

# NVR Innovative Network Video Recorder

# VioStor-2008/2012

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

Live Monitoring, Recording, and Video Playback over the Internet Anytime, Anywhere  
*Secure Life, Secure Property*



### All-in-one Recording Functions

- Continuous/ manual/ schedule recording
- Alarm recording (by motion detection or sensor triggered)
- Multiple alarm recording schedules
- High performance megapixel recording (up to 8-megapixel)
- High quality Motion-JPEG, MPEG-4 and H.264 recording
- Audio recording (vary by camera models)

### Powerful Surveillance Features

- Diversified modes for live monitoring
- Event notification on monitoring
- Smart control of PTZ & speed dome cameras on monitoring
- Digital zoom for monitoring and playback
- Multi-channel playback at different speed
- Search of recording data by date & time, timeline and event

### Easy to Use

- Trouble-free 6-step installation
- Intuitive web-based user interface
- Smart search of IP cameras for quick settings
- Drag and drop function on monitoring

### High Reliability and Smart Features

- Intel 1.6GHz CPU and 1GB DDRII memory
- RAID 0, 1, JBOD with hot-swap design
- Large storage capacity (up to 4TB) for long-term recording
- Convenient video backup to external USB storage by one touch auto video backup button
- Supports UPS (Uninterruptible Power Supply) for 24x7 service
- Intelligent auto power on when power resumes after power outage
- Two Gigabit LAN ports for failover, load-balancing, or multi-IP setting
- Green NVR solution: Linux-embedded system, low power consumption (37~44W)



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



# VioStor-2008/2012

Secure Life, Secure Property



## High Performance Network Surveillance System for SMB and SOHO

QNAP VioStor-2008/2012 NVR are the new generation 2-bay, hot-swappable network surveillance systems with the multi-server monitoring feature designed for small and midsized business who demands for megapixel recording, mass storage capacity and high performance real-time monitoring. The fashionable shiny black VioStor-2008/2012 are featured with high reliability and powerful all-in-one surveillance features. Based on Linux OS, the NVR supports M-JPEG, MPEG-4, and H.264 recording from popular camera brands, e.g. **AXIS, ACTi, Arecont, Canon, Cisco, D-Link, EDIMAX, ELMO, EtrVision, GANZ, iPUX, IQeye, LevelOne, Linksys, MOBOTIX, Panasonic BB/BL/ i-Pro, SANYO, SONY, TOA, TOSHIBA, TRENDnet, VIVOTEK, and Y-CAM.**

Powered by Intel 1.6GHz CPU and 1GB DDRII memory, the VioStor-2008/2012 NVR support simultaneous megapixel recording (up to 8-megapixel) from multiple network cameras. By adopting the unique and innovative technology,

one NVR can cascade to other NVR systems to support up to 120 IP cameras for central monitoring. No extra software is required on the PC. This is an important breakthrough in network surveillance that no other Linux-based or PC-based solutions can compare in the current market.

VioStor-2008/2012 NVR support diversified recording features, e.g. schedule recording, alarm recording, alarm recording schedule, pre-alarm, and post-alarm recordings. An intuitive user interface is provided for the users to view the monitoring screens, connection and recording status, network bandwidth, search the recording data for playback, and play the recording data at different speed. Other class-leading server features of the NVR include advanced data protection by RAID 0, RAID 1 and JBOD, Online RAID Capacity Expansion, Online RAID Level Migration, and two Giga LAN ports for network failover, load-balancing, and multi-IP setting, etc. The NVR can be easily set up in 6 simple steps by the web-based GUI using the IE browser.



### • Data Search by Date & Time, Timeline, and Event

The VioStor NVR supports quick search of recording data by date & time, timeline, and event.

## High Reliability and Smart Features

### • Advanced RAID (0/ 1/ JBOD) with Hot-swap Design

The VioStor NVR offers advanced RAID 0, 1, JBOD, and single disk configurations. The VioStor NVR also supports hot-swap design that a failed drive can be replaced by hot swapping without turning off the server. Besides, the best-in-class RAID on the NVR to protect all the important recordings in the most secure way.

### • Online RAID Capacity Expansion and Online RAID Level Migration

- Online RAID Capacity Expansion  
The storage capacity of a RAID configuration can be expanded by replacing the hard drives with larger ones. All the data are kept and seamlessly moved to the newly installed hard drives. There is no need to turn off the server during the process.
- Online RAID Level Migration  
You can upgrade the disk configuration to higher RAID level with the data retained. There is no need to turn off the server during the process.

### • S.M.A.R.T. & Advanced HDD Health Scanning (HHS)

### • Intelligent Automatic System Startup when Power Resumes after Power Outage

### • Support UPS for 24x7 Service

### • Convenient Video Backup to External USB Storage by One Touch Auto Video Backup Button

## Powerful Network Services

### • Built-in DDNS Support

### • Built-in NTP Server

### • Convenient Data Access

You can access the recording data on the VioStor NVR by: Network Neighborhood (SMB/ CIFS) / Web File Management (HTTP) / FTP

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

#### • Business Service

- Live production line monitoring for quality and security control
- Department store/ mail monitoring
- Shipping process recording

- Crime prevention, e.g. shoplifting
- Parking lot monitoring
- Construction site monitoring
- Convenience store security
- Campus security

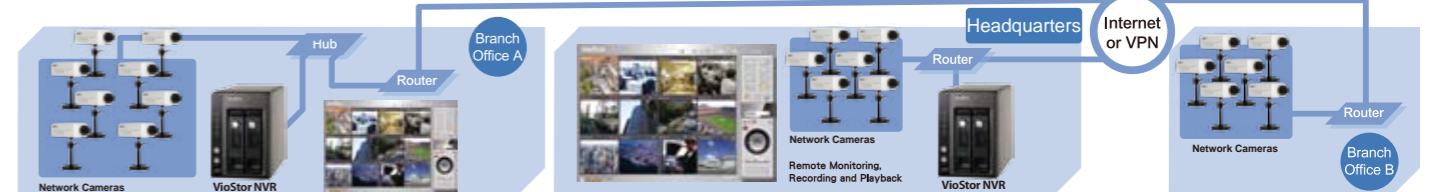
- Server room security
- Gas station security
- Hotel security
- Multiple remote offices/ factory sites live monitoring

#### • Office Management

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

#### • Home Care

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



## Powerful Surveillance Features



### • Diversified modes for live monitoring

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

### • Easy Drag and Drop Function on Monitoring

The VioStor NVR provides drag and drop function to change the display order of the monitoring channels.

### • Smart Control of PTZ & Speed Dome Cameras

You can adjust the PTZ cameras directly by the web user interface.

### • Monitoring Preset Position Control

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

### • Digital Zoom for Monitoring and Playback

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

### • Video Snapshot

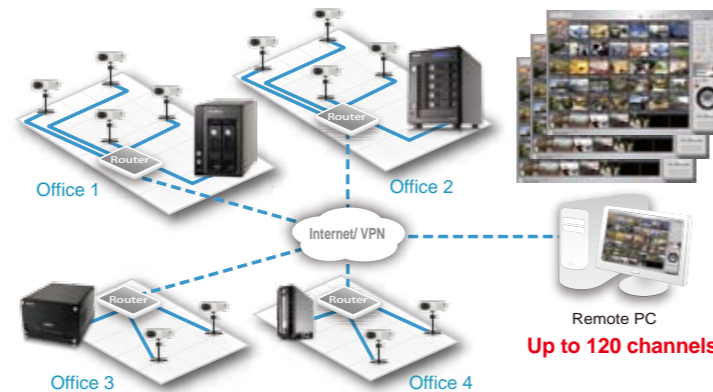
The snapshot function is supported on monitoring and playback page.

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

You can upload the pictures of the monitoring location.

### • Multi-server Monitoring

You can connect to the VioStor NVR and add other QNAP NVR servers for monitoring up to 120 channels over LAN or WAN.



### • All-in-one Recording Functions

- Continuous/ schedule/ manual recording
- Alarm recording/ multiple alarm recording schedules
- High quality Motion-JPEG, MPEG-4 and H.264 recording
- VioStor-2008: Up to 240 fps D1/ VGA recording
- VioStor-2012: Up to 360 fps D1/ VGA recording
- Support megapixel cameras (up to 8-megapixel)
- Audio recording (vary by camera models)
- \* Up to 15 schedules are supported for each camera

### • Event Notification

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

### • 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.

### • Host Access Control

You can specify the connections to be allowed and denied to access the VioStor NVR.

### • On-line User List

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

### • Multi-channel Playback at Different Speed

The VioStor 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.

### • Flexible Adjustment of the Length of Recording Files

You can flexibly adjust the length of the recording files.

### • Schedule Remote Replication

The VioStor NVR supports schedule remote replication for secure data backup to a remote NAS.

### • Detailed Event Logs

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

## Excellent Hardware Design

### • Intel 1.6GHz CPU and 1GB DDRII Memory

Powered by Intel 1.6GHz CPU and 1GB DDRII memory, the VioStor NVR delivers superior performance for surveillance applications.

### • Linux-embedded System, Low Power Consumption

The Linux-based VioStor NVR is more power-saving and less vulnerable to virus attack compared to PC-based surveillance solution.

#### Low Power Consumption



### • Smart Fan

The fan rotation speed is automatically adjusted according to the server's temperature. You can also define the system temperatures to trigger high speed or low speed rotation of the fan.

### • Up to 4TB Storage Capacity for Long-term Recording

### • Two Gigabit LAN Ports for Failover, Load-balancing, or Multi-IP Setting

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

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

### • Multi-IP Setting

The VioStor NVR can be deployed with two different IP settings for sharing among different workgroups in two different subnets.



Supports access of multiple IP from different LAN areas

# Hardware Specifications

## Processor

- Intel® Processor 1.6 GHz

## Memory

- 1GB DDRII RAM, 128MB flash (DOM)

## HDD Capacity

- 2 x 3.5" SATA I/II HDD, up to 4TB (the standard system is shipping without HDD)

## HDD Tray

- 2 x hot-swappable and lockable tray

## LAN Port

- 2 x Gigabit RJ-45 Ethernet port

## LED Indicators

- HDD 1, HDD 2, LAN, eSATA

## eSATA

- 2 x eSATA port (back); reserved

## USB

- 3 x USB 2.0
- Front: for USB storage device (one touch auto video backup)
- Back: for UPS device

## Buttons

- One touch auto video backup button, power button, reset button

## Form Factor

- Tower

## Hardware Dimensions

- 150 (H) x 102 (W) x 216 (D) mm
- 5.91 (H) x 4.02 (W) x 8.5 (D) inch

## Weight

- Net weight: 1.74 kg/ 3.84 lb
- Gross weight: 2.92 kg/ 6.44 lb

## Operation Environment

- Temperature: 0~40°C/ 32~104°F
- Humidity: 0%~95% R.H.

## Fan

- 1 x quiet cooling fan (7 cm, 12V DC)

## Power Supply

- External power adaptor, 60W, input: 110~240V

## Power Consumption

- In operation: 37~44W

## Secure Design

- K-Lock security slot

## VGA

- Reserved

## Certification

- CE, FCC, VCCI, BSMI

# Software Specifications

## Video

**Display Mode:** 1/4/6/8/9/10/12/16/20/25/36/42-channel display, Picture-in-Picture mode, sequential mode

### Multi-server Monitoring:

Up to 120 channels monitoring from multiple QNAP NVR servers

### Recording Connection:

- VioStor-2008: Up to 8 channels
- VioStor-2012: Up to 12 channels

### Compression Format:

Motion-JPEG/ MPEG-4/ H.264 (vary by camera models)

### Video Setting:

Resolution, quality, frame rate

### E-map:

Upload E-map

## Recording

### Recording Mode:

- Continuous/ manual/ schedule recording
- Alarm recording/ multiple alarm recording schedules
- Up to 15 schedules are supported for each camera

### Buffer Storage for Alarm Images (before and after Events):

Pre-recording: up to 300 sec; post-recording: up to 300 sec (Total 600 sec/ 10 min)

### Recording Performance:

- VioStor-2008: Up to 240 fps at D1 or VGA
- VioStor-2012: Up to 360 fps at D1 or VGA

\* Real performance may vary in different environment

### Megapixel Recording:

Supports megapixel cameras (up to 8-megapixel)

### File format:

AVI (Recordings can be played by Windows® Media Player)

## Playback

**Playback Channel:** Max 4-channel 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, timeline, event

**Playback Enhancement:** Full screen display, video snapshot, digital zoom, screen recording and convert into one AVI file

**Download:** Download recordings via the web

## Security

**Operation System:** Linux-embedded system

**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 the NVR

**Authority Management:** Configure different authority of specified cameras for max 32 users

**Alert Notification:** Buzzer, e-mail alert, event notification on monitoring

**UPS:** APC/ MGE (USB type UPS)

**Event Log:** Detailed record of all events

## Storage

### Disk Management:

- Single, RAID 0, RAID 1, JBOD/ Linear
- Online RAID Capacity Expansion, Online RAID Level Migration
- HDD S.M.A.R.T., bad blocks scan

**Services:** Web File Manager, FTP, SMB/ CIFS

## Network

**Support:** HTTP, TCP/IP, SMTP, DHCP, static IP, DNS, DDNS, FTP, NTP, UPnP, failover, load-balancing, multi-IP setting

**Dual Gigabit LAN:** Failover/ load-balancing/ multi-IP setting

## Utility Software

**QNAP Finder:** Discovery and quick setup for NVR

## Client PC Requirements

(Suggested system requirements for better video performance)

**CPU:** • Motion-JPEG format (up to 12 channels):

Intel® Pentium® 4 CPU 2.4 GHz or above

• MPEG-4/ H.264 format (up to 12 channels):

Dual core CPU 2.4 GHz or above

\* For higher surveillance performance, please select more advanced PC models

**Memory:** 1 GB or above

**Operation System:** Microsoft® Windows® XP/ Vista (32bit)

**Browser:** Internet Explorer® 6.0 or later

**Network Interface:** 10/100/1000 Mbps

**View Resolution:** 1024 x 768 pixels or above

## Language Support

English/ French/ German/ Italian/ Japanese/ Spanish/ Simplified

Chinese/ Traditional Chinese/ Danish/ Dutch/ Finnish/ Korean/

Norwegian/ Polish/ Portuguese/ Russian/ Swedish

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

# Package Contents



Brand	Models	VioStor-2008	VioStor-2012
		8 channels	12 channels
AXIS	208M/ 207/ 207W/ 207M/ 207MW/ 209FD-R/ 209MFD-R/ 210/ 210A/ 211A/ 211W/ 211MW/ 212/ 213/ 214/ 215/ 216FD/ 216MFD/ 221/ 228M/ 225FD/ 231/ 232/ 233D/ P131/ P330/ Q740/ M101/ M1011-W/ M1031-W/ 241Q/ 241QA/ 241S/ 241SA/ 243SA/ 247S	•	•
ACTI	ACM-1231/ ACM-1232/ ACM-1311/ ACM-1431/ ACM-1432/ ACM-3001/ ACM-3211/ ACM-3311/ ACM-3401/ ACM-3411/ ACM-4100/ ACM-4200/ ACM-5001/ ACM-5601/ ACM-5611/ ACM-5711/ ACM-7411/ ACM-8211/ ACM-8511/ CAM-5201/ CAM-5221/ CAM-5301/ CAM-5321/ CAM-6500/ CAM-6600/ CAM-6610/ CAM-6620/ CAM-6630/ ACD-2100/ ACD-2200/ SED-2140/ SED-2120	•	•
Arecont	AV 1300/ AV 2100/ AV 3100/ AV 3130/ AV 3105/ AV 5100/ AV 5105/ AV 8180	•	•
Canon	VB-C300/ VB-C300B/ VB-C500R/ VB-C500/ VB-C50FS/ VB-C50FI	•	•
Cisco	CIVS-IPC-2500/ CIVS-IPC-2500W	•	•
D-Link	DCS-2120/ DCS-2121/ DCS-3220/ DCS-3220G/ DCS-3420/ DCS-5220/ DCS-5200/ DCS-5300G/ DCS-6620/ DCS-6620G/ DCS-900(A)/ DCS-900(B)/ DCS-900(B2)/ DCS-920	•	•
EDIMAX	IC-1510/ IC-1510WG/ IC-3010/ IC-3010WG/ IC-7000PT/ IC-7000PTN	•	•
ELMO	PTC-401C-IP/ PTC-402C-IP/ SN2230-IP2/ SN2230-IPW/ SN2232-IP/ TD4112-IP/ TD4114-IP2	•	•
EtroVision	EV3130/ EV3131/ EV3131A/ EV3830/ EV1630/ EV6332/ EV6530	•	•
GANZ	ZN-D2024/ ZN-PT304L/ ZN-PT304WL/ ZN-YH305/ ZV-S306	•	•
iPUX	ICS 1001/ ICS 1011/ ICS 1003/ ICS 1013/ ICS 1300/ ICS 1310/ ICS 130A/ ICS 131A	•	•
iQeye	040S/ 041S/ 042S/ 510/ 511/ 701/ 702/ 703/ 705/ 710D/ 711D/ 712D/ 752/ 753/ 755/ 802/ 803/ 805/ 811/ 852/ 853/ 855	•	•
LevelOne	FCS-0010/ WCS-0010/ FCS-0020/ WCS-0020/ FCS-1010/ WCS-2010/ FCS-1030/ WCS-2030/ FCS-1040/ WCS-2040/ FCS-1060/ WCS-2060/ FCS-1070/ WCS-2070/ FCS-109X/ WCS-109X/ FCS-3000/ FCS-3021/ FCS-5030	•	•
Linksys	PVC-2300/ WVC-200/ WVC54GCA	•	•
MOBOTIX	D12D-IT/ D12D-Sec/ D22M-Basic/ D22M-IT/ D22M-Sec/ M12D-IT/ M12D-Sec/ M12M-IT/ M12M-Sec/ M12M-Web/ M22M-IT/ M22M-Night/ M22M-Sec/ Q22M-Basic/ Q22M-Sec	•	•
Panasonic	BB-HCM580/ BB-HCM581/ BB-HCM527/ BB-HCM531/ BB-HCM511/ BB-HCM515/ BB-HCM547/ BL-C1/ BL-C10/ BL-C111/ BL-C131/ BL-C20/ BL-C30/ BL-C30K1/ BB-HCM481/ BB-HCM403/ BB-HCM381/ BB-HCM371/ BB-HCM331/ BB-HCM311/ BB-HCM110/ BB-HCM100/ BB-HCM280/ KK-HCM180/ BL-C11/ BL-C31/ NF282/ NF284/ NP1000/ NP100A/ NP244/ NS202(A)/ NW484/ WV-NF302/ WV-NP304/ WV-NP304V	•	•
SANYO	VCC-400N/ VCC-P450/ VCC-P470/ VCC-PT490/ VCC-PT500/ VCC-9600/ VCC-9800	•	•
SONY	SNC-CS10/ SNC-CS11/ SNC-CS20/ SNC-CS50/ SNC-CM120/ SNC-DF40/ SNC-DF50/ SNC-DF70/ SNC-DF80/ SNC-DS10/ SNC-DS80/ SNC-DM110/ SNC-DM160/ SNC-P1/ SNC-P5/ SNC-RX530/ SNC-RX550/ SNC-RX570/ SNC-RZ25/ SNC-RZ30/ SNC-RZ50/ SNC-Z20	•	•
TOA	N-CC2561/ N-VT-2010/ N-CC-2360	•	•
TOSHIBA	CI8110-D/ CI8210-D/ IK-WB12/ IK-WB21	•	•
TRENDnet	TV-IP212/ TV-IP212W/ TV-IP312/ TV-IP312W/ TV-IP410/ TV-IP410W/ TV-IP422/ TV-IP422W	•	•
VIVOTEK	IP3111/ IP3121/ IP3122/ IP3132/ IP3135/ IP3137/ PT3112/ PT3122/ PT3117/ PT3127/ FD6112V/ FD6122V/ IP6112/ IP6122/ IP6117/ IP6127/ PZ6112/ PZ6122/ PZ6114/ PZ6124/ SD6112V/ SD6122V/ FD7131/ FD7141/ IP7131/ IP7132/ IP7133/ IP7134/ IP7135/ IP7137/ IP7138/ IP7139/ IP7142/ IP7151/ IP7152/ IP7161/ IP7251/ IP7300/ IZ7151/ PZ7111/ PZ7121/ PZ7112/ PZ7122/ PZ7131/ PT7135/ PT7137/ PZ7151/ PZ7152/ SD7151/ VS 3102/ VS 3100P/ VS 7100	•	•
Y-CAM	Y-Cam White/ Y-Cam Black	•	•

\*For the latest information of the supported cameras, please visit QNAP Security website: [http://www.qnapsecurity.com/pro\\_compatibility\\_camera.asp](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 Systems, Inc.

TEL: 886-2-8698 2000 FAX: 886-2-8698 2270

Address: 21F, No. 77, Sec. 1, Xintai 5th Rd, Xizhi City, Taipei County, 221, Taiwan

For more detailed information, please visit QNAP website: <http://www.qnapsecurity.com/>

E-mail: [nvr@qnap.com](mailto:nvr@qnap.com)

QNAP is a registered trademark of QNAP Systems, Inc. Microsoft and Windows are either registered trademarks of Microsoft® Corporation in the United States and other countries.

