

VS-2012/ 2008 VioStor NVR

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

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

Intelligent Video Analytics

- Motion Detection
- Foreign Object
- Missing Object
- Out of Focus
- Camera Occlusion

Environment Friendly

- Quiet
- Power-saving

intel Atom inside

1GB DDRII Memory

Powerful 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
- High quality Motion-JPEG, MPEG-4, MxPEG and H.264 recording
- Audio recording (vary by camera models)

Powerful Surveillance Features

- Diversified modes for live monitoring
- Smart control of PTZ cameras and auto cruising
- Event notification on monitoring
- Real-time SMS and email alert
- Multi-channel playback at different speed
- Easy data search by date & time, timeline, event, and intelligent video analytics (motion detection, foreign object, missing object, out of focus, and camera occlusion)
- Enhanced file security by digital watermark

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® Atom™ 1.6GHz CPU and 1GB DDRII memory
- Advanced RAID(RAID 0/ 1/ JBOD) with hot-swap design
- Ultra large storage capacity (up to 4TB) for long-term recording
- Intelligent auto power on when power resumes after power outage
- Supports UPS for 24x7 service
- 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 !**



High Performance Network Surveillance System for SOHO and SMB

QNAP VS-2012/2008 NVR is the new generation 2-bay network surveillance system for the small and mid-sized business market. The NVR features Linux OS, Intel 1.6GHz CPU and 1GB DDRII memory. It supports high quality real-time monitoring, megapixel recording, M-JPEG, MPEG-4, MxPEG, and H.264 recording from popular IP camera brands such as **AXIS, ACTi, Arecont Vision, Canon, D-Link, EDIMAX, ELMO, EtroVision, GANZ, iPUX, IQeye, LevelOne, Messo, MOBOTIX, Panasonic BB/ BL/ i-Pro, SANYO, SONY, TOSHIBA, TRENDnet, VIVOTEK, and Y-CAM.**

The VS-2012/2008 NVR houses 2 hot-swappable SATA hard drives which are capable of maximum 4TB storage capacity. The unique multi-server monitoring enables the users to monitor up to 120 IP cameras from multiple QNAP NVR servers without any extra software. Diversified recording features

such as schedule recording, alarm recording, alarm recording schedule, pre-alarm, and post-alarm recordings are also provided.

The NVR offers enhanced **video search by intelligent video analytics (IVA), including motion detection, foreign object, missing object, out of focus, and camera occlusion.** The NVR can be easily set up in 6 simple steps by the IE browser. An intuitive user interface is provided for the users to view the monitoring screens, connection and recording status, and the network bandwidth. The users can also play the recording data at different speed. Other class-leading server are also available, e.g. 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.

Powerful Surveillance Features



• Diversified Monitoring Modes

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



• Easy Drag and Drop Function on Monitoring

The VioStor NVR supports 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.

• Preset Position Control and Auto Cruising

You can view different preset positions of the IP cameras by clicking the number buttons on the monitoring page. You can also configure auto cruising settings on the VioStor NVR for periodic monitoring of the preset positions of the PTZ cameras.

• Digital Zoom for Monitoring and Playback

The VioStor NVR supports digital zoom for more flexible monitoring and playback.

• 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.

• Video Snapshot

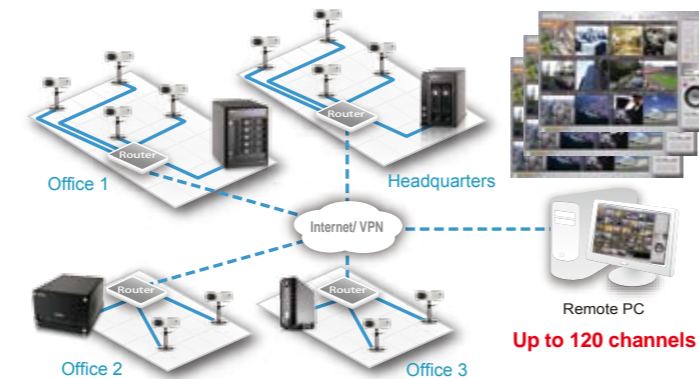
The snapshot function is supported on monitoring and playback page.

• 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 to monitor 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, MxPEG and H.264 recording
- Up to 30 fps at D1 or VGA for each camera
- High performance megapixel recording
- Audio recording (depends on the cameras)
- * Up to 15 schedules are supported for each camera

• Real-time SMS and Email Alert

The NVR sends SMS and e-mail alert 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 up to 32 users.

• On-line User List and Host Access Control

You can specify the connections to be allowed and denied to access the VioStor NVR. You can also view the record of users currently logged on and previously logged on to the VioStor NVR.

• 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.

• Advanced Event Logs

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



• Multi-channel Playback at Different Speed

The VioStor NVR 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.

• Enhanced File Security by Digital Watermark

The digital watermark technology allows you to check if the recording files on VioStor NVR are modified to enhance the file security.



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

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

Motion Detection: Detects the movement in the video. The moving objects are highlighted in red brackets.



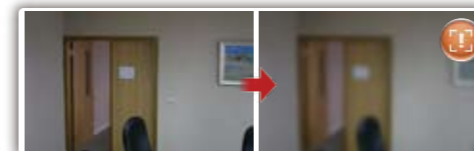
Foreign Object: Detects a new object in the video. The foreign objects are highlighted in yellow brackets.



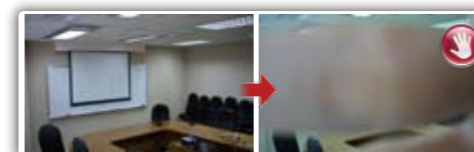
Missing Object: Detects a missing object in the video. The missing objects are highlighted in yellow brackets.



Out of Focus: Detects if the IP camera is out of focus.



Camera Occlusion: Detects if the IP camera is obstructed.



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/ mall 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



High Reliability and Smart Features

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

• 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.
- 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.

• Auto Logoff

The administrator can set the timeout period to log off the users when the idling time has reached in order to enhance secure management of the NVR.

• 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

With UPS, the NVR-104 can function normally in case of power outage or unstable power supply.

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

• DOM Architecture with Embedded Fail-safe Dual OS for Enhanced Reliability

Excellent Hardware Design

• Intel® Atom™ 1.6GHz CPU and 1GB DDRII Memory for Superior System Performance

• Green NVR Solution: Linux-embedded System with Low Power Consumption

Low Power Consumption



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

• Lockable HDD Tray

• 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.



Powerful Network Services

• DDNS Support & Built-in NTP Server

• Convenient Data Access by Network Neighborhood (SMB/ CIFS) / Web File Management (HTTP) / FTP server

Hardware Specifications

Processor

- Intel® Atom™ 1.6GHz

Memory

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

HDD Capacity

- 2 x 3.5" SATA I/II HDD or 2 x 2.5" SATA HDD (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:

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

Compression Format:

Motion-JPEG/ MPEG-4/ MxPEG/ 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

Compression Format:

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

Video Setting: Resolution, quality, frame rate

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* Up to 15 schedules are supported for each camera

Compression Format:

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

Video Setting: Resolution, quality, frame rate

E-map: Upload E-map

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, event notification, SMS, e-mail alert

Auto logoff: The administrator can set the timeout period to log off the users when the idling time has reached

Digital Watermark: Enhanced file security by digital watermark

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/ MxJPG/ 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	VS-2012	VS-2008
		12 channels	8 channels
AXIS	208M/ 207/ 207N/ 207M/ 207MFD/ 209FD/ RJ 210/ 210A/ 211A/ 211/ 211M/ 211M1/ 212/ 213/ 214/ 215/ 216FD/ 216MFD/ 221/ 223M/ 225FD/ 231/ 232/ 233D/ P1311/ P3011/ P3301/ P3344/ Q1755/ Q7401/ M1011/ M1011-W/ M1031-W/ M3011/ M7001/ 241Q/ 241QA/ 241S/ 241SA/ 243SA/ 247S	•	•
ACTI	ACM-1231/ ACM-1232/ ACM-1311/ ACM-1431/ ACM-1432/ ACM-1511/ ACM-3001/ ACM-3211/ ACM-3311/ ACM-3401/ ACM-3411/ ACM-4000/ ACM-4001/ 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/ CAM-7300/ CAM-7321/ CAM-7322/ ACD-2100/ ACD-2200/ ACD-2300/ ACD-2400/ ACD-2000Q/ SED-2140/ SED-2120/ TCM-4301/ TCM-5311	•	•
Arecont Vision	AV 1300/ AV 1305/ AV 1355/ AV 2100/ AV 2105/ AV 2155/ AV 3130/ AV 3100/ AV 3105/ AV 3155/ AV 5100/ AV 5105/ AV 5155/ AV 8180/ AV 8185/ AV 8360/ AV 8365	•	•
Canon	VB-C300/ VB-C300B/ VB-C50R/ VB-C50/ VB-C50FS/ VB-C50F1	•	•
Cisco	CIVS-IPC-2500/ CIVS-IPC-2500W	•	•
D-Link	DCS-2120/ DCS-2121/ DCS-3220/ DCS-3220G/ DCS-3420/ DCS-5220/ DCS-5300/ 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-IP/ SN2230-IPW/ SN2232-IP/ TD4112-IP/ TD4114-IP2	•	•
EtroVision	EV3130/ EV3131/ EV3131A/ EV3830/ EV6130/ 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	•	•
IOeye	0405/ 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	•	•
MESSOA	ND2860 H2/ NIC835 HNS/ NIC836	•	•
MOBOTIX	D12D-IT/ D12D-Sec/ D22M-Basic/ D22M-IT/ D22M-Sec/ M10D-Night/ M12D-IT/ M12D-Sec/ M12M-IT/ M12M-Sec/ M12M-Web/ M22M-IT/ M22M-Night/ M22M-Sec/ Q22M-Basic/ Q22M-Sec/ Q24M-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/ KX-HCM280/ KX-HCM180/ BL-C11/ BL-C31/ NF282/ NF284/ NP1000/ NP1004/ NP240/ NP244/ NS202(A)/ NS950/ NS954/ NW484/ NW960/ NW964/ WV-NF302/ WV-NP304/ WV-NP304V	•	•
SANYO	VCC-400W/ VCC-P450/ VCC-P470/ VCC-PT490/ VCC-PT500/ VCC-9600/ VCC-9800/ N6955/VCC-HD4000	•	•
SONY	SNC-CS10/ SNC-CS11/ SNC-CS20/ SNC-CS50/ SNC-CM120/ SNC-DF40/ SNC-DF50/ SNC-DF70/ SNC-DF80/ SNC-DF85/ SNC-DS10/ SNC-DS60/ SNC-DM110/ SNC-DM160/ SNC-P1/ SNC-P5/ SNC-RX530/ SNC-RX550/ SNC-RX570/ SNC-RZ55/ 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/ IP3112/ IP3122/ IP3132/ IP3135/ IP3137/ PT3112/ PT3122/ PT3127/ PT3127/ FD6111V/ FD6121V/ FD6121V/ FD6122V/ IP6112/ IP6122/ IP6117/ IP6127/ P26112/ P26112/ P26114/ SD6112V/ FD7130/ FD7131/ FD7132/ FD7141/ IP7130/ IP7131/ IP7132/ IP7133/ IP7134/ IP7135/ IP7137/ IP7138/ IP7139/ IP7142/ IP7151/ IP7152/ IP7154/ IP7161/ IP7251/ IP7330/ IZ7151/ PZ7111/ PZ7121/ PZ7122/ PZ7122/ PZ7131/ PZ7135/ PZ7137/ PZ7151/ PZ7152/ SD6122V/ SD7151/ SD7313/ SD7323/ 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

**All the other trademarks mentioned herein are the property of their respective companies.

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

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