NVR Innovative Network Video Recorder
VioStor-101

Network Surveillance System for SOHO and SMB
QNAP Network Video Recorder for IP Camera

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

Secure Life, Secure Property

QNAP SECURITY

Environment Friendly • Quiet • Power-saving

Powerful All-in-one Recording
- Continuous/ manual/ schedule recording (up to 15 schedules for each camera)
- Alarm recording (by motion detection or sensor triggered)
- Alarm recording schedule
- Up to 120 fps (4 channels) QVGA/ CIF recording
  Up to 40 fps (4 channels) VGA/ D1 recording
- High quality recording in Motion-JPEG and MPEG-4
- Audio recording (depends on the cameras)

High Reliability and Smart Features
- Convenient video backup to external USB storage by one touch auto video backup button
- Supports UPS (Uninterruptible Power Supply) for 24x7 service
- Green NVR solution: Linux-embedded system with low power consumption (14.4W only)

Variety Live Video Monitoring
- Single/ quad channels display mode
- Sequential and Picture-in-Picture display mode
- Easy drag and drop to change display order on monitoring
- Digital zoom
- Alarm notification
- Smart control of PTZ & speed dome cameras
- Monitoring preset position control

Easy to Use
- Trouble-free 6-step installation
- Intuitive web-based user interface
- Smart search of IP camera for quick settings
- Intelligent auto power on when power resumes after power outage

* RAID function is enabled via an external eSATA device

Linux Embedded | MJPEG MPEG4 | Gigabit Ethernet | RAID 0/1/ JBOD | AUDIO

Mega pixel | MOTION DETECTION | TIME STAMP AM 10:00 | UPS Support APC | SENSOR TRIGGERED Alarm

Real-time monitoring
over the Internet anytime, anywhere !

QNAP VioStor-101

Secure Life, Secure Property

The Most Affordable and Reliable NVR for SOHO and SMB

The VioStor-101 NVR (Network Video Recorder) is a reliable and affordable network surveillance solution for remote monitoring and recording from **Axis**, **ACTi**, **Arecont**, **Canon**, **D-Link**, **GANZ**, **IQeye**, **Mobotix**, **Panasonic**, **Sanyo**, **Sony**, **Toshiba**, and **Vivotek** IP-based cameras. The VioStor-101 supports up to 4-channel M-JPEG or MPEG-4 recording, and one high-speed SATA hard disk (up to 1 TB) for long-term recording.

Designed for SOHO and SMB users, the VioStor-101 can be easily set up in an Ethernet-ready environment in 6 steps 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 and no extra software

is required. The VioStor-101 provides versatile professional recording modes: continuous recording, motion-detection recording, event-triggered recording, schedule recording, manual recording, pre-alarm and post-alarm recording etc. The recording data can be played over the web or accessed by samba, HTTP, or FTP.

The embedded and energy-saving design of the VioStor-101 enables non-stop system operation 24x7. The power consumption of the VioStor-101 is less than 14.4W, which is more power-saving than an energy-saving bulb. It is an ideal network surveillance solution for monitoring in home and office, campus, car parks, and chain stores etc.

Powerful Surveillance Features

- **Variety Live Video Monitoring**
  - 1/ 4-channel display mode
  - Sequential display mode
  - Exclusive Picture-in-Picture mode

- **Easy Drag and Drop Function on Monitoring**
  The VioStor-101 NVR provides easy drag and drop to change the display order of the monitoring channels for different monitoring management target.

- **Smart Control of PTZ & Speed Dome Cameras**
  You can adjust the PTZ cameras directly by the web user interface.

- **Digital Zoom for Monitoring and Playback**
  The VioStor-101 NVR supports digital zoom for more flexible monitoring and playback. It is a powerful function for megapixel IP cameras.

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

- **Monitoring Preset Position Control**
  You can view different preset positions of the camera by clicking the number buttons on monitoring page.

- **All-in-one Recording Functions**
  - Continuous/ schedule/ manual recording
  - Alarm recording (by motion detected or sensor triggered)
  - Scheduled alarm recording
  - High quality recordings in Motion-JPEG and MPEG-4 (depends on camera)
  - Supports audio recording function (depends on camera)
  - Supports megapixel recording

- **Pre-alarm and Post-alarm Recording**
  The VioStor-101 NVR supports pre-alarm and post-alarm recording, which is used to record additional details before and after the event occurs.

- **Real-time Email Notification**
  Alert e-mails are sent to the administrator immediately in case of system error or emergent events.

- **Authority Management**
  You can configure the 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.

- **Host Access Control**
  You can specify the connections to be allowed and denied to access NVR.

- **On-line User List**
  You can view the record of users currently logged on and previously logged on to the NVR.

- **Detailed Event Logs**
  The VioStor-101 NVR provides detailed event logs of system warning, hard disk error, network disconnection, UPS status, and users' networking services and recordings access record.

- **E-map for Easy Preview of the Camera Location**
  The VioStor-101 NVR provides an exclusive E-map function for you to upload the pictures of the monitoring location.

- **Video Snapshot**
  The snapshot function is supported on monitoring and playback page.

- **Convenient Quick Link Buttons of Network Camera**
  You can make use of the quick link buttons to access the management interface of the network cameras.

- **Easy Data Search by Date & Time and Alarm Event**
  The VioStor-101 NVR supports quick search of recording data by date and time, and alert events.

High Reliability and Smart Features

- **Secure Data Protection by RAID 1 Mirroring**
  (RAID function is enabled via an external eSATA device)
  To enhance data security and protection, the VioStor provides RAID 1 (mirroring) configuration. The 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.

- **RAID 0, JBOD**
  (RAID function is enabled via an external eSATA device)
  The VioStor supports RAID 0 and JBOD configurations for larger storage capacity and higher reading and writing performance.

- **Intelligent Automatic System Startup**
  The VioStor-101 NVR supports intelligent power-on support. When enabled, the system turns on automatically when the power resumes after power outage.

- **Supports UPS System for 24*7 Service**
  With UPS, the system can function normally in case of power outage or unstable power supply.

- **Convenient Video Backup by One Touch Auto Backup Button**
  The VioStor-101 NVR supports exclusive USB auto video backup button. By pressing the button once, all the recording data on the VioStor-101 NVR will be copied to external USB storage device immediately.

- **Multi-channel Playback at Different Speed**
  The VioStor-101 NVR supports playback of the recording data from different monitoring channels. It also provides Express Quad View Playback that you can either divide the selected time equally into four playback views or play the video of four cameras at the same time.

- **Recordings can be Played by Windows® Media Player**
  You can play the files by Windows® Media Player. There is no need to install unique program or convert the files to other formats.

- **Convenient Recordings Playback**
  The VioStor-101 NVR adopts complete network-based management interface that users can download the recording data via the web and play the files from remote computer.

- **Flexible Adjustment of the Length of Recording Files**
 The VioStor-101 NVR enables the users to flexibly adjust the length of the recording files.

- **Schedule Remote Replication**
  The VioStor-101 NVR supports schedule remote replication for secure data backup to a remote NAS.

Excellent Hardware Design

- **Embedded System with Low Power Consumption**
  Built on Linux OS, the VioStor-101 NVR is less vulnerable to virus attack and more energy-saving than PC-based surveillance solutions.

  Power Consumption
  VioStor-101 — 14.4W
  PC-based NVR solution Write/Read — 300 ~ 350W

- **Supports 1 SATA HDD for Long-term Recording**
  The VioStor-101 NVR supports one SATA hard drives with the storage capacity of up to 1TB for long-term recording.

- **Up to 1TB storage capacity, expandable to 2TB through an external eSATA device**
  The VioStor is an excellent choice for long-term recording and storing large amount of recording data.

- **Small-sized, Easy to Deploy**
  The VioStor-101 NVR occupies small space. It is easy to install and maintain.

- **High speed GigaLAN Port x 1**

Powerful Network Services

- **Built-in NTP server/ DDNS support**
- **Convenient data access**
  You can access the recording data on the VioStor-101 NVR by: Network Neighborhood (SMB/ CIFS) / Web File Management (HTTP) / FTP server

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

- **Home Care**
  - Home surveillance to secure life and property
  - Enhanced protection for kids, elders, and pets
  - Crime prevention
  - Evidence or aid to police investigations

- **Office Management**
  - Real-time office monitoring from remote locations
  - In-house office monitoring
  - Office security fortification
  - False alarm identification

- **Business Service**
  - Live production line monitoring for quality and security control
  - Department store/ mall onitoring
  - Shipping process recording
  - Crime prevention, e.g. shoplifting

  - Parking lot monitoring
  - Construction site monitoring
  - Convenience store security
  - Campus security
  - Server room security

  - Gas station security
  - Hotel security
  - Multiple remote offices/ factory sites live monitoring
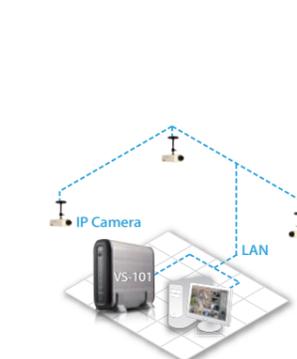
↑ Network surveillance installation for SOHO and SMB
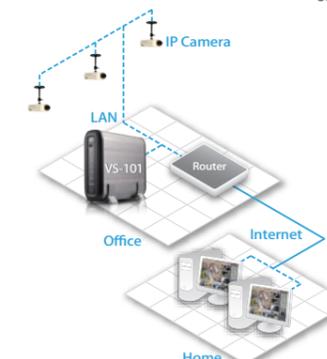
↑ Remote monitoring and playback over the Internet
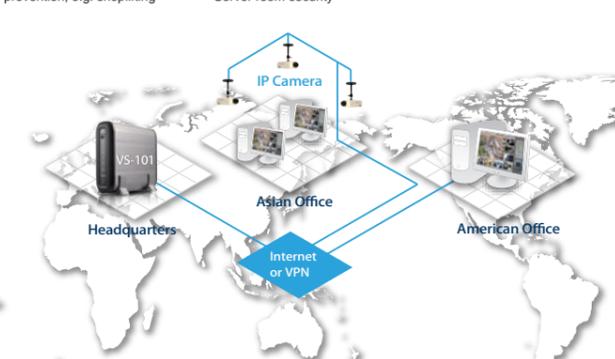
↑ Central surveillance deployment for international enterprise

Hardware Specifications

HDD Capacity
- Supports 1 x 3.5" SATA I/II HDD, up to 1TB or above, expandable to 2 TB through QBack-35S with preference hard disk
  (the standard system is shipping without HDD)

LAN Port
- 1 x Gigabit RJ-45 Ethernet port

LED Indicators
- Power, USB, status, LAN, hard disk

USB
- 3 x USB 2.0
  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
- Portable desktop

Hardware Dimensions
- 210(D) x 60(W) x 182(H) mm
  262(D) x 143(W) x 222(H) mm (Color Box)
- 8.27(D) x 2.36(W) x 7.17(H) inch
  10.31(D) x 5.63(W) x 8.74(H) inch (Color Box)

Color Box Shipping Weight
- 2.5 Kg/ 5.51lb (without HDD)

Temperature
- Temperature 0~35°C

Humidity
- 0%~85% R.H.

Power Supply
- Input: 100-240V AC, 50/60Hz, Output: 12V DC, 3A

Power Consumption
- In operation: 14.4W

Energy saving Design
- Low power consumption & low noise

Thermal solution
- Heat dissipation by aluminum case

Secure Design
- K-Lock security slot for theft prevention
- Power cord hook for kicking-off prevention

Software Specifications

Video
Display Mode: Single, quad, Picture-in-Picture, sequential mode
Recording Cameras Number: Up to 4
Network Camera Support: For the latest information of the supported cameras, please visit QNAP Security website: http://www.qnapsecurity.com/pro_compatibility_camera.asp
Compression Format: Motion-JPEG/ MPEG-4 (depend on IP Camera)
Video Setting: Resolution, quality, frame rate
E-map: Upload E-map

Recording
Recording Mode: Continuous, manual, scheduled, alarm, alarm recording schedule, motion, snapshot
Buffer Storage for Alarm Images (before and after events): Pre-recording: 300 seconds/ Post–recording: 300 seconds (Total 600 seconds/ 10 minutes)
Recording Performance:
- Up to 120 frames at QVGA/ CIF (320*240)
  Up to 40 frames at VGA (640*480)
  * Real performance may vary in different environment
File format: AVI (Recordings can be played by Windows Media Player)

Playback
Playback Channel: Max. 4 Ch SYNC playback at the same time
Playback Mode: Play, pause, stop, reverse play, next/ previous frame, next/ previous video file, different speed control
Display Mode: Single playback view, 4 playback views
Search Mode: By date, time, alarm event
Playback Enhancement: Full screen display, video snapshot, digital zoom, screen recording and convert into one AVI file
Download: Click to download recorded files from web page

Storage
Disk Mode: Single, RAID 0, RAID 1, JBOD/ Linear
Capacity: Supports 1 x 3.5" SATA I/II HDD, up to 1TB or above, expandable to 2TB through QBack-35S with preference hard disk
Services: Web File Manager, FTP, SMB/CIFS

Network
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 for NVR

Security
Operation System: Linux-embedded, free from PC crash and virus attack

On-line Users List: Record 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
User Management: The right to monitor and playback each camera can be separately defined for each individual user (up to 32 users)
Alert Notification: E-mail, buzzer, event logs
UPS: APC (USB type of UPS)
Event Log: Detailed record of all events

Client PC Requirement
(Suggested system requirement for better video performance)
CPU: Pentium 4 CPU 2 GHz or higher
Memory: 512 MB or above
Operation System: Windows XP / Vista (32bit)
Browser: Internet Explorer 6.0 or later
Network Interface: 10/100 Mbps or above
View Resolution: 1024 x 768 pixels or above

Language Support
English/ Japanese/ French/ Italian/ German/ Spanish/ Russian/ Dutch/ Swedish/ Norwegian/ Finnish/ Danish/ Simplified Chinese/ Traditional Chinese

Certification
CE , FCC , VCCI, BSMI

*Designs and specifications are subject to change without notice.

Package Contents

- VioStor-101
- CD-ROM
- Ethernet cable x 1
- Quick Installation Guide
- Power cord
- Flat head screw x 4
- Stand x 2
- Adaptor
- Flat head screw x 2

Brand	Models	VS-101A	VS-101P	VS-101V
		4 channels	4 channels	4 channels
AXIS	206/ 206M/ 207/ 207W/ 207M/ 207MW/ 209FD/ 209FD-R/ 210/ 210A/ 211A/ 211/ 211W /211M/ 212PTZ(-V)/ 213PTZ/ 214/ 215PTZ/ 216FD(-V)/ 216MFD(-V)/ 221/ 223M/ 225FD/ 231/ 232D/ 233D/ 241Q/ 241QA/ 241S/ 241SA/ 243SA/ 247S	●		
ACTi	ACM123X/ ACM34XX/ ACM4200/ ACM56XX/ ACM7411/ ACM5711/ ACM1311/ ACM143X/ ACM3211/ ACM3311/ ACM3001/ ACM4100/ ACM5001/ ACD2100/ ACD2200/ SED2140/ SED2120/ CAM5XXX	●	●	●
Arecont	1300M/ 2100M/ 3130/ 3100/ 5100M/ 8180	●	●	●
IQeye	510 / 511 / 701/ 702/ 703/ 705/ 752/ 753/ 755/ 802/ 803/ 805/ 811/ 852/ 853/ 855	●	●	●
Mobotix	M12M-IT/ M12D-IT-DNight/ M12M-Web/ M12M-Secure/ M12D-Secure/ M12D-Secure-DNight/ M12D-Secure D12D-Secure/ M22M-IT/ M22M-Secure/ M22M-Secure-Night/ M22M-Secure-CSVario	●	●	●
Toshiba	IK-WB12/ IK-WB21	●	●	●
SANYO	VCC-P450/ VCC-P470/ VCC-PT490/ VCC-PT500	●	●	
Canon	VB-C300/ VB-C300B / VB-C50iR/ VB-C50i / VB-C50FSi / VB-C50Fi	●	●	
Panasonic	BB-HCM580/ BB-HCM581/ BB-HCM527/ BB-HCM531/ BB-HCM511/ BB-HCM515 / BB-HCM547/ BB-HCM481/ BB-HCM403/ BB-HCM381/BB-HCM371/BB-HCM331/ BB-HCM311/BB-HCM110/BB-HCM100/KX-HCM280/ KX-HCM180/ BL-C1/ BL-C10/ BL-C111/ BL-C131/ BL-C20/ BL-C30/ BL-C11/ BL-C31/ NF282/NF 284/ NP1000/ NP1004/ NP244/ NS202(A)/ NW484/ WV-NF302/ WV-NF304/ NF304V		●	
SONY	CS10/ CS11/ CS50/ DF40/ DF50/ DF70/ DF80/ P1/ P5/ RX530/ RX550/ RX570/ RZ25/ RZ30/ RZ50/ Z20/ DS10/ DM110		●	
D-link	2120 / 3220/ 3220(G)/ 3420/ 5220/ 5300/ 5300G/ 6620/ 6620G			●
Vivotek	IP3112 / IP3122/ IP3111/ IP3121/ IP3132/ IP3135/ IP3137 / PT3112/ PT3122/ PT3117/ PT3127/ IP6112/ IP6122/ IP6117/ IP6127/ FD6112V/ FD6122V/ PZ6112/ PZ6122/ PZ6114/ PZ6124/ SD6112V/ SD6122V/ FD7131/ IP7131/ IP7132/ IP7135/ IP7137/ PT7135/ PT7137/ IP7138/ IP7139/ IP7151/ IP7152/ IZ7151/ IP7142/ PZ7151/ PZ7152/ SD7151/ VS3102/ VS3100P/ VS7100			●
LevelOne	FCS-1010/ WCS-2010 /FCS-1030/ WCS-2030/ FCS-1040/ WCS-2040/ FCS-1060/ WCS-2060/ FCS-1070/ WCS-2070/ FCS-3000/ FCS-3021/ FCS-0010/ WCS-0010/ FCS-0020/ WCS-0020/ FCS-1091/ WCS-1091			●
GANZ	ZN-D2024/ ZN-PT304L/ ZN-PT304WL/ ZN-YH305/ ZV-S306			●

*For the latest information of the supported cameras, please visit QNAP Security website: http://www.qnapsecurity.com/pro_compatibility_camera.asp
**All the other trademarks mentioned herein are the property of their respective companies.
***Designs and specifications are subject to change without notice.

QNAP SECURITY