps or above
View Resolution	Suggested 1024 x 768 pixel or above
<b>Language Support</b>	
English/ Japanese/ French/ Italian/ German/ Spanish/ Simplified Chinese/ Traditional Chinese	
<b>Certification</b>	
CE, FCC, VCCI, BSMI	

## Hardware specification

HDD	2 x 3.5" SATA I/II HDD, up to 2TB. (the standard system is shipped without HDD)
LAN Ports	1 x Gigabit RJ-45 Ethernet port
LED Indicators	Power, USB, status, LAN, hard disk
USB	3 x USB (For USB storage device for One Touch Auto-Video Backup and UPS device)
Buttons	USB Auto-Video Backup Button, Power Button, Reset Button
Form Factor	Desktop
Dimensions	214(D) x 175(W) x 115 (H) mm
Color Box Shipping Weight	3.5 Kg (Without HDD)
Operation Environment	Temperature: 0~40°C Humidity: 0%~90% R.H.
Power Supply	External power adapter, 60W, 100~240V
Energy-saving Design	HDD Sleep mode Low power consumption & low noise
Thermal solution	Noiseless Fan Case
Secure Design	K-Lock Security Slot for Theft Prevention

\* Designs and specifications are subject to change without notice.

## VioStor-201A Network Video Recorder

QNAP VioStor-201A is a powerful 2-bay network surveillance system that works well with the IP cameras of Axis, Canon, Sanyo, and Arecont etc. to provide advanced video surveillance and storage of recording data over the network. The entire system is built on Linux OS with guaranteed reliable system performance and lower power consumption for 24/7 operation. It is less vulnerable to virus attack or hacking compared to Windows-based surveillance solutions. The solution supports intelligent automatic system startup when power resumes after an outage as well as UPS to ensure uninterrupted system services. The VioStor-201A is an ideal solution for power-saving and highly stable surveillance for homes and offices.

### Supported Camera Brands

- ✓ *Axis*
- ✓ *Canon*
- ✓ *Sanyo*
- ✓ *Arecont*

MegaPixel   GigaLAN   RAID1/0   Hot-Swap   MJPEG/MPEG4

Supported camera brands are subject to change without notice. Please contact QNAP for updated information.



## Outstanding Product Features

### Best Hardware Design

- **Embedded system with lowest power consumption**

QNAP NVR products are built on Linux OS which is secure, stable, power-saving, and less liable to PC crash and virus attack. Also, there is no need to install extra software or perimeter devices as PC solutions do. The reliability of system performance is guaranteed. (The power consumption of VioStor-201 is only 25.2W and that of PC-based solution is 250-300W!)

- **Supports 2 high-speed SATA hard drives**

SATA hard drives are faster than IDE hard drives, which enhance the recording and playback performance of QNAP NVR.

- **Small-sized, easy to deploy**

VioStor is compact and occupies little space. It is easy to install and maintain.

### Powerful Surveillance Features

- **High quality Motion-JPEG and MPEG-4 recording (for particular camera models only)**

VioStor supports high quality monitoring, recording, and playback.

- **All-in-one recording functions:**

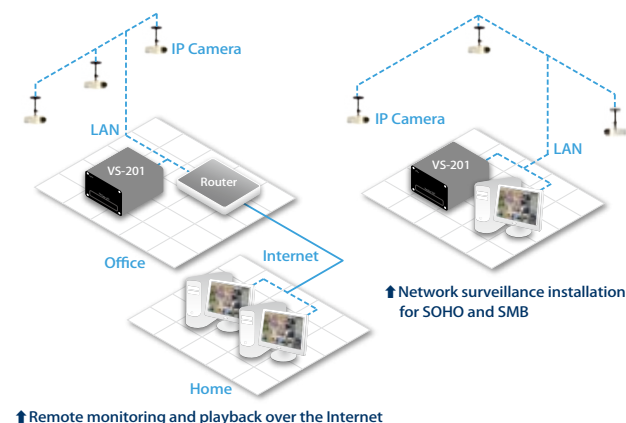
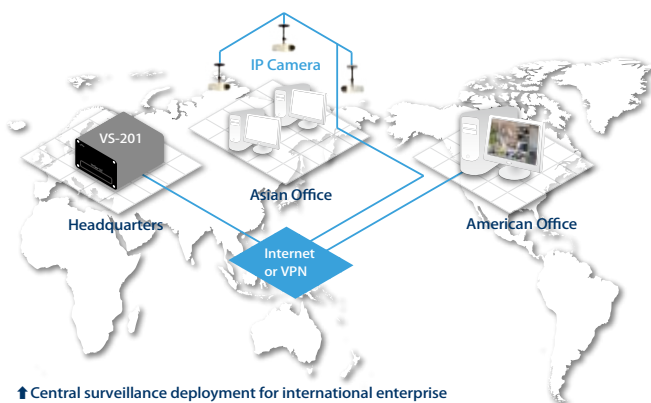
- Continuous/ manual/ schedule recording.
- Alarm recording (by motion detection and sensor triggering).

QNAP VioStor supports versatile recording functions. By manual recording, users can enable recording in urgent situation. VioStor provides schedule recording for users to set up to 15 recording schedules for each camera. Alarm recording is also supported which recording is activated when a moving object is detected or a sensor is triggered.

- **Remote replication**

The recording data can be copied to remote QNAP storage devices by remote replication from LAN.

### • VioStor Network Architecture





each camera at maximum. VioStor also provides alarm recording that recording starts automatically when motion detection or camera sensor is triggered. No important events will be missed under the secure monitoring of VioStor!

## • Variety live video monitoring:

- Single/Quad/Octave/Sequential mode
- Exclusive Picture-in-Picture mode

VioStor is the world's only system that supports picture-in-picture mode. Variety monitoring combinations are also provided. Users can adjust the monitoring modes according to their own demand.

## • Real-time monitoring everywhere

By web-based monitoring and management interface, you can manage recording, live monitoring and playback video anytime, anywhere.

## • Smart control of PTZ (Pan, Tilt, Zoom) & speed dome camera by direct clicking on video screen

If the network camera supports PTZ camera, VioStor enables users to click on the PTZ control on the web interface directly to adjust the direction and zooming angle of the camera.

## • E-map function for easy preview of the camera location

VioStor is the world's only NVR that provides exclusive E-map function. Users can upload the pictures of the location that the cameras are installed. In case of emergency, they can refer to the E-map to indicate the location and adjust the monitoring direction.

## • Supports video snapshot

VioStor provides real-time monitoring as well as real-time snapshot. Users can take a snapshot of the monitoring screen anytime.

## • Real-time e-mail notification to user upon alert events

VioStor supports e-mail alert feature that warning e-mails will be sent to the administrator immediately in case of system error or error or emergent events.

## • Powerful pre-alarm and post-alarm recording

VioStor supports pre-alarm and post-alarm recording, which is used to record additional details before and after an event occurs.

## • Easy playback searching by date & time and alarm event

VioStor enables searching recording data by date and time, and also by alert events. This reduces the time and enhances the efficiency of searching recording.

## • Recordings can be easily downloaded to remote computer for playback

VioStor supports complete network-based management interface that users can download recording data via the web and play the files from remote computer. This largely increases the convenience of accessing recording data.

## • Recordings can be played by Windows Media Player

The file format of VioStor recording data is avi. Users can play the files by popular video playing applications. There is no need to install unique program or convert the files to other formats to view the video.

## • Flexible adjustment of the length of recording files

VioStor enables users to adjust the length of the recording files, which is more flexible than general NVR that recording length is fixed.

## • Supports monitoring preset position control

You can view different preset positions of the camera by clicking the number buttons on monitoring page.

→ E-map preview



## • Audio recording function (option)

VioStor supports powerful audio recording. When recording, monitoring or playing videos, audio function can be enabled for complete surveillance.

↓ Octave live video monitoring

↓ Picture-in-Picture mode live video monitoring



## High Performance

### • Video recording frame rate\*:

- Up to 240 frames at QVGA (320x240) or CIF (352x240 in NTSC, 352x288 in PAL)
- Up to 80 frames at VGA (640x480)
- Support mega pixels recording

\* Real performance may vary in different environment.

VioStor provides outstanding recording quality. In purely independent network environment, QVGA or CIF can reach 240 frames/sec.

### • High-speed Gigabit LAN interface

VioStor is equipped with Gigabit LAN port to largely enhance the network access performance.

## High Reliability and Smart Features

### • Extra secure data protection by RAID 1 Mirroring

To enhance data security and protection, VioStor provides RAID 1 (mirroring) configuration. Recording data is highly secured and the reading rate is also increased. VioStor also provides hot swap function. When a hard disk fails, the failed disk can be replaced by a new one immediately without shutting down the system, and the recording data can be reserved.

### • Supports RAID 0, JBOD (Just a Bunch of Disks/ Linear)

In addition to RAID 1 (mirroring) function, VioStor supports RAID 0 and JBOD configurations for larger storage capacity and higher reading and writing performance.

### • Intelligent automatic system startup when power resumes after power outage

VioStor supports intelligent power-on support. When enabled, the system can turn on automatically when power resumes after power outage.

### • Supports UPS (Uninterruptible Power Supply) for 24x7 service

VioStor supports UPS to enable stable and continuous recording 24x7. With UPS, the system can function normally in case of power outage or unstable power supply.

### • Convenient video backup to external USB storage by one touch auto video backup button

VioStor supports exclusive USB auto video backup button. By pressing the button once, all recording data on VioStor will be copied to external USB storage device immediately.

### • Detailed record of all events

VioStor provides detailed event logs covering system warning, hard disk error, network disconnection, and UPS status etc. for users to maintain and manage VioStor. The logs can be classified to all events, warning & errors, and errors for quick searching.

## Powerful Network Services

- **Powerful authority management.** The right to monitor and play back the recordings of each camera can be separately defined for individual user

VioStor enables administrator to configure monitoring and playback authority of specified cameras for different users. The authority can be set for up to 32 users. Different monitoring and playback rights can be assigned for individual user.

- **Provide on-line user list**

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

- **Powerful host access control**

Specify the connections to be allowed and denied to access NVR.

- **Built-in NTP server.** Date and time of the network cameras are synchronized with this NVR

VioStor has built-in NTP server feature. All the network cameras connected to the VioStor can synchronize the time settings with VioStor. Users do not need to establish another NTP server or adjust the time of the cameras one by one.

- **The world's only NVR with NAS features embedded**

- Network Neighborhood (SMB/CIFS)
- FTP server
- Web File Management (HTTP)

## Software specification

<b>Video</b>	
Display Mode	1, 4, 8, Picture in Picture, Sequential mode
Recording Cameras Number	8 (maximum)
Network Camera Support	Axis/ Canon/ Sanyo/ Arecont More brands and series will be supported in the future * For the information of supported camera models, please visit QNAP website, <a href="http://www.qnapsecurity.com">www.qnapsecurity.com</a>
Compression Format	Motion JPEG/ MPEG 4 (depend on IP Camera)
Video Setting	Resolution, Quality, Frame Rate
E-map	Upload E-map
<b>Recording</b>	
Recording Mode	Continuous, Manual, Schedule, Alarm, Motion, Snapshot
Buffer Storage for Alarm Images (before and post events)	Pre-recording: 300 Seconds/ Post-recording: 300 Seconds (Total 600 Seconds/ 10 Minutes)
Recording Performance	Up to 240 frames at QVGA (320 x 240) or CIF (352 x 240 in NTSC, 352x 288 in PAL)/ Up to 80 frames at VGA (640 x 480) * Real performance varies in different environment
File format	AVI (Recordings can be played by Windows Media Player)
<b>Playback</b>	
Playback Mode	Play, Pause, Stop, Fast forward, Full screen display
Video Search	Search by Date, Time
Video Player	Immediately playback by default video player
Download	Click to download recorded files from web page
<b>Storage</b>	
Disk Mode	Single, RAID 0, RAID 1, JBOD/ Linear
Capacity	Support 2 x 3.5" SATA I/II HDD, Up to 2TB
Services	Web File Manager, FTP, SMB/CIFS
<b>Network</b>	
Support	HTTP, TCP/ IP, SMTP, DHCP, Static IP, DNS, DDNS, FTP, NTP, UPnP
Camera IP address & Port	Allow setting LAN/ WAN IP address of each camera
<b>Utility Software</b>	
QNAP Finder	Discovery and quick setup
<b>Security</b>	
Operation system	Linux embedded, free from PC crash and virus attack
User Management	The right to monitor and play back the recordings of each camera can be separately defined for individual user (up to 32 users)
On-line Users List	Records of users currently logged on and previously logged on to the NVR
Host Access Control	Specify the connections to be allowed and denied to access NVR.
Alert Notification	E-mail, Buzzer, Event logs
UPS	Support APC (USB type of UPS)
Event Log	Detailed record of all events
<b>Client PC Requirement</b> (Suggested system requirement for better video performance)	
CPU	Pentium 4 CPU 2 GHz or higher
Memory	512 MB or above
Operation system	Windows XP or later
Browser	Internet Explorer 6.0 or later
Network interface	10/ 100 Mbps or above
View Resolution	Suggested 1024 x 768 pixel or above
<b>Language Support</b>	
English/ Japanese/ French/ Italian/ German/ Spanish/ Simplified Chinese/ Traditional Chinese	
<b>Certification</b>	
CE, FCC, VCCI, BSMI	

## Functions supported by QNAP VioStor-201A corresponding to the IP camera models

	MJPEG	MPEG4	Motion Detection	Sensor-Triggered Alarm	PTZ	Audio
<b>AXIS</b>						
206	○	*	○			
206M	○	*	○			○
207/ 207W	○		○	○		○
207M/ 207MW	○		○	○		○
209FD-R	○		○			
210	○		○	○		
210A/ 211A	○		○	○		○
211M	○		○	○		○
212PTZ	○		○	○	PTZ	○
213PTZ	○		○	○	PTZ	○
214/ 215PTZ	○		○	○	PTZ	○
216FD	○		○	○		○
216MF-D(-V)	○		○	○		○
221	○		○	○		
223M	○		○	○		○
225FD	○		○	○		○
231/ 232D	○		○	○	PTZ	○
233D	○		○	○	PTZ	○
241Q	○		○	○		○
241QA	○		○	○		○
241S	○		○	○		○
241SA	○		○	○		○
243SA	○		○	○		○
Axis Generic(MJPEG)	○		○	○		
<b>Canon</b>						
VB-C300 series	○			○	PTZ	○
VB-C50 series	○			○	PTZ	○
<b>SANYO</b>						
VCC-P450/ VCC-P470	○	*	○	○		○
VCC-PT490/ PT500	○	*	○	○	PTZ	○
<b>Arecont</b>						
AV1300M	○	*	○	○		
AV2100M	○	*	○	○		
AV3130	○	*	○	○		

\* Function not supported by the camera.

For latest information about supported camera models, please visit QNAP website at <http://www.qnapsecurity.com>

## Hardware specification

HDD	2 x 3.5" SATA I/II HDD, up to 2TB. (the standard system is shipped without HDD)
LAN Ports	1 x Gigabit RJ-45 Ethernet port
LED Indicators	Power, USB, status, LAN, hard disk
USB	3 x USB (For USB storage device for One Touch Auto-Video Backup and UPS device)
Buttons	USB Auto-Video Backup Button, Power Button, Reset Button
Form Factor	Desktop
Dimensions	214(D) x 175(W) x 115 (H) mm
Color Box Shipping Weight	3.5 Kg (Without HDD)
Operation Environment	Temperature: 0~40°C Humidity: 0%~90% R.H.
Power Supply	External power adapter, 60W, 100~240V
Energy-saving Design	HDD Sleep mode Low power consumption & low noise
Thermal solution	Noiseless Fan Case
Secure Design	K-Lock Security Slot for Theft Prevention

\* Designs and specifications are subject to change without notice.

## VioStor-201V Network Video Recorder

QNAP VioStor-201V is the best network surveillance partner with the IP cameras developed by Vivotek, D-Link, Arecont, GANZ, and Arecont etc. It is a Linux-embedded network surveillance system with compact design, large storage capacity, and powerful monitoring and recording functions. In the size of just a shoe box, the system comes with versatile advanced functions, including schedule recording, motion-triggered recording, pre-alarm and post-alarm recording, smart control of PTZ cameras etc. The system is easy to install and even novice can set up the entire system in 6 simple steps!

### Supported Camera Brands

- ☒ *Vivotek*
- ☒ *D-Link*
- ☒ *Arecont*
- ☒ *GANZ*
- ☒ *Level-One*

MegaPixel GigaLAN RAID1/0 Hot-Swap MJPEG/MPEG4

Supported camera brands are subject to change without notice. Please contact QNAP for updated information.



## Outstanding Product Features

### Best Hardware Design

#### • Embedded system with lowest power consumption

QNAP NVR products are built on Linux OS which is secure, stable, power-saving, and less liable to PC crash and virus attack. Also, there is no need to install extra software or perimeter devices as PC solutions do. The reliability of system performance is guaranteed. (The power consumption of VioStor-201 is only 25.2W and that of PC-based solution is 250-300W!)

#### • Supports 2 high-speed SATA hard drives

SATA hard drives are faster than IDE hard drives, which enhance the recording and playback performance of QNAP NVR.

#### • Small-sized, easy to deploy

VioStor is compact and occupies little space. It is easy to install and maintain.

### Powerful Surveillance Features

#### • High quality Motion-JPEG and MPEG-4 recording (for particular camera models only)

VioStor supports high quality monitoring, recording, and playback.

#### • All-in-one recording functions:

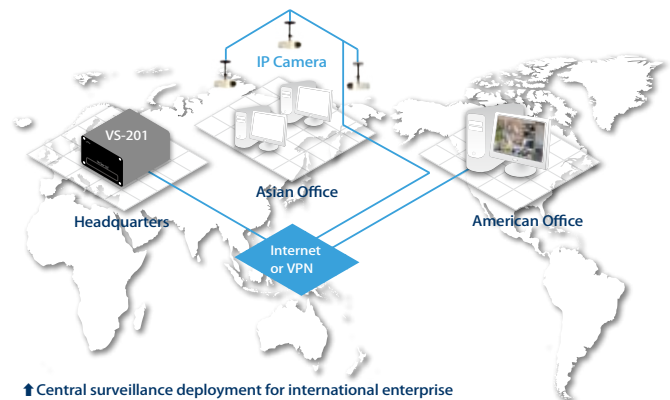
- Continuous/ manual/ schedule recording.
- Alarm recording (by motion detection and sensor triggering).

QNAP VioStor supports versatile recording functions. By manual recording, users can enable recording in urgent situation. VioStor provides schedule recording for users to set up to 15 recording schedules for each camera. Alarm recording is also supported which recording is activated when a moving object is detected or a sensor is triggered.

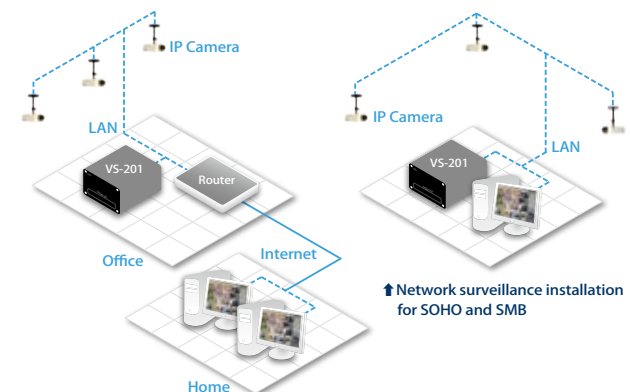
#### • Remote replication

The recording data can be copied to remote QNAP storage devices by remote replication from LAN.

#### • VioStor Network Architecture



↑ Central surveillance deployment for international enterprise



↑ Network surveillance installation for SOHO and SMB

↑ Remote monitoring and playback over the Internet

each camera at maximum. VioStor also provides alarm recording that recording starts automatically when motion detection or camera sensor is triggered. No important events will be missed under the secure monitoring of VioStor!

#### • Variety live video monitoring:

- Single/Quad/Octave/Sequential mode
- Exclusive Picture-in-Picture mode

VioStor is the world's only system that supports picture-in-picture mode. Variety monitoring combinations are also provided. Users can adjust the monitoring modes according to their own demand.

#### • Real-time monitoring everywhere

By web-based monitoring and management interface, you can manage recording, live monitoring and playback video anytime, anywhere.

#### • Smart control of PTZ (Pan, Tilt, Zoom) & speed dome camera by direct clicking on video screen

If the network camera supports PTZ camera, VioStor enables users to click on the PTZ control on the web interface directly to adjust the direction and zooming angle of the camera.

#### • E-map function for easy preview of the camera location

VioStor is the world's only NVR that provides exclusive E-map function. Users can upload the pictures of the location that the cameras are installed. In case of emergency, they can refer to the E-map to indicate the location and adjust the monitoring direction.

#### • Supports video snapshot

VioStor provides real-time monitoring as well as real-time snapshot. Users can take a snapshot of the monitoring screen anytime.

#### • Real-time e-mail notification to user upon alert events

VioStor supports e-mail alert feature that warning e-mails will be sent to the administrator immediately in case of system error or error or emergent events.

#### • Powerful pre-alarm and post-alarm recording

VioStor supports pre-alarm and post-alarm recording, which is used to record additional details before and after an event occurs.

#### • Easy playback searching by date & time and alarm event

VioStor enables searching recording data by date and time, and also by alert events. This reduces the time and enhances the efficiency of searching recording.

#### • Recordings can be easily downloaded to remote computer for playback

VioStor supports complete network-based management interface that users can download recording data via the web and play the files from remote computer. This largely increases the convenience of accessing recording data.

#### • Recordings can be played by Windows Media Player

The file format of VioStor recording data is avi. Users can play the files by popular video playing applications. There is no need to install unique program or convert the files to other formats to view the video.

#### • Flexible adjustment of the length of recording files

VioStor enables users to adjust the length of the recording files, which is more flexible than general NVR that recording length is fixed.

#### • Supports monitoring preset position control

You can view different preset positions of the camera by clicking the number buttons on monitoring page.

→ E-map preview



#### • Audio recording function (option)

VioStor supports powerful audio recording. When recording, monitoring or playing videos, audio function can be enabled for complete surveillance.

#### ↓ Octave live video monitoring



#### ↓ Picture-in-Picture mode live video monitoring



## High Performance

#### • Video recording frame rate\*:

- Up to 240 frames at QVGA (320x240) or CIF (352x240 in NTSC, 352x288 in PAL)
- Up to 80 frames at VGA (640x480)
- Support mega pixels recording

\* Real performance may vary in different environment.

VioStor provides outstanding recording quality. In purely independent network environment, QVGA or CIF can reach 240 frames/sec.

#### • High-speed Gigabit LAN interface

VioStor is equipped with Gigabit LAN port to largely enhance the network access performance.

## High Reliability and Smart Features

#### • Extra secure data protection by RAID 1 Mirroring

To enhance data security and protection, VioStor provides RAID 1 (mirroring) configuration. Recording data is highly secured and the reading rate is also increased. VioStor also provides hot swap function. When a hard disk fails, the failed disk can be replaced by a new one immediately without shutting down the system, and the recording data can be reserved.

#### • Supports RAID 0, JBOD (Just a Bunch of Disks/ Linear)

In addition to RAID 1 (mirroring) function, VioStor supports RAID 0 and JBOD configurations for larger storage capacity and higher reading and writing performance.

#### • Intelligent automatic system startup when power resumes after power outage

VioStor supports intelligent power-on support. When enabled, the system can turn on automatically when power resumes after power outage.

#### • Supports UPS (Uninterruptible Power Supply) for 24x7 service

VioStor supports UPS to enable stable and continuous recording 24x7. With UPS, the system can function normally in case of power outage or unstable power supply.

#### • Convenient video backup to external USB storage by one touch auto video backup button

VioStor supports exclusive USB auto video backup button. By pressing the button once, all recording data on VioStor will be copied to external USB storage device immediately.

#### • Detailed record of all events

VioStor provides detailed event logs covering system warning, hard disk error, network disconnection, and UPS status etc. for users to maintain and manage VioStor. The logs can be classified to all events, warning & errors, and errors for quick searching.



## Powerful Network Services

- **Powerful authority management.** The right to monitor and play back the recordings of each camera can be separately defined for individual user

VioStor enables administrator to configure monitoring and playback authority of specified cameras for different users. The authority can be set for up to 32 users. Different monitoring and playback rights can be assigned for individual user.

- **Provide on-line user list**

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

- **Powerful host access control**

Specify the connections to be allowed and denied to access NVR.

- **Built-in NTP server. Date and time of the network cameras are synchronized with this NVR**

VioStor has built-in NTP server feature. All the network cameras connected to the VioStor can synchronize the time settings with VioStor. Users do not need to establish another NTP server or adjust the time of the cameras one by one.

### Functions supported by QNAP VioStor-201V corresponding to the IP camera models

	MJPEG	MPEG4	Motion Detection	Sensor-Triggered Alarm	PTZ	Audio
<b>VivoTek</b>						
IP3112 /IP3122	*	○	○	○		
IP3111 /IP3121	*	○	○	○		
IP3132	*	○	○	○		
IP3135/ 3137	*	○	○			
PT3112 /PT3122	*	○	○	○	PT	○
PT3117 /PT3127	*	○	○	○	PT	○
6000series	*					○
IP6112/6122	○	○	○	○		○
IP6117/6127	○	○	○	○		○
FD6112V/6122V	○	○	○	○		○
PZ6112/6122	○	○	○	○	PTZ	○
PZ6114/6124	○	○	○	○	PTZ	○
FD7131	○	○	○	○		○
IP7131/ 7132	*	○	○	○		○
IP7135/ 7137	*	○	○			
PT7135/ 7137	○	○	○		PT	○
IP7138/ 7139	○	○	○	○		○
IP7151/ 7152	○	○	○	○		○
SD6112V/6122V	○	○	○	○	PTZ	○
VS7100	○	○	○	○		○
<b>D-link</b>						
DCS-2120	○	*	○	○		○
DCS-3220/ DCS-3220(G)	*	○	○	○		○
DCS-3420	*	○	○	○		○
DCS-5220	*	○	○		PT	○
DCS-5300/ DCS-5300G	*	○	○	○	PT	○
DCS-6620/ DCS-6620G	○	○	○	○	PTZ	○
<b>Arecont</b>						
AV1300M	○	*	○	○		
AV2100M	○	*	○	○		
AV3130	○	*	○	○		
<b>GANZ</b>						
ZN-D2024	○	○	○	○		○
ZN-PT304L	○	○	○		PT	○
ZN-PT304WL	○	○	○		PT	○
ZN-YH305		○	○	○		○
ZV-S306	○	○	○	○		○
<b>LevelOne</b>						
FCS-1010/ WCS-2010	*	○	○	○	PT	○
FCS-1030/ WCS-2030	*	○	○			○
FCS-1040/ WCS-2040	○	○	○	○	PTZ	○
FCS-1060/ WCS-2060	*	○	○		PT	○
FCS-1070/ WCS-2070	○	○	○	○		○
FCS-3000	○	○	○	○		○
FCS-3021	○	○	○	○		○

\* Function not supported by the camera.

For latest information about supported camera models, please visit QNAP website at <http://www.qnapsecurity.com>

- **The world's only NVR with NAS features embedded**

- Network Neighborhood (SMB/CIFS)
- FTP server
- Web File Management (HTTP)

### Software specification

<b>Video</b>	
Display Mode	1, 4, 8, Picture in Picture, Sequential mode
Recording Cameras Number	8 (maximum)
Network Camera Support	D-Link/ Vivitek/ Level-One/ Arecont * For the information of supported camera models, please visit QNAP website, <a href="http://www.qnapsecurity.com">www.qnapsecurity.com</a>
Compression Format	Motion JPEG/ MPEG 4 (depend on IP Camera)
Video Setting	Resolution, Quality, Frame Rate
E-map	Upload E-map
<b>Recording</b>	
Recording Mode	Continuous, Manual, Schedule, Alarm, Motion, Snapshot
Buffer Storage for Alarm Images (before and post events)	Pre-recording: 300 Seconds/ Post-recording: 300 Seconds (Total 600 Seconds/ 10 Minutes)
Recording Performance	Up to 240 frames at QVGA (320 x 240) or CIF (352 x 240 in NTSC, 352x 288 in PAL)/ Up to 80 frames at VGA (640 x 480) * Real performance varies in different environment
File format	AVI (Recordings can be played by Windows Media Player)
<b>Playback</b>	
Playback Mode	Play, Pause, Stop, Fast forward, Full screen display
Video Search	Search by Date, Time
Video Player	Immediately playback by default video player
Download	Click to download recorded files from web page
<b>Storage</b>	
Disk Mode	Single, RAID 0, RAID 1, JBOD/ Linear
Capacity	Support 2 x 3.5" SATA I/II HDD, Up to 2TB
Services	Web File Manager, FTP, SMB/CIFS
<b>Network</b>	
Support	HTTP, TCP/ IP, SMTP, DHCP, Static IP, DNS, DDNS, FTP, NTP, UPnP
Camera IP address & Port	Allow setting LAN/ WAN IP address of each camera
<b>Utility Software</b>	
QNAP Finder	Discovery and quick setup
<b>Security</b>	
Operation system	Linux embedded, free from PC crash and virus attack
User Management	The right to monitor and play back the recordings of each camera can be separately defined for individual user (up to 32 users)
On-line Users List	Records of users currently logged on and previously logged on to the NVR
Host Access Control	Specify the connections to be allowed and denied to access NVR.
Alert Notification	E-mail, Buzzer, Event logs
UPS	Support APC (USB type of UPS)
Event Log	Detailed record of all events
<b>Client PC Requirement</b> (Suggested system requirement for better video performance)	
CPU	Pentium 4 CPU 2 GHz or higher
Memory	512 MB or above
Operation system	Windows XP or later
Browser	Internet Explorer 6.0 or later
Network interface	10/ 100 Mbps or above
View Resolution	Suggested 1024 x 768 pixel or above
<b>Language Support</b>	
English/ Japanese/ French/ Italian/ German/ Spanish/ Simplified Chinese/ Traditional Chinese	
<b>Certification</b>	
CE, FCC, VCCI, BSMI	

### Hardware specification

HDD	2 x 3.5" SATA I/II HDD, up to 2TB. (the standard system is shipped without HDD)
LAN Ports	1 x Gigabit RJ-45 Ethernet port
LED Indicators	Power, USB, status, LAN, hard disk
USB	3 x USB (For USB storage device for One Touch Auto-Video Backup and UPS device)
Buttons	USB Auto-Video Backup Button, Power Button, Reset Button
Form Factor	Desktop
Dimensions	214(D) x 175(W) x 115 (H) mm
Color Box Shipping Weight	3.5 Kg (Without HDD)
Operation Environment	Temperature: 0~40°C Humidity: 0%~90% R.H.
Power Supply	External power adapter, 60W, 100~240V
Energy-saving Design	HDD Sleep mode Low power consumption & low noise
Thermal solution	Noiseless Fan Case
Secure Design	K-Lock Security Slot for Theft Prevention

\* Designs and specifications are subject to change without notice.

## VioStor-101P Network Video Recorder

QNAP VioStor-101P is a professional Linux-based network surveillance system designed to support the monitoring and recording functions of the most popular IP cameras in the market, namely Panasonic BB/ BL/ i-Pro, Sony, Canon, Sanyo, TOSHIBA and Arecont etc. Real-time monitoring, recording, and other system configurations can all be carried out from any Ethernet-ready location remotely. The VioStor-101P supports two high-speed SATA hard drives to provide up to 1TB internal storage capacity in single disk configuration, expandable to 2TB via eSATA.

### Supported Camera Brands

- ✓ *Panasonic*
- ✓ *Sony*
- ✓ *Canon*
- ✓ *Sanyo*
- ✓ *Arecont*

MegaPixel   Giga LAN   MJPEG/MPEG4

Supported camera brands are subject to change without notice. Please contact QNAP for updated information.

## Outstanding Product Features

### Best Hardware Design

- **Embedded system with lowest power consumption**

QNAP NVR products are built on Linux OS which is secure, stable, power-saving, and less liable to PC crash and virus attack. Also, there is no need to install extra software or perimeter devices as PC solutions do. The reliability of system performance is guaranteed. (The power consumption of VioStor-201 is only 14.4W and that of PC-based solution is 250-300W!)

- **Supports 1 high-speed SATA hard drives**

SATA hard drives are faster than IDE hard drives, which enhance the recording and playback performance of QNAP NVR.

- **Small-sized, easy to deploy**

VioStor is compact and occupies little space. It is easy to install and maintain.

### Powerful Surveillance Features

- **High quality Motion-JPEG and MPEG-4 recording (for particular camera models only)**

VioStor supports high quality monitoring, recording, and playback.

- **All-in-one recording functions:**

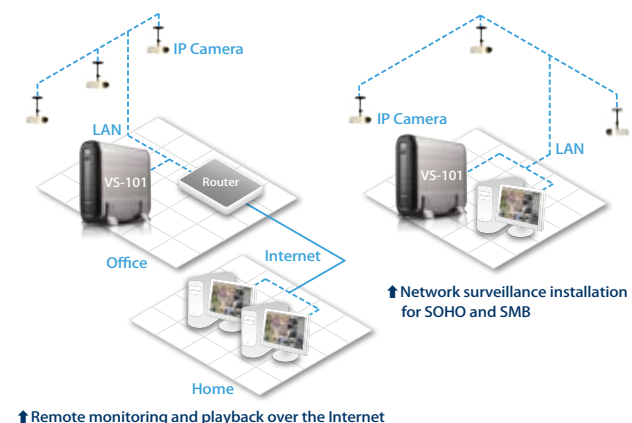
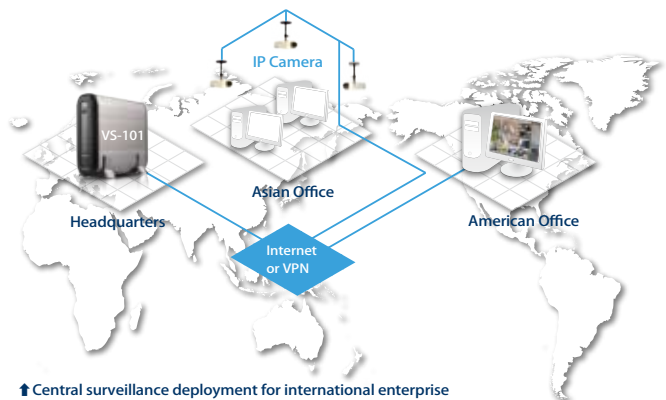
- Continuous/ manual/ schedule recording.
- Alarm recording (by motion detection and sensor triggering).

QNAP VioStor supports versatile recording functions. By manual recording, users can enable recording in urgent situation. VioStor provides schedule recording for users to set up to 15 recording schedules for each camera. Alarm recording is also supported which recording is activated when a moving object is detected or a sensor is triggered.

- **Remote replication**

The recording data can be copied to remote QNAP storage devices by remote replication from LAN.

### • VioStor Network Architecture



each camera at maximum. VioStor also provides alarm recording that recording starts automatically when motion detection or camera sensor is triggered. No important events will be missed under the secure monitoring of VioStor!

## • Variety live video monitoring:

- Single/Quad/Octave/Sequential mode
- Exclusive Picture-in-Picture mode

VioStor is the world's only system that supports picture-in-picture mode. Variety monitoring combinations are also provided. Users can adjust the monitoring modes according to their own demand.

## • Real-time monitoring everywhere

By web-based monitoring and management interface, you can manage recording, live monitoring and playback video anytime, anywhere.

## • Smart control of PTZ (Pan, Tilt, Zoom) & speed dome camera by direct clicking on video screen

If the network camera supports PTZ camera, VioStor enables users to click on the PTZ control on the web interface directly to adjust the direction and zooming angle of the camera.

## • E-map function for easy preview of the camera location

VioStor is the world's only NVR that provides exclusive E-map function. Users can upload the pictures of the location that the cameras are installed. In case of emergency, they can refer to the E-map to indicate the location and adjust the monitoring direction.

## • Supports video snapshot

VioStor provides real-time monitoring as well as real-time snapshot. Users can take a snapshot of the monitoring screen anytime.

## • Real-time e-mail notification to user upon alert events

VioStor supports e-mail alert feature that warning e-mails will be sent to the administrator immediately in case of system error or error or emergent events.

## • Powerful pre-alarm and post-alarm recording

VioStor supports pre-alarm and post-alarm recording, which is used to record additional details before and after an event occurs.

## • Easy playback searching by date & time and alarm event

VioStor enables searching recording data by date and time, and also by alert events. This reduces the time and enhances the efficiency of searching recording.

## • Recordings can be easily downloaded to remote computer for playback

VioStor supports complete network-based management interface that users can download recording data via the web and play the files from remote computer. This largely increases the convenience of accessing recording data.

## • Recordings can be played by Windows Media Player

The file format of VioStor recording data is avi. Users can play the files by popular video playing applications. There is no need to install unique program or convert the files to other formats to view the video.

## • Flexible adjustment of the length of recording files

VioStor enables users to adjust the length of the recording files, which is more flexible than general NVR that recording length is fixed.

## • Supports monitoring preset position control

You can view different preset positions of the camera by clicking the number buttons on monitoring page.

→ E-map preview



## • Audio recording function (option)

VioStor supports powerful audio recording. When recording, monitoring or playing videos, audio function can be enabled for complete surveillance.

↓ Octave live video monitoring

↓ Picture-in-Picture mode live video monitoring



## High Performance

### • Video recording frame rate\*:

- Up to 240 frames at QVGA (320x240) or CIF (352x240 in NTSC, 352x288 in PAL)
- Up to 80 frames at VGA (640x480)
- Support mega pixels recording

\* Real performance may vary in different environment.

VioStor provides outstanding recording quality. In purely independent network environment, QVGA or CIF can reach 240 frames/sec.

### • High-speed Gigabit LAN interface

VioStor is equipped with Gigabit LAN port to largely enhance the network access performance.

## High Reliability and Smart Features

### • Extra secure data protection by RAID 1 Mirroring

To enhance data security and protection, VioStor provides RAID 1 (mirroring) configuration. Recording data is highly secured and the reading rate is also increased. VioStor also provides hot swap function. When a hard disk fails, the failed disk can be replaced by a new one immediately without shutting down the system, and the recording data can be reserved.\*

### • Supports RAID 0, JBOD (Just a Bunch of Disks/ Linear)

In addition to RAID 1 (mirroring) function, VioStor supports RAID 0 and JBOD configurations for larger storage capacity and higher reading and writing performance.\*

### • Intelligent automatic system startup when power resumes after power outage

VioStor supports intelligent power-on support. When enabled, the system can turn on automatically when power resumes after power outage.

### • Supports UPS (Uninterruptible Power Supply) for 24x7 service

VioStor supports UPS to enable stable and continuous recording 24x7. With UPS, the system can function normally in case of power outage or unstable power supply.

### • Convenient video backup to external USB storage by one touch auto video backup button

VioStor supports exclusive USB auto video backup button. By pressing the button once, all recording data on VioStor will be copied to external USB storage device immediately.

### • Detailed record of all events

VioStor provides detailed event logs covering system warning, hard disk error, network disconnection, and UPS status etc. for users to maintain and manage VioStor. The logs can be classified to all events, warning & errors, and errors for quick searching.

\* Single, RAID 0, RAID 1, JBOD/ Linear (RAID is enabled via QBack-35S box with preference hard disk).

## Powerful Network Services

- **Powerful authority management.** The right to monitor and play back the recordings of each camera can be separately defined for individual user

VioStor enables administrator to configure monitoring and playback authority of specified cameras for different users. The authority can be set for up to 32 users. Different monitoring and playback rights can be assigned for individual user.

- **Provide on-line user list**

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

- **Powerful host access control**

Specify the connections to be allowed and denied to access NVR.

- **Built-in NTP server.** Date and time of the network cameras are synchronized with this NVR

VioStor has built-in NTP server feature. All the network cameras connected to the VioStor can synchronize the time settings with VioStor. Users do not need to establish another NTP server or adjust the time of the cameras one by one.

### Functions supported by QNAP VioStor-101P corresponding to the IP camera models

	MJPEG	MPEG4	Motion Detection	Sensor Triggered Alarm	PTZ	Audio
<b>Panasonic</b>						
BB-HCM515	○		○	○	PT	○
BB-HCM527	○	*	○	○	PTZ	○
BB-HCM5x1	○		○	○	PT	○
BB-HCM58x	○		○	○	PTZ	○
BL-C1	○	*		○		○
BL-C10	○	*		○	PT	○
BL-C111	○			○	PT	○
BL-C131	○			○	PT	○
BL-C20	○	*		○		○
BL-C30	○	*		○	PT	○
<b>Generic JPEG series</b>						
NF282/ 284	○		○	○		○
NP1000/ 1004	○		○	○		○
NP244	○		○	○		○
NS202(A)	○		○	○	PTZ	○
NW484	○		○	○		○
<b>SONY</b>						
SNC-CS10	○	○	○	○		○
SNC-CS11	○	○	○	○		○
SNC-CS50	○	○	○	○		○
SNC-DF40	○	○	○	○		○
SNC-DF50	○	○	○	○		○
SNC-DF70	○	○	○	○		○
SNC-DF80	○	○	○	○		○
SNC-P1	○	○	○	○		○
SNC-P5	○	○	○	○	PTZ	○
SNC-RX530/ 550/ 570	○	○	○	○	PTZ	○
SNC-RZ25	○	○	○	○	PTZ	○
SNC-RZ30	○	*	○	○	PTZ	○
SNC-RZ50	○	○	○	○	PTZ	○
SNC-Z20	○	*	○	○	Z	○
<b>Canon</b>						
VB-C300 series	○			○	PTZ	○
VB-C50 series	○			○	PTZ	○
<b>SANYO</b>						
VCC-P450/ VCC-P470	○	*	○	○		○
VCC-PT490/ PT500	○	*	○	○	PT	○
<b>Arecont</b>						
AV1300M	○	*	○	○		
AV2100M	○	*	○	○		
AV3130	○	*	○	○		

\* Function not supported by the camera.

For latest information about supported camera models, please visit QNAP website at <http://www.qnapsecurity.com>

- **The world's only NVR with NAS features embedded**

- Network Neighborhood (SMB/CIFS)
- FTP server
- Web File Management (HTTP)

### Software specification

<b>Video</b>	
Display Mode	1, 4, Picture in Picture, Sequential mode
Recording Cameras Number	4 (maximum)
Network Camera Support	Panasonic/ Sony/ Canon/ Sanyo/ Arecont * For the information of supported camera models, please visit QNAP website, <a href="http://www.qnapsecurity.com">www.qnapsecurity.com</a>
Compression Format	Motion JPEG/ MPEG 4 (depend on IP Camera)
Video Setting	Resolution, Quality, Frame Rate
E-map	Upload E-map
<b>Recording</b>	
Recording Mode	Continuous, Manual, Schedule, Alarm, Motion, Snapshot
Buffer Storage for Alarm Images (before and post events)	Pre-recording: 300 Seconds/ Post-recording: 300 Seconds (Total 600 Seconds/ 10 Minutes)
Recording Performance	Up to 240 frames at QVGA (320 x 240) or CIF (352 x 240 in NTSC, 352x 288 in PAL)/ Up to 80 frames at VGA (640 x 480) * Real performance varies in different environment
File format	AVI (Recordings can be played by Windows Media Player)
<b>Playback</b>	
Playback Mode	Play, Pause, Stop, Fast forward, Full screen display
Video Search	Search by Date, Time
Video Player	Immediately playback by default video player
Download	Click to download recorded files from web page
<b>Storage</b>	
Disk Mode	Single, RAID 0, RAID 1, JBOD/ Linear (RAID is enabled via QBack-355 box with preference hard disk)
Capacity	Support 1 x 3.5" SATA I/II HDD, Up to 1TB or above, expandable to 2TB through QNAP QBack-355 with preference hard disk.
Services	Web File Manager , FTP , SMB/CIFS
<b>Network</b>	
Support	HTTP, TCP/ IP, SMTP, DHCP, Static IP, DNS, DDNS, FTP, NTP, UPnP
Camera IP address & Port	Allow setting LAN/ WAN IP address of each camera
<b>Utility Software</b>	
QNAP Finder	Discovery and quick setup
<b>Security</b>	
Operation system	Linux embedded, free from PC crash and virus attack
User Management	The right to monitor and play back the recordings of each camera can be separately defined for individual user (up to 32 users)
On-line Users List	Records of users currently logged on and previously logged on to the NVR
Host Access Control	Specify the connections to be allowed and denied to access NVR.
Alert Notification	E-mail, Buzzer, Event logs
UPS	Support APC (USB type of UPS )
Event Log	Detailed record of all events
<b>Client PC Requirement</b> (Suggested system requirement for better video performance)	
CPU	Pentium 4 CPU 2 GHz or higher
Memory	512 MB or above
Operation system	Windows XP or later
Browser	Internet Explorer 6.0 or later
Network interface	10/ 100 Mbps or above
View Resolution	Suggested 1024 x 768 pixel or above
<b>Language Support</b>	
English/ Japanese/ French/ Italian/ German/ Spanish/ Simplified Chinese/ Traditional Chinese	
<b>Certification</b>	
CE, FCC, VCCI, BSMI	

### Hardware specification

HDD	1 x 3.5" SATA I/II HDD, up to 1TB. (the standard system is shipped without HDD)
LAN Ports	1 x Gigabit RJ-45 Ethernet port
LED Indicators	Power, USB, status, LAN, hard disk
USB	3 x USB (For USB storage device for One Touch Auto-Video Backup and UPS device)
Buttons	USB Auto-Video Backup Button, Power Button, Reset Button
Form Factor	Desktop
Dimensions	210(D) x 60(W) x 182 (H) mm
Color Box Shipping Weight	2.5 Kg (Without HDD)
Operation Environment	Temperature: 0~40°C Humidity: 0%~90% R.H.
Power Supply	External power adapter, 36W, 100~240V
Energy-saving Design	HDD Sleep mode Low power consumption (only 14.4W) & low noise
Thermal solution	Heat dissipation by aluminum case
Secure Design	K-Lock Security Slot for Theft Prevention

\* Designs and specifications are subject to change without notice.



## VioStor-101A Network Video Recorder

QNAP VioStor-101A is a powerful 1-bay network surveillance system that works well with the IP cameras of Axis, Canon, Sanyo, and Arecont etc. to provide advanced video surveillance and storage of recording data over the network. The entire system is built on Linux OS with guaranteed reliable system performance and lower power consumption for 24/7 operation. It is less vulnerable to virus attack or hacking compared to Windows-based surveillance solutions. The solution supports intelligent automatic system startup when power resumes after an outage as well as UPS to ensure uninterrupted system services. The VioStor-101A is an ideal solution for power-saving and highly stable surveillance for homes and offices.

### Supported Camera Brands

- ☒ *Axis*
- ☒ *Canon*
- ☒ *Sanyo*
- ☒ *Arecont*

MegaPixel   Giga LAN   MJPEG/MPEG4



Supported camera brands are subject to change without notice. Please contact QNAP for updated information.

## Outstanding Product Features

### Best Hardware Design

#### • Embedded system with lowest power consumption

QNAP NVR products are built on Linux OS which is secure, stable, power-saving, and less liable to PC crash and virus attack. Also, there is no need to install extra software or perimeter devices as PC solutions do. The reliability of system performance is guaranteed. (The power consumption of VioStor-201 is only 14.4W and that of PC-based solution is 250-300W!)

#### • Supports 2 high-speed SATA hard drives

SATA hard drives are faster than IDE hard drives, which enhance the recording and playback performance of QNAP NVR.

#### • Small-sized, easy to deploy

VioStor is compact and occupies little space. It is easy to install and maintain.

### Powerful Surveillance Features

#### • High quality Motion-JPEG and MPEG-4 recording (for particular camera models only)

VioStor supports high quality monitoring, recording, and playback.

#### • All-in-one recording functions:

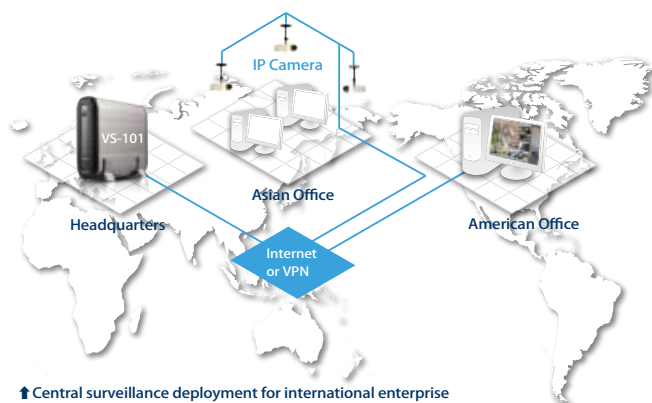
- Continuous/ manual/ schedule recording.
- Alarm recording (by motion detection and sensor triggering).

QNAP VioStor supports versatile recording functions. By manual recording, users can enable recording in urgent situation. VioStor provides schedule recording for users to set up to 15 recording schedules for each camera. Alarm recording is also supported which recording is activated when a moving object is detected or a sensor is triggered.

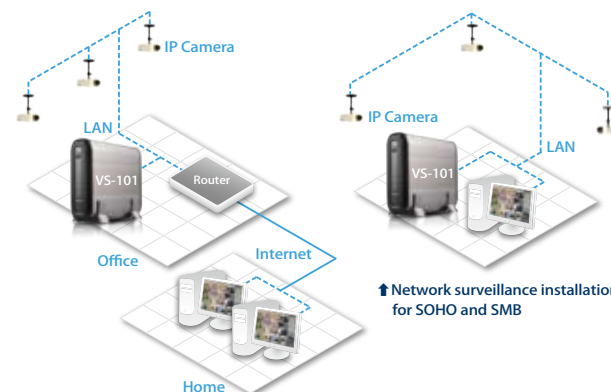
#### • Remote replication

The recording data can be copied to remote QNAP storage devices by remote replication from LAN.

#### • VioStor Network Architecture



↑ Central surveillance deployment for international enterprise



↑ Remote monitoring and playback over the Internet

each camera at maximum. VioStor also provides alarm recording that recording starts automatically when motion detection or camera sensor is triggered. No important events will be missed under the secure monitoring of VioStor!

#### • Variety live video monitoring:

- Single/Quad/Octave/Sequential mode
- Exclusive Picture-in-Picture mode

VioStor is the world's only system that supports picture-in-picture mode. Variety monitoring combinations are also provided. Users can adjust the monitoring modes according to their own demand.

#### • Real-time monitoring everywhere

By web-based monitoring and management interface, you can manage recording, live monitoring and playback video anytime, anywhere.

#### • Smart control of PTZ (Pan, Tilt, Zoom) & speed dome camera by direct clicking on video screen

If the network camera supports PTZ camera, VioStor enables users to click on the PTZ control on the web interface directly to adjust the direction and zooming angle of the camera.

#### • E-map function for easy preview of the camera location

VioStor is the world's only NVR that provides exclusive E-map function. Users can upload the pictures of the location that the cameras are installed. In case of emergency, they can refer to the E-map to indicate the location and adjust the monitoring direction.

#### • Supports video snapshot

VioStor provides real-time monitoring as well as real-time snapshot. Users can take a snapshot of the monitoring screen anytime.

#### • Real-time e-mail notification to user upon alert events

VioStor supports e-mail alert feature that warning e-mails will be sent to the administrator immediately in case of system error or error or emergent events.

#### • Powerful pre-alarm and post-alarm recording

VioStor supports pre-alarm and post-alarm recording, which is used to record additional details before and after an event occurs.

#### • Easy playback searching by date & time and alarm event

VioStor enables searching recording data by date and time, and also by alert events. This reduces the time and enhances the efficiency of searching recording.

#### • Recordings can be easily downloaded to remote computer for playback

VioStor supports complete network-based management interface that users can download recording data via the web and play the files from remote computer. This largely increases the convenience of accessing recording data.

#### • Recordings can be played by Windows Media Player

The file format of VioStor recording data is avi. Users can play the files by popular video playing applications. There is no need to install unique program or convert the files to other formats to view the video.

#### • Flexible adjustment of the length of recording files

VioStor enables users to adjust the length of the recording files, which is more flexible than general NVR that recording length is fixed.

#### • Supports monitoring preset position control

You can view different preset positions of the camera by clicking the number buttons on monitoring page.

➔ E-map preview



#### • Audio recording function (option)

VioStor supports powerful audio recording. When recording, monitoring or playing videos, audio function can be enabled for complete surveillance.

#### ↓ Octave live video monitoring



#### ↓ Picture-in-Picture mode live video monitoring



## High Performance

#### • Video recording frame rate\*:

- Up to 240 frames at QVGA (320x240) or CIF (352x240 in NTSC, 352x288 in PAL)
- Up to 80 frames at VGA (640x480)
- Support mega pixels recording

\* Real performance may vary in different environment.

VioStor provides outstanding recording quality. In purely independent network environment, QVGA or CIF can reach 240 frames/sec.

#### • High-speed Gigabit LAN interface

VioStor is equipped with Gigabit LAN port to largely enhance the network access performance.

## High Reliability and Smart Features

#### • Extra secure data protection by RAID 1 Mirroring

To enhance data security and protection, VioStor provides RAID 1 (mirroring) configuration. Recording data is highly secured and the reading rate is also increased. VioStor also provides hot swap function. When a hard disk fails, the failed disk can be replaced by a new one immediately without shutting down the system, and the recording data can be reserved.

#### • Supports RAID 0, JBOD (Just a Bunch of Disks/ Linear)

In addition to RAID 1 (mirroring) function, VioStor supports RAID 0 and JBOD configurations for larger storage capacity and higher reading and writing performance.

#### • Intelligent automatic system startup when power resumes after power outage

VioStor supports intelligent power-on support. When enabled, the system can turn on automatically when power resumes after power outage.

#### • Supports UPS (Uninterruptible Power Supply) for 24x7 service

VioStor supports UPS to enable stable and continuous recording 24x7. With UPS, the system can function normally in case of power outage or unstable power supply.

#### • Convenient video backup to external USB storage by one touch auto video backup button

VioStor supports exclusive USB auto video backup button. By pressing the button once, all recording data on VioStor will be copied to external USB storage device immediately.

#### • Detailed record of all events

VioStor provides detailed event logs covering system warning, hard disk error, network disconnection, and UPS status etc. for users to maintain and manage VioStor. The logs can be classified to all events, warning & errors, and errors for quick searching.

\* Single, RAID 0, RAID 1, JBOD/ Linear (RAID is enabled via QBack-35S box with preference hard disk).

## Powerful Network Services

- **Powerful authority management.** The right to monitor and play back the recordings of each camera can be separately defined for individual user

VioStor enables administrator to configure monitoring and playback authority of specified cameras for different users. The authority can be set for up to 32 users. Different monitoring and playback rights can be assigned for individual user.

- **Provide on-line user list**

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

- **Powerful host access control**

Specify the connections to be allowed and denied to access NVR.

- **Built-in NTP server.** Date and time of the network cameras are synchronized with this NVR

VioStor has built-in NTP server feature. All the network cameras connected to the VioStor can synchronize the time settings with VioStor. Users do not need to establish another NTP server or adjust the time of the cameras one by one.

## Functions supported by QNAP VioStor-101A corresponding to the IP camera models

	MJPEG	MPEG4	Motion Detection	Sensor-Triggered Alarm	PTZ	Audio
<b>AXIS</b>						
206	○	*	○			
206M	○	*	○			○
207/ 207W	○		○	○		○
207M/ 207MW	○		○	○		○
209FD-R	○		○			
210	○		○	○		
210A/ 211A	○		○	○		○
211M	○		○	○		○
212PTZ	○		○	○	PTZ	○
213PTZ	○		○	○	PTZ	○
214/ 215PTZ	○		○	○	PTZ	○
216FD	○		○	○		○
216MF-D(-V)	○		○	○		○
221	○		○	○		
223M	○		○	○		○
225FD	○		○	○		○
231/ 232D	○		○	○	PTZ	○
233D	○		○	○	PTZ	○
241Q	○		○	○		○
241QA	○		○	○		○
241S	○		○	○		○
241SA	○		○	○		○
243SA	○		○	○		○
Axis Generic(MJPEG)	○		○	○		
<b>Canon</b>						
VB-C300 series	○			○	PTZ	○
VB-C50 series	○			○	PTZ	○
<b>SANYO</b>						
VCC-P450/ VCC-P470	○	*	○	○		○
VCC-PT490/ PT500	○	*	○	○	PTZ	○
<b>Arecont</b>						
AV1300M	○	*	○	○		
AV2100M	○	*	○	○		
AV3130	○	*	○	○		

\* Function not supported by the camera.

For latest information about supported camera models, please visit QNAP website at <http://www.qnapsecurity.com>

- **The world's only NVR with NAS features embedded**

- Network Neighborhood (SMB/CIFS)
- FTP server
- Web File Management (HTTP)

## Software specification

<b>Video</b>	
Display Mode	1, 4, Picture in Picture, Sequential mode
Recording Cameras Number	4 (maximum)
Network Camera Support	Panasonic/ Sony/ Canon/ Sanyo/ Arecont * For the information of supported camera models, please visit QNAP website, <a href="http://www.qnapsecurity.com">www.qnapsecurity.com</a>
Compression Format	Motion JPEG/ MPEG 4 (depend on IP Camera)
Video Setting	Resolution, Quality, Frame Rate
E-map	Upload E-map
<b>Recording</b>	
Recording Mode	Continuous, Manual, Schedule, Alarm, Motion, Snapshot
Buffer Storage for Alarm Images (before and post events)	Pre-recording: 300 Seconds/ Post-recording: 300 Seconds (Total 600 Seconds/ 10 Minutes)
Recording Performance	Up to 240 frames at QVGA (320 x 240) or CIF (352 x 240 in NTSC, 352x 288 in PAL)/ Up to 80 frames at VGA (640 x 480) * Real performance varies in different environment
File format	AVI (Recordings can be played by Windows Media Player)
<b>Playback</b>	
Playback Mode	Play, Pause, Stop, Fast forward, Full screen display
Video Search	Search by Date, Time
Video Player	Immediately playback by default video player
Download	Click to download recorded files from web page
<b>Storage</b>	
Disk Mode	Single, RAID 0, RAID 1, JBOD/ Linear (RAID is enabled via QBack-355 box with preference hard disk)
Capacity	Support 1 x 3.5" SATA I/II HDD, Up to 1TB or above, expandable to 2TB through QNAP QBack-355 with preference hard disk.
Services	Web File Manager , FTP , SMB/CIFS
<b>Network</b>	
Support	HTTP, TCP/ IP, SMTP, DHCP, Static IP, DNS, DDNS, FTP, NTP, UPnP
Camera IP address & Port	Allow setting LAN/ WAN IP address of each camera
<b>Utility Software</b>	
QNAP Finder	Discovery and quick setup
<b>Security</b>	
Operation system	Linux embedded, free from PC crash and virus attack
User Management	The right to monitor and play back the recordings of each camera can be separately defined for individual user (up to 32 users)
On-line Users List	Records of users currently logged on and previously logged on to the NVR
Host Access Control	Specify the connections to be allowed and denied to access NVR.
Alert Notification	E-mail, Buzzer, Event logs
UPS	Support APC (USB type of UPS )
Event Log	Detailed record of all events
<b>Client PC Requirement</b>	(Suggested system requirement for better video performance)
CPU	Pentium 4 CPU 2 GHz or higher
Memory	512 MB or above
Operation system	Windows XP or later
Browser	Internet Explorer 6.0 or later
Network interface	10/ 100 Mbps or above
View Resolution	Suggested 1024 x 768 pixel or above
<b>Language Support</b>	
English/ Japanese/ French/ Italian/ German/ Spanish/ Simplified Chinese/ Traditional Chinese	
<b>Certification</b>	
CE, FCC, VCCI, BSMI	

## Hardware specification

<b>HDD</b>	1 x 3.5" SATA I/II HDD, up to 1TB. (the standard system is shipped without HDD)
<b>LAN Ports</b>	1 x Gigabit RJ-45 Ethernet port
<b>LED Indicators</b>	Power, USB, status, LAN, hard disk
<b>USB</b>	3 x USB (For USB storage device for One Touch Auto-Video Backup and UPS device)
<b>Buttons</b>	USB Auto-Video Backup Button, Power Button, Reset Button
<b>Form Factor</b>	Desktop
<b>Dimensions</b>	210(D) x 60(W) x 182 (H) mm
<b>Color Box Shipping Weight</b>	2.5 Kg (Without HDD)
<b>Operation Environment</b>	Temperature: 0~40°C Humidity: 0%~90% R.H.
<b>Power Supply</b>	External power adapter, 36W, 100~240V
<b>Energy-saving Design</b>	HDD Sleep mode Low power consumption (only 14.4W) & low noise
<b>Thermal solution</b>	Heat dissipation by aluminum case
<b>Secure Design</b>	K-Lock Security Slot for Theft Prevention

\* Designs and specifications are subject to change without notice.

## VioStor-101V Network Video Recorder

QNAP VioStor-101V is the best network surveillance partner with the IP cameras developed by Vivotek, D-Link, Arecont, GANZ, and Level-One etc. It is a Linux-embedded network surveillance system with compact design, large storage capacity, and powerful monitoring and recording functions. In the size of just a shoe box, the system comes with versatile advanced functions, including schedule recording, motion-triggered recording, pre-alarm and post-alarm recording, smart control of PTZ cameras etc. The system is easy to install and even novice can set up the entire system in 6 simple steps!

### Supported Camera Brands

- ✓ *Vivotek*
- ✓ *D-Link*
- ✓ *Arecont*
- ✓ *GANZ*
- ✓ *Level-One*

MegaPixel

Giga LAN

MJPEG/MPEG4

Supported camera brands are subject to change without notice. Please contact QNAP for updated information.

## Outstanding Product Features

### Best Hardware Design

#### • Embedded system with lowest power consumption

QNAP NVR products are built on Linux OS which is secure, stable, power-saving, and less liable to PC crash and virus attack. Also, there is no need to install extra software or perimeter devices as PC solutions do. The reliability of system performance is guaranteed. (The power consumption of VioStor-201 is only 14.4W and that of PC-based solution is 250-300W!)

#### • Supports 2 high-speed SATA hard drives

SATA hard drives are faster than IDE hard drives, which enhance the recording and playback performance of QNAP NVR.

#### • Small-sized, easy to deploy

VioStor is compact and occupies little space. It is easy to install and maintain.

### Powerful Surveillance Features

#### • High quality Motion-JPEG and MPEG-4 recording (for particular camera models only)

VioStor supports high quality monitoring, recording, and playback.

#### • All-in-one recording functions:

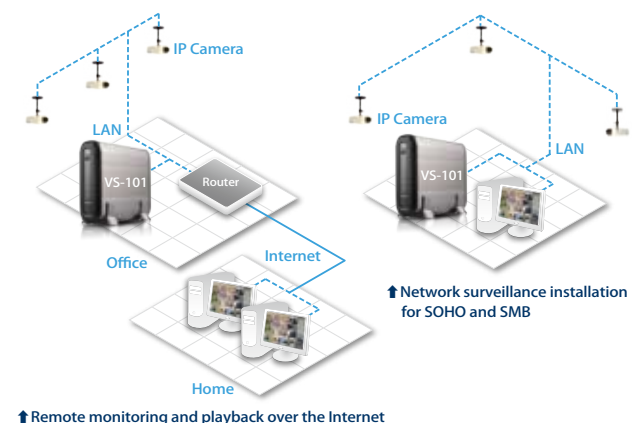
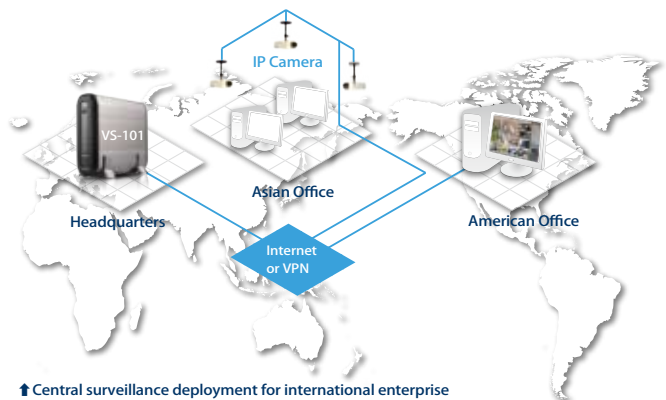
- Continuous/ manual/ schedule recording.
- Alarm recording (by motion detection and sensor triggering).

QNAP VioStor supports versatile recording functions. By manual recording, users can enable recording in urgent situation. VioStor provides schedule recording for users to set up to 15 recording schedules for each camera. Alarm recording is also supported which recording is activated when a moving object is detected or a sensor is triggered.

#### • Remote replication

The recording data can be copied to remote QNAP storage devices by remote replication from LAN.

#### • VioStor Network Architecture





each camera at maximum. VioStor also provides alarm recording that recording starts automatically when motion detection or camera sensor is triggered. No important events will be missed under the secure monitoring of VioStor!

## • Variety live video monitoring:

- Single/Quad/Octave/Sequential mode
- Exclusive Picture-in-Picture mode

VioStor is the world's only system that supports picture-in-picture mode. Variety monitoring combinations are also provided. Users can adjust the monitoring modes according to their own demand.

## • Real-time monitoring everywhere

By web-based monitoring and management interface, you can manage recording, live monitoring and playback video anytime, anywhere.

## • Smart control of PTZ (Pan, Tilt, Zoom) & speed dome camera by direct clicking on video screen

If the network camera supports PTZ camera, VioStor enables users to click on the PTZ control on the web interface directly to adjust the direction and zooming angle of the camera.

## • E-map function for easy preview of the camera location

VioStor is the world's only NVR that provides exclusive E-map function. Users can upload the pictures of the location that the cameras are installed. In case of emergency, they can refer to the E-map to indicate the location and adjust the monitoring direction.

## • Supports video snapshot

VioStor provides real-time monitoring as well as real-time snapshot. Users can take a snapshot of the monitoring screen anytime.

## • Real-time e-mail notification to user upon alert events

VioStor supports e-mail alert feature that warning e-mails will be sent to the administrator immediately in case of system error or error or emergent events.

## • Powerful pre-alarm and post-alarm recording

VioStor supports pre-alarm and post-alarm recording, which is used to record additional details before and after an event occurs.

## • Easy playback searching by date & time and alarm event

VioStor enables searching recording data by date and time, and also by alert events. This reduces the time and enhances the efficiency of searching recording.

## • Recordings can be easily downloaded to remote computer for playback

VioStor supports complete network-based management interface that users can download recording data via the web and play the files from remote computer. This largely increases the convenience of accessing recording data.

## • Recordings can be played by Windows Media Player

The file format of VioStor recording data is avi. Users can play the files by popular video playing applications. There is no need to install unique program or convert the files to other formats to view the video.

## • Flexible adjustment of the length of recording files

VioStor enables users to adjust the length of the recording files, which is more flexible than general NVR that recording length is fixed.

## • Supports monitoring preset position control

You can view different preset positions of the camera by clicking the number buttons on monitoring page.

→ E-map preview



## • Audio recording function (option)

VioStor supports powerful audio recording. When recording, monitoring or playing videos, audio function can be enabled for complete surveillance.

↓ Octave live video monitoring

↓ Picture-in-Picture mode live video monitoring



## High Performance

### • Video recording frame rate\*:

- Up to 240 frames at QVGA (320x240) or CIF (352x240 in NTSC, 352x288 in PAL)
- Up to 80 frames at VGA (640x480)
- Support mega pixels recording

\* Real performance may vary in different environment.

VioStor provides outstanding recording quality. In purely independent network environment, QVGA or CIF can reach 240 frames/sec.

### • High-speed Gigabit LAN interface

VioStor is equipped with Gigabit LAN port to largely enhance the network access performance.

## High Reliability and Smart Features

### • Extra secure data protection by RAID 1 Mirroring

To enhance data security and protection, VioStor provides RAID 1 (mirroring) configuration. Recording data is highly secured and the reading rate is also increased. VioStor also provides hot swap function. When a hard disk fails, the failed disk can be replaced by a new one immediately without shutting down the system, and the recording data can be reserved.

### • Supports RAID 0, JBOD (Just a Bunch of Disks/ Linear)

In addition to RAID 1 (mirroring) function, VioStor supports RAID 0 and JBOD configurations for larger storage capacity and higher reading and writing performance.

### • Intelligent automatic system startup when power resumes after power outage

VioStor supports intelligent power-on support. When enabled, the system can turn on automatically when power resumes after power outage.

### • Supports UPS (Uninterruptible Power Supply) for 24x7 service

VioStor supports UPS to enable stable and continuous recording 24x7. With UPS, the system can function normally in case of power outage or unstable power supply.

### • Convenient video backup to external USB storage by one touch auto video backup button

VioStor supports exclusive USB auto video backup button. By pressing the button once, all recording data on VioStor will be copied to external USB storage device immediately.

### • Detailed record of all events

VioStor provides detailed event logs covering system warning, hard disk error, network disconnection, and UPS status etc. for users to maintain and manage VioStor. The logs can be classified to all events, warning & errors, and errors for quick searching.

\* Single, RAID 0, RAID 1, JBOD/ Linear (RAID is enabled via QBack-35S box with preference hard disk).

## Powerful Network Services

- **Powerful authority management.** The right to monitor and play back the recordings of each camera can be separately defined for individual user

VioStor enables administrator to configure monitoring and playback authority of specified cameras for different users. The authority can be set for up to 32 users. Different monitoring and playback rights can be assigned for individual user.

- **Provide on-line user list**

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

- **Powerful host access control**

Specify the connections to be allowed and denied to access NVR.

- **Built-in NTP server. Date and time of the network cameras are synchronized with this NVR**

VioStor has built-in NTP server feature. All the network cameras connected to the VioStor can synchronize the time settings with VioStor. Users do not need to establish another NTP server or adjust the time of the cameras one by one.

### Functions supported by QNAP VioStor-101V corresponding to the IP camera models

	MJPEG	MPEG4	Motion Detection	Sensor-Triggered Alarm	PTZ	Audio
<b>VivoTek</b>						
IP3112 /IP3122	*	○	○	○		
IP3111 /IP3121	*	○	○	○		
IP3132	*	○	○	○		
IP3135/ 3137	*	○	○			
PT3112 /PT3122	*	○	○	○	PT	○
PT3117 /PT3127	*	○	○	○	PT	○
6000series	*					○
IP6112/6122	○	○	○	○		○
IP6117/6127	○	○	○	○		○
FD6112V/6122V	○	○	○	○		○
PZ6112/6122	○	○	○	○	PTZ	○
PZ6114/6124	○	○	○	○	PTZ	○
FD7131	○	○	○	○		○
IP7131/ 7132	*	○	○	○		○
IP7135/ 7137	*	○	○	○		○
PT7135/ 7137	○	○	○		PT	○
IP7138/ 7139	○	○	○	○		○
IP7151/ 7152	○	○	○	○		○
SD6112V/6122V	○	○	○	○	PTZ	○
V57100	○	○	○	○		○
<b>D-link</b>						
DCS-2120	○	*	○	○		○
DCS-3220/ DCS-3220(G)	*	○	○	○		○
DCS-3420	*	○	○	○		○
DCS-5220	*	○	○	○	PT	○
DCS-5300/ DCS-5300G	*	○	○	○	PT	○
DCS-6620/ DCS-6620G	○	○	○	○	PTZ	○
<b>Arecont</b>						
AV1300M	○	*	○	○		
AV2100M	○	*	○	○		
AV3130	○	*	○	○		
<b>GANZ</b>						
ZN-D2024	○	○	○	○		○
ZN-PT304L	○	○	○		PT	○
ZN-PT304WL	○	○	○		PT	○
ZN-YH305		○	○	○		○
ZV-5306	○	○	○	○		○
<b>LevelOne</b>						
FCS-1010/ WCS-2010	*	○	○	○	PT	○
FCS-1030/ WCS-2030	*	○	○			○
FCS-1040/ WCS-2040	○	○	○	○	PTZ	○
FCS-1060/ WCS-2060	*	○	○		PT	○
FCS-1070/ WCS-2070	○	○	○	○		○
FCS-3000	○	○	○	○		○
FCS-3021	○	○	○	○		○

\* Function not supported by the camera.

For latest information about supported camera models, please visit QNAP website at <http://www.qnapsecurity.com>

- **The world's only NVR with NAS features embedded**

- Network Neighborhood (SMB/CIFS)
- FTP server
- Web File Management (HTTP)

### Software specification

<b>Video</b>	
Display Mode	1, 4, Picture in Picture, Sequential mode
Recording Cameras Number	4 (maximum)
Network Camera Support	Panasonic/ Sony/ Canon/ Sanyo/ Arecont * For the information of supported camera models, please visit QNAP website, <a href="http://www.qnapsecurity.com">www.qnapsecurity.com</a>
Compression Format	Motion JPEG/ MPEG 4 (depend on IP Camera)
Video Setting	Resolution, Quality, Frame Rate
E-map	Upload E-map
<b>Recording</b>	
Recording Mode	Continuous, Manual, Schedule, Alarm, Motion, Snapshot
Buffer Storage for Alarm Images (before and post events)	Pre-recording: 300 Seconds/ Post-recording: 300 Seconds (Total 600 Seconds/ 10 Minutes)
Recording Performance	Up to 240 frames at QVGA (320 x 240) or CIF (352 x 240 in NTSC, 352 x 288 in PAL)/ Up to 80 frames at VGA (640 x 480) * Real performance varies in different environment
File format	AVI (Recordings can be played by Windows Media Player)
<b>Playback</b>	
Playback Mode	Play, Pause, Stop, Fast forward, Full screen display
Video Search	Search by Date, Time
Video Player	Immediately playback by default video player
Download	Click to download recorded files from web page
<b>Storage</b>	
Disk Mode	Single, RAID 0, RAID 1, JBOD/ Linear (RAID is enabled via QBack-35S box with preference hard disk)
Capacity	Support 1 x 3.5" SATA I/II HDD, Up to 1TB or above, expandable to 2TB through QNAP QBack-35S with preference hard disk.
Services	Web File Manager, FTP, SMB/CIFS
<b>Network</b>	
Support	HTTP, TCP/ IP, SMTP, DHCP, Static IP, DNS, DDNS, FTP, NTP, UPnP
Camera IP address & Port	Allow setting LAN/ WAN IP address of each camera
<b>Utility Software</b>	
QNAP Finder	Discovery and quick setup
<b>Security</b>	
Operation system	Linux embedded, free from PC crash and virus attack
User Management	The right to monitor and play back the recordings of each camera can be separately defined for individual user (up to 32 users)
On-line Users List	Records of users currently logged on and previously logged on to the NVR
Host Access Control	Specify the connections to be allowed and denied to access NVR.
Alert Notification	E-mail, Buzzer, Event logs
UPS	Support APC (USB type of UPS)
Event Log	Detailed record of all events
<b>Client PC Requirement</b> (Suggested system requirement for better video performance)	
CPU	Pentium 4 CPU 2 GHz or higher
Memory	512 MB or above
Operation system	Windows XP or later
Browser	Internet Explorer 6.0 or later
Network interface	10/ 100 Mbps or above
View Resolution	Suggested 1024 x 768 pixel or above
<b>Language Support</b>	
English/ Japanese/ French/ Italian/ German/ Spanish/ Simplified Chinese/ Traditional Chinese	
<b>Certification</b>	
CE, FCC, VCCI, BSMI	

### Hardware specification

HDD	1 x 3.5" SATA I/II HDD, up to 1TB. (the standard system is shipped without HDD)
LAN Ports	1 x Gigabit RJ-45 Ethernet port
LED Indicators	Power, USB, status, LAN, hard disk
USB	3 x USB (For USB storage device for One Touch Auto-Video Backup and UPS device)
Buttons	USB Auto-Video Backup Button, Power Button, Reset Button
Form Factor	Desktop
Dimensions	210(D) x 60(W) x 182 (H) mm
Color Box Shipping Weight	2.5 Kg (Without HDD)
Operation Environment	Temperature: 0~40°C Humidity: 0%~90% R.H.
Power Supply	External power adapter, 36W, 100~240V
Energy-saving Design	HDD Sleep mode Low power consumption (only 14.4W) & low noise
Thermal solution	Heat dissipation by aluminum case
Secure Design	K-Lock Security Slot for Theft Prevention

\* Designs and specifications are subject to change without notice.

## **NVR-201** Network Video Recorder

### Hottest New Product!

QNAP NVR-201 is a powerful 2-bay network surveillance system that works well with the IP cameras of Panasonic, AXIS, IPUX, Linksys, D-Link, Vivotek, and LevelOne. to provide advanced video surveillance and storage of recording data over the network. The entire system is built on Linux OS with guaranteed reliable system performance and lower power consumption for 24/7 operation. It is less vulnerable to virus attack or hacking compared to Windows-based surveillance solutions. The solution supports intelligent automatic system startup when power resumes after an outage as well as UPS to ensure uninterrupted system services. The NVR-201 is an ideal solution for power-saving and highly stable surveillance for homes and offices.

## Secure Your Life, Secure Your Property.

Giga LAN

MJPEG/MPEG4

Supported camera brands are subject to change without notice. Please contact QNAP for updated information.



## Outstanding Product Features

### Best Hardware Design

- **Embedded system with lowest power consumption**

QNAP NVR products are built on Linux OS which is secure, stable, power-saving, and less liable to PC crash and virus attack. Also, there is no need to install extra software or perimeter devices as PC solutions do. The reliability of system performance is guaranteed. (The power consumption of NVR-201 is only 28W and that of PC-based solution is 250-300W!)

- **Supports 2 high-speed SATA hard drives**

SATA hard drives are faster than IDE hard drives, which enhance the recording and playback performance of QNAP NVR.

- **Small-sized, easy to deploy**

NVR is compact and occupies little space. It is easy to install and maintain.

### Powerful Surveillance Features

- **High quality Motion-JPEG and MPEG-4 recording (for particular camera models only)**

NVR supports high quality monitoring, recording, and playback

- **All-in-one recording functions:**

- Continuous/ manual/ schedule recording.
- Alarm recording (by motion detection and sensor triggering).

QNAP NVR supports versatile recording functions. By manual recording, users can enable recording in urgent situation. NVR provides schedule recording for users to set up to 15 recording schedules for each camera. Alarm recording is also supported which recording is activated when a moving object is detected or a sensor is triggered

Functions supported by QNAP NVR-201 corresponding to the IP camera models

	Motion JPEG	MPEG4	Audio *1	Motion Detection *2	Sensor-triggered Alarm *3	PTZ *4
<b>Panasonic</b>						
BL-C1/ BL-C20	○		1-way	○	○	
BL-C11/ BL-C10/ BL-C111/ BL-C131/ BL-C30/ BL-C31	○		1-way	○	○	PT
<b>AXIS</b>						
AXIS 206	○					
AXIS 207	○			○	○	
AXIS 207W	○		1-way	○	○	
<b>IPUX</b>						
ICS 1013/ ICS 1003	○		2-way	○		
<b>Linksys</b>						
WVC54GCA	○					
<b>D-Link</b>						
DCS-900	○					
DCS-2120		○		○		
DCS-3220(G)/ DCS-3420		○		○	○	
DCS-5220		○		○		PT
DCS-5300(G)		○		○	○	PT
DCS-6620(G)	○	○		○	○	PT
<b>Vivotek</b>						
IP3112/ IP3122/ IP3111/ IP3121/ IP3132		○		○	○	
IP3135/ IP3137		○		○		
PT3112/ PT3122/ PT3117/ PT3127		○		○	○	PT
IP7135/ IP7137		○		○		
IP7131/ IP7132		○		○		
PT7135/ PT7137		○		○		PT
<b>LevelOne</b>						
FCS-1010/ WCS-2010		○		○	○	PT
FCS-1030/ WCS-2030		○		○		
FCS-1040/ WCS-2040	○	○		○	○	PTZ
FCS-1060/ WCS-2060		○		○		PT
FCS-1070/ WCS-2070	○	○		○	○	
FCS-3000/ FCS-3021	○	○		○	○	

For latest information about supported camera models, please visit QNAP website at <http://www.qnapsecurity.com>



# QNAP NVR-201

*Secure Life, Secure Property*



## Innovative Network Surveillance System for SOHO and Home

### ▶ The new era of network surveillance technology is coming

Traditional analog surveillance system lacks of remote management and takes high installation cost since video monitoring, recording, and maintenance can only be done locally over the physical wiring. Due to the popularity of broadband environment, the QNAP NVR-201 network surveillance system has broken through the limitations of traditional surveillance. The live videos of the IP cameras can be monitored and recorded. It is an ideal solution for various applications, including remote monitoring of childcare situation, elder care, home and office security, and long-term environmental monitoring that provides tremendous peace of mind.

The unrivaled QNAP NVR technology realized the true boundless surveillance over the network. The NVR-201 can be easily set up in an Ethernet-ready environment without any complicated wiring. The system settings can be managed via the IE browser anytime, anywhere. All the professional surveillance software functions are embedded in the NVR without the need of installing extra software. The NVR supports smart PTZ camera control. Users can simply click on the graphic control panel to zoom in or zoom out the PTZ camera, or move the monitoring direction. Preset positions can also be defined for the PTZ camera by the NVR for intelligent monitoring. The recordings can be accessed remotely via web, FTP, or My Network Places with access right control. The NVR-201 provides a user-friendly web interface for straightforward management and allows even novice to use the system easily.

The NVR-201 provides versatile professional recording modes: continuous recording, motion-detection recording, event-triggered recording, schedule recording, and manual recording. Advanced features such as sensor-triggered recording, schedule recording upon different alarm modes, and two-way audio recording are offered for different deployment applications, efficient storage capacity usage, and quick recording data search.

The embedded and energy-saving design of QNAP NVR-201 enables non-stop system operation 24x7. The power consumption of the NVR is less than 28W, which is more power-saving than an energy-saving bulb! Moreover, the NVR-201 is equipped with a low-noise fan for quiet operation. The compact server can be installed anywhere at home or office like other ordinary electric home appliances. It is the new generation digital surveillance solution for modern home and small office.

### ▶ Application

#### Live Monitoring, Recording, and Video Playback over the Internet Anytime, Anywhere

- ✓ High quality video recording in MPEG4 and Motion JPEG format
- ✓ Real-time monitoring and recording for up to 30 frames/sec per channel!!!
- ✓ Live 2-way audio supported for monitoring and voice broadcasting \*1
- ✓ All sorts of alarms supported (sensor-triggered, motion detection, etc.) \*2\*3
- ✓ Easy installation and management from remote locations
- ✓ Standalone system, no extra PC or utility required
- ✓ Stable, energy-saving, can operate 24x7 non-stop
- ✓ Small-sized, easy to deploy.





## Live real-time monitoring



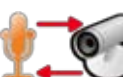
### Electronic map for easy preview

Electronic map (E-map) can be uploaded for ease of identification of monitoring locations.



### Variety live video monitoring

Electronic map (E-map) can be uploaded for ease of identification of monitoring locations.



### Supports live 2-way audio

Real-time audio and video monitoring, voice broadcasting. \*1



### Smart PTZ camera control by direct mouse clicking

You can zoom in/ out, control camera's direction, and set hotspot monitoring positions by the intuitive control panel. \*4

## Instant event alert

### Instant on-screen alert and e-mail alert



- Instant alarm signal will appear on the monitoring screen to alert users.



- Alert e-mails will be sent to administrator immediately when a system error or emergent event takes place.

### Various alarm type to capture



#### • Motion detection

Recording is triggered when a moving object is detected by the camera. \*2



#### • Sensor-triggered alarm

The NVR can receive any alarm signals from the cameras specified by the users, e.g., when a door or window is opened, or smoke is detected, recording will be activated automatically. \*3



#### • Alarm schedule recording

Different recording modes can be defined for different time periods, e.g. alarm recording at daytime and continuous recording at night time.

## Most complete recording functions



### All-in-one recording modes

- Continuous/ Schedule/ Manual recording.
- Alarm schedule recording (by motion detected or sensor triggered) \*2\*3
- Synchronized audio recording. \*1



With scheduled recording, users can set different recording schedules for different cameras. Up to 15 schedules are supported for each camera. Manual recording allows users to activate recording in any necessary conditions. The NVR-201 also provides alarm recording that starts automatically when motion detection or camera sensor is triggered.



### Standard video recording format with Time Stamp

The recordings are saved in AVI format (codec provided) for easy playing by Windows Media Player. Time stamp on the video is provided for convenient data search and can be used as legal evidence.



### Flexible adjustment of the length of recording files

User can adjust the length of the recording files flexibly (1-15 minutes).

## Powerful system functions



UPS (Uninterruptible Power Supply) supported for continuous services against interruption or risk of data crash caused by power outage.



Video data can be exported to an external storage device via the one-touch copy button for ease of archiving. \*It is suggested to use USB backup devices, e.g. QBack-25S, QBack-35S.



When the power resumes after a power outage, PC-based recording solution will not be started up automatically and recording is stopped. QNAP NVR supports automatic system startup and recording is enabled immediately after power resumes. The system maintenance cost is largely reduced.



Supports advanced RAID1 mirroring for ultra secure data protection.

## Trouble-free setup & maintenance



UPS (Uninterruptible Power Supply) supported for continuous services against interruption or risk of data crash caused by power outage.



Video data can be exported to an external storage device via the one-touch copy button for ease of archiving. \*It is suggested to use USB backup devices, e.g. QBack-25S, QBack-35S.

## Energy-saving design



The normal power consumption of the NVR in operation is less than 28W (less than the power consumption of an energy-saving light bulb).

### Low Power Consumption

Power Consumption  
NVR-201 (In operation) 28 W  
Laptop 65 W  
Desktop PC 350 W



The low-noise fan design allows long-term and quiet operation at home or in office.

## NVR-101 Network Video Recorder

### Hottest New Product!

QNAP VioStor-101A is a powerful 2-bay network surveillance system that works well with the IP cameras of Axis, Canon, Sanyo, and Arecont etc. to provide advanced video surveillance and storage of recording data over the network. The entire system is built on Linux OS with guaranteed reliable system performance and lower power consumption for 24/7 operation. It is less vulnerable to virus attack or hacking compared to Windows-based surveillance solutions. The solution supports intelligent automatic system startup when power resumes after an outage as well as UPS to ensure uninterrupted system services. The VioStor-101A is an ideal solution for power-saving and highly stable surveillance for homes and offices.

## Secure Your Life, Secure Your Property.

Giga LAN

MJPEG/MPEG4



## Outstanding Product Features

### Best Hardware Design

- Embedded system with lowest power consumption**

QNAP NVR products are built on Linux OS which is secure, stable, power-saving, and less liable to PC crash and virus attack. Also, there is no need to install extra software or perimeter devices as PC solutions do. The reliability of system performance is guaranteed. (The power consumption of NVR-101 is only 18W and that of PC-based solution is 250-300W!)

- Supports 1 high-speed SATA hard drives**

SATA hard drives are faster than IDE hard drives, which enhance the recording and playback performance of QNAP NVR.

- Small-sized, easy to deploy**

VioStor is compact and occupies little space. It is easy to install and maintain.

### Powerful Surveillance Features

- High quality Motion-JPEG and MPEG-4 recording (for particular camera models only)**

NVR supports high quality monitoring, recording, and playback

- All-in-one recording functions:**

- Continuous/ manual/ schedule recording.
- Alarm recording (by motion detection and sensor triggering).

QNAP NVR supports versatile recording functions. By manual recording, users can enable recording in urgent situation. NVR provides schedule recording for users to set up to 15 recording schedules for each camera. Alarm recording is also supported which recording is activated when a moving object is detected or a sensor is triggered

Functions supported by QNAP NVR-101 corresponding to the IP camera models

	Motion JPEG	MPEG4	Audio *1	Motion Detection *2	Sensor-triggered Alarm *3	PTZ *4
<b>Panasonic</b>						
BL-C1/ BL-C20	○		1-way	○	○	
BL-C11/ BL-C10/ BL-C111/ BL-C131/ BL-C30/ BL-C31	○		1-way	○	○	PT
<b>AXIS</b>						
AXIS 206	○					
AXIS 207	○			○	○	
AXIS 207W	○		1-way	○	○	
<b>IPUX</b>						
ICS 1013/ ICS 1003	○		2-way	○		
<b>Linksys</b>						
WVC54GCA	○					
<b>D-Link</b>						
DCS-900	○					
DCS-2120		○		○		
DCS-3220(G)/ DCS-3420		○		○	○	
DCS-5220		○		○		PT
DCS-5300(G)		○		○	○	PT
DCS-6620(G)	○	○		○	○	PT
<b>Vivitek</b>						
IP3112/ IP3122/ IP3111/ IP3121/ IP3132		○		○	○	
IP3135/ IP3137		○		○		
PT3112/ PT3122/ PT3117/ PT3127		○		○	○	PT
IP7135/ IP7137		○		○		
IP7131/ IP7132		○		○		
PT7135/ PT7137		○		○		PT
<b>LevelOne</b>						
FCS-1010/ WCS-2010		○		○	○	PT
FCS-1030/ WCS-2030		○		○		
FCS-1040/ WCS-2040	○	○		○	○	PTZ
FCS-1060/ WCS-2060		○		○		PT
FCS-1070/ WCS-2070	○	○		○	○	
FCS-3000/ FCS-3021	○	○		○	○	

For latest information about supported camera models, please visit QNAP website at <http://www.qnapsecurity.com>

## QNAP NVR-101

*Secure Life, Secure Property*



### Innovative Network Surveillance System for SOHO and Home

## ▶ The new era of network surveillance technology is coming

Traditional analog surveillance system lacks of remote management and takes high installation cost since video monitoring, recording, and maintenance can only be done locally over the physical wiring. Due to the popularity of broadband environment, the QNAP NVR-101 network surveillance system has broken through the limitations of traditional surveillance. The live videos of the IP cameras can be monitored and recorded. It is an ideal solution for various applications, including remote monitoring of childcare situation, elder care, home and office security, and long-term environmental monitoring that provides tremendous peace of mind.

The unrivaled QNAP NVR technology realized the true boundless surveillance over the network. The NVR-101 can be easily set up in an Ethernet-ready environment without any complicated wiring. The system settings can be managed via the IE browser anytime, anywhere. All the professional surveillance software functions are embedded in the NVR without the need of installing extra software. The NVR supports smart PTZ camera control. Users can simply click on the graphic control panel to zoom in or zoom out the PTZ camera, or move the monitoring direction. Preset positions can also be defined for the PTZ camera by the NVR for intelligent monitoring. The recordings can be accessed remotely via web, FTP, or My Network Places with access right control. The NVR-101 provides a user-friendly web interface for straightforward management and allows even novice to use the system easily.

The NVR-101 provides versatile professional recording modes: continuous recording, motion-detection recording, event-triggered recording, schedule recording, and manual recording. Advanced features such as sensor-triggered recording, schedule recording upon different alarm modes, and two-way audio recording are offered for different deployment applications, efficient storage capacity usage, and quick recording data search.

The embedded and energy-saving design of QNAP NVR-101 enables non-stop system operation 24x7. The power consumption of the NVR is less than 18W, which is more power-saving than an energy-saving bulb! Moreover, the NVR-101 is equipped with a low-noise fan for quiet operation. The compact server can be installed anywhere at home or office like other ordinary electric home appliances. It is the new generation digital surveillance solution for modern home and small office.

## ▶ Application

### Live Monitoring, Recording, and Video Playback over the Internet Anytime, Anywhere

- ✓ High quality video recording in MPEG4 and Motion JPEG format
- ✓ Real-time monitoring and recording for up to 30 frames/sec per channel!!!!
- ✓ Live 2-way audio supported for monitoring and voice broadcasting\*1
- ✓ All sorts of alarms supported (sensor-triggered, motion detection, etc.) \*2\*3
- ✓ Easy installation and management from remote locations
- ✓ Standalone system, no extra PC or utility required
- ✓ Stable, energy-saving, can operate 24x7 non-stop
- ✓ Small-sized, easy to deploy.





## Live real-time monitoring



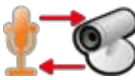
### Electronic map for easy preview

Electronic map (E-map) can be uploaded for ease of identification of monitoring locations.



### Variety live video monitoring

Electronic map (E-map) can be uploaded for ease of identification of monitoring locations.



### Supports live 2-way audio

Real-time audio and video monitoring, voice broadcasting. \*1



### Smart PTZ camera control by direct mouse clicking

You can zoom in/ out, control camera's direction, and set hotspot monitoring positions by the intuitive control panel. \*4

## Instant event alert

### Instant on-screen alert and e-mail alert



- Instant alarm signal will appear on the monitoring screen to alert users.



- Alert e-mails will be sent to administrator immediately when a system error or emergent event takes place.

### Various alarm type to capture



#### Motion detection

Recording is triggered when a moving object is detected by the camera. \*2



#### Sensor-triggered alarm

The NVR can receive any alarm signals from the cameras specified by the users, e.g., when a door or window is opened, or smoke is detected, recording will be activated automatically. \*3



#### Alarm schedule recording

Different recording modes can be defined for different time periods, e.g. alarm recording at daytime and continuous recording at night time.

## Most complete recording functions



### All-in-one recording modes

- Continuous/ Schedule/ Manual recording.
- Alarm schedule recording (by motion detected or sensor triggered) \*2\*3
- Synchronized audio recording. \*1



With scheduled recording, users can set different recording schedules for different cameras. Up to 15 schedules are supported for each camera. Manual recording allows users to activate recording in any necessary conditions. The NVR-101 also provides alarm recording that starts automatically when motion detection or camera sensor is triggered.



### Standard video recording format with Time Stamp

The recordings are saved in AVI format (codec provided) for easy playing by Windows Media Player. Time stamp on the video is provided for convenient data search and can be used as legal evidence.



### Flexible adjustment of the length of recording files

User can adjust the length of the recording files flexibly (1-15 minutes).

## Powerful system functions



UPS (Uninterruptible Power Supply) supported for continuous services against interruption or risk of data crash caused by power outage.



Video data can be exported to an external storage device via the one-touch copy button for ease of archiving. \*It is suggested to use USB backup devices, e.g. QBack-25S, QBack-35S.



When the power resumes after a power outage, PC-based recording solution will not be started up automatically and recording is stopped. QNAP NVR supports automatic system startup and recording is enabled immediately after power resumes. The system maintenance cost is largely reduced.



Supports advanced RAID1 mirroring for ultra secure data protection by connecting to an external eSATA device, e.g. QBack-35S.

## Trouble-free setup & maintenance



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## Eenergy-saving design



The normal power consumption of the NVR in operation is less than 18W (less than the power consumption of an energy-saving light bulb).

### Low Power Consumption

Power Consumption  
NVR-101 (in operation)  
Laptop  
Desktop PC



The low-noise fan design allows long-term and quiet operation at home or in office.



## NVR-1012 Network Video Recorder



### Hottest New Product!

QNAP NVR-1012 is an instant surveillance system providing professional grade live video recording and real-time remote monitoring/playback service. The complete system is built-on the Linux OS for its proven superb performance yet power-saving feature. In order to bring users more convenience and extra benefits in setting up a network surveillance system, QNAP has considerably selected two value-plus IP cameras for the NVR-1012 kit. The kit can be set up instantly in a few simple steps. All the system configuration and recording/monitoring functions of the NVR are carried out through Internet Explorer and absolutely no complicated software installation is ever required.

Secure Your Life,  
Secure Your Property.

Giga LAN MJPEG/MPEG4 2-way Audio



## Outstanding Product Features

### Best Hardware Design

- **Embedded system with lowest power consumption**

QNAP NVR products are built on Linux OS which is secure, stable, power-saving, and less liable to PC crash and virus attack. Also, there is no need to install extra software or perimeter devices as PC solutions do. The reliability of system performance is guaranteed. (The power consumption of NVR-101 is only 18W and that of PC-based solution is 250-300W!)

- **Supports 1 high-speed SATA hard drives**

SATA hard drives are faster than IDE hard drives, which enhance the recording and playback performance of QNAP NVR.

- **Small-sized, easy to deploy**

NVR is compact and occupies little space. It is easy to install and maintain.

### Powerful Surveillance Features

- **High quality Motion-JPEG and MPEG-4 recording (for particular camera models only)**

NVR supports high quality monitoring, recording, and playback

- **All-in-one recording functions:**

- Continuous/ manual/ schedule recording.
- Alarm recording (by motion detection and sensor triggering).

QNAP NVR-101 supports versatile recording functions. By manual recording, users can enable recording in urgent situation. NVR provides schedule recording for users to set up to 15 recording schedules for each camera. Alarm recording is also supported which recording is activated when a moving object is detected or a sensor is triggered.

### ICS-1013 Camera Spec

Image Sensor	1/4" Color CMOS sensor, maximum resolution 640x480 pixels
CPU & Memory	ARM9 processor with 8MB flash and 32MB RAM
Network	10/100 Mbps Fast Ethernet with Auto MDIX
Wireless	Wireless IEEE 802.11b/g
Wireless Security	64/128 bit WEP and WPA-PSK
Built-in Microphone: Sensitivity of built-in microphone	-48dB +/- 3dB, freq 50~16000MHz
Audio out	Mono output to external speaker
Day Vision	Minimum illumination 0.5 lux
Night Vision	IR LED with light sensor control night vision 0 lux within 5 meters with built-in 6 infrared LEDs on
Image Setting	Brightness/ sharpness/ saturation
Upside Down and Mirror	Yes
Digital Zoom	3x
Compression Ratio Setting	5 levels
Lens Type	Board lens
Aperture (F/No.)	2.8
Focus Length	4.5mm
View Angle(Diagonal)	54 degrees
LED Control	Normal / Off
Power LED	Orange
Link/ act. LED	Green
Reset Button	Press over 5 sec to reset to factory default
USB Dismount Button	Press over 4 sec to dismount USB device

# QNAP NVR-1012

*Secure Life, Secure Property*



## Innovative Network Surveillance System for SOHO and Home

### ▶ The new era of network surveillance technology is coming

Traditional analog surveillance system lacks of remote management and takes high installation cost since video monitoring, recording, and maintenance can only be done locally over the physical wiring. Due to the popularity of broadband environment, the QNAP NVR-101 network surveillance system has broken through the limitations of traditional surveillance. The live videos of the IP cameras can be monitored and recorded. It is an ideal solution for various applications, including remote monitoring of childcare situation, elder care, home and office security, and long-term environmental monitoring that provides tremendous peace of mind.

The unrivaled QNAP NVR technology realized the true boundless surveillance over the network. The NVR-101 can be easily set up in an Ethernet-ready environment without any complicated wiring. The system settings can be managed via the IE browser anytime, anywhere. All the professional surveillance software functions are embedded in the NVR without the need of installing extra software. The NVR supports smart PTZ camera control. Users can simply click on the graphic control panel to zoom in or zoom out the PTZ camera, or move the monitoring direction. Preset positions can also be defined for the PTZ camera by the NVR for intelligent monitoring. The recordings can be accessed remotely via web, FTP, or My Network Places with access right control. The NVR-101 provides a user-friendly web interface for straightforward management and allows even novice to use the system easily.

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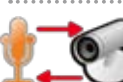
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### Low Power Consumption



The low-noise fan design allows long-term and quiet operation at home or in office.



## VioGate Master

VioGate Master is a powerful central management software that supports collective monitoring and configuration of multiple IP cameras. Simply install the software on any Ethernet-ready computer, you can view and playback the monitoring video, and configure the settings of numerous IP cameras configured to QNAP NVR. With VioGate Master, you can set up an ideal central management system (CMS) anytime, anywhere!

# Central Management System **CMS** VioGate Master

- Decentralized Structure
- Centralized Management
- Dual Display
- Powerful Multi-layer E-map



## Product Features

- **Virtual surveillance center**

VioGate Master enables users to set up one to many virtual surveillance centers for remote monitoring of IP cameras on any computer via LAN or WAN.

- **Central configuration**

VioGate Master allows users to configure the QNAP NVR settings from remote locations, which largely reduce system maintenance cost and effort.

- **Support live 2-way audio (by camera)**

VioGate Master supports real-time audio and video monitoring. Users can even use the software as an impromptu intercom device for voice broadcast.





## Powerful Graphic Control System

### Powerful Multi-layer E-map

You can upload pictures to indicate monitoring location and drag icons to the E-Map to identify the camera positions.



### Dual Display

VioGate Master supports dual display function. You can view the images of up to 20 cameras and the corresponding E-map on two monitors at the same time.



### Powerful E-Map

With the E-map function of VioGate Master, you can upload pictures to illustrate the monitoring locations and drag and drop the icons to the map to indicate the cameras' positions. You can view the video of the cameras easily by double clicking the camera icon on the E-map.

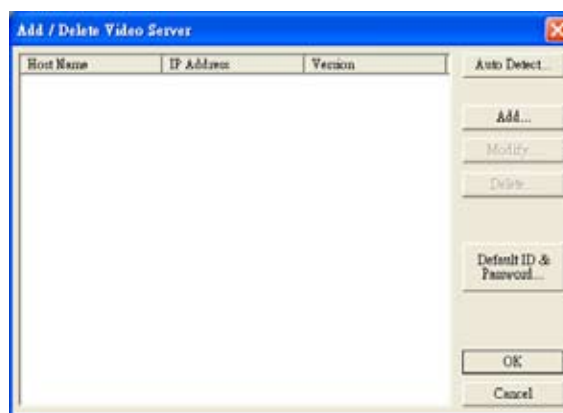


### Video Page Management

You can flexibly categorize the video source of multiple IP cameras from different locations and group them for collective monitoring. You can select to view 1, 4, 9, 12, 16, 20, 32, or 40 channels simultaneously.

### Automatic detection of QNAP NVR in LAN

The user-friendly automatic detection function of QNAP Finder enables users to find all QNAP NVR products in the same subnet in one click for more efficient configuration.



### VioGate Master

Model Name	VioGate Master
Automatic server detection	Automatic server search in LAN and login with default ID and password.
Video Display	1, 4, 9, 12, 16, 20, 32, 40-channel display Sequential mode, and PIP (Picture-in-Picture) mode
System Settings	Configure all server name and description
Network Settings	DHCP, static IP, PPPoE, dynamic DNS server
User Management	Add/ remove user; modify user password. Edit user settings and access control.
Camera Settings	Camera name, resolution, compression rate, frame rate, PTZ control
Recording Mode	Continuous recording, schedule recording, event-triggered recording, manual recording
Video Playback	Playback by time/ event/ file, fast playback support
System Tools	System update, backup/ restore system configurations, restart/ shut down system, enable hardware configuration reset switch, disk tools (format disk, check disk)
E-map	Multi-layer E-map with event notification
Online Help	Multilingual online help
Languages	English, Traditional Chinese, Simplified Chinese, Japanese, German, French, Spanish, Italian, Russian, and Dutch
System Requirement	OS: WindowsXP/ Vista CPU: P4 2.4 or above Memory: 512MB or above Display: 1024x768 pixels or above

\* Design and specifications subject to change without notice. Please contact QNAP for updated product information.



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Your  
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