# **Innovative NVR Solutions**

(For Enterprise/ SMB/ SOHO/ Home Users)



GANZ

• H.264, MPEG-4, M-JPEG and MxPEG Recording • 120-channel Multi-server Monitoring • Megapixel Recording

## **QNAP VioStor NVR Series**

**NVR** Innovative Network Video Recorder

M ACTi

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

**EVITECH** 

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

#### **NVR** Innovative Network Video Recorder

- VS-6020/ 6016/ 6012 Pro • 6-bay, 12TB, 20/ 16/ 12-channel
- Dual-core Intel<sup>®</sup> Atom<sup>™</sup> CPU, 1GB memory
- · PC-less network surveillance by HD local display
- · High quality megapixel recording
- · Max network throughput: 176 Mbps

#### NVR Innovative Network Video Recorder

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

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

#### NVR Innovative Network Video Recorder

#### VS-2012/ 2008/ 2004 Pro

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









#### **NVR** Innovative Network Video Recorder

#### VS-8040/ 8032/ 8024

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

#### Winner 2009 ASIS New Product of the Year

#### **NVR** Innovative Network Video Recorder

#### VS-5020/ 5012

- 5-bay, 10TB, 20/ 12-channel
- Intel® Celeron® 1.6GHz CPU, 1GB DDRII memory
- · High quality megapixel recording
- · Max network throughput: 138 Mbps

#### **NVR** Innovative Network Video Recorder

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

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

#### **NVR** Innovative Network Video Recorder

#### NVR-104P/ 104V

- 1-bay, 1TB, 4-channel
- Up to 30 fps at CIF for each channel
- Power-saving design, consumes only 18W





## Why QNAP NVR

NAP VioStor NVR (Network Video Recorder) is designed for high quality megapixel recording, and high performance real-time monitoring. It is a reliable standalone NVR with powerful surveillance features and mass storage capacity. Based on Linux OS, the NVR supports H.264, MPEG-4, M-JPEG and MxPEG recording from over 800 network camera models from many popular brands. With QNAP's unique multi-server monitoring feature, multiple VioStor NVRs can be cascaded together for central monitoring of up to 120 channels of video surveillance. The VioStor NVR is an ideal solution for small, medium, and large facilities that integrate IP cameras, advanced intelligent video analytics and RAID storage technologies to help companies provide a safe environment for employees and protect company assets.



#### Complete Recording Features

Schedule recording, motion detection recording, alarm recording, alarm recording schedule, pre-alarm and post-alarm recording, etc.

#### PC-less Network Surveillance by HD Local Display\*

VioStor NVR supports PC-less quick configuration, monitoring of IP cameras over the network, and video playback by connecting a monitor to the built-in VGA connector, a USB mouse, and a USB keyboard (option).

\* For VioStor Pro series NVR only.

#### Powerful Remote Management

VioStor NVR is an standalone surveillance system that supports professional grade video recording, remote monitoring and playback.

#### 4 Multi-server Monitoring

You can connect to one VioStor NVR and monitor up to 120 channels from other VioStor NVR servers over LAN or WAN by an IE browser.

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

VioStor NVR supports intelligent video analytics (IVA) to provide fast video retrieval. The following features are supported for video analytics: motion detection, missing object, foreign object, out of focus, and camera occlusion.

#### Simple Steps to Complete Setup

No more pains of hardware assembling and software installation of a PC-based server.

#### Advanced RAID with Hot-swap Design

VioStor NVR protects all important recordings.

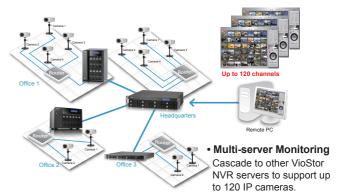
#### © Exclusive Linux + High Performance CPU + Embedded System Stable and reliable recording solution (PC-less recording).

#### 9 Green NVR Surveillance System

Easy-to-deploy, small footprint, and extra power-saving!

## **Powerful Surveillance Features**

#### Real-time Remote Monitoring





#### Diversified Remote Monitoring Modes

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



# Smart Control of PTZ & Speed Dome Cameras You can adjust the PTZ cameras directly by the web user interface of VioStor NVR



Preset Position Control and Auto Cruising
 You can view the preset positions of an IP camera
 by clicking the corresponding number buttons on the
 monitoring page. You can also choose the preset
 positions and configure the time interval on the PTZ
 cameras for periodic monitoring.



#### Instant Event Notification

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



#### Digital Zoom

You can zoom in or zoom out the video image on the monitoring and playback interfaces.



#### Video Snapshot

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



#### E-map

VioStor NVR provides E-map function for users to upload the pictures of the monitoring locations.

#### **HD Local Display**



• Intuitive Local Display Interface By supporting full HD (1920 x 1080) local display, you can configure the system, monitor the IP cameras and play the video conveniently via only a USB mouse and a VGA monitor connected to VioStor NVR.
\* For VioStor Pro series NVR only.

#### Most Complete Recording Functions



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

Simultaneous multi-channel H.264, MPEG-4, M-JPEG and MxPEG video recording of IP cameras (depending on the camera models).



#### Various Recording Functions

- Continuous/ manual/ schedule recording
- Alarm recording (by multiple alarm events)
- Multiple alarm recording schedules
- Pre-alarm and post-alarm recording



• High Performance Megapixel Recording

VioStor NVR supports high performance megapixel recording (up to 8-megapixel) from various IP cameras.



Audio Recording

VioStor NVR supports audio recording (depending on the camera models).



Generic IP Cameras Support

VioStor NVR provides an interface for the users to enter the JPEG CGI command of their IP cameras to retrieve the video and audio data from the IP cameras.

#### Convenient Backup Solution



Scheduled Remote Replication

VioStor NVR supports scheduled remote replication for secure data backup to a remote QNAP NAS on the local network.



One-Touch-Auto-Video-Backup\*

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

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

#### Advanced Ever

NAP VioStor NVR is equipped with enterprise-level alarm-triggering mechanism and supports various alerts and abnormal event. This feature greatly strengthens the security, management efficiency, and compatibility of the VioStor NVR systems.

\* NVR-104P/ 104V do not support this feature.

#### Advanced event management can be divided into two parts:



#### **Events Overview**

Supports more event types, e.g. motion detection, alarm input, connection failure, recording failure, and user-defined event to trigger follow-up actions.



#### Motion Detection

When the camera detects the movement, the defined actions will be activated to notify related persons to look over the monitoring area.



#### Alarm Input

When the VioStor NVR receives the signal from the IP camera's alarm input connecting to other alert devices, the defined actions will be activated to notify related persons to deal with this event immediately.



#### Connection Failure

When the VioStor NVR fails to connect to the IP camera, the defined actions will be triggered to notify related persons to check the status of the camera.



#### Recording Failure

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



#### User-defined Event\*

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

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

#### nt Management

#### **Actions Overview**

More actions can be activated when an event is triggered, such as multichannel recording, adjusting the PTZ camera to the preset position, alarm output, built-in buzzer, email & SMS alert, and user-defined action.



#### Recording

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



#### Camera Control

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



#### Alarm Output

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

\* VioStor NVR supports the alarm output of AXIS, Panasonic, SONY, ACTi, VIVOTEK camera models.



#### SMS

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



#### Email

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



#### Buzzer

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



#### User-defined Action

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

#### **Example**

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

#### Playback Features

#### Multi-view Playback

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



#### Digital Watermarking

VioStor NVR supports digital watermarking to protect the exported videos and snapshots from unauthorized modification. You can use the Watermark Proof utility to verify whether or not the videos and snapshots are original.



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

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



#### **Motion Detection:**

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



## Foreign Object:

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



#### Missing Object:

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



#### Out of Focus:

Detects if the IP camera is out of focus.



#### Camera Occlusion:

Detects if the IP camera is obstructed.



## **Security Control**



#### Authority Management

You can create multiple users on VioStor NVR. The users created on the NVR can be assigned to different user groups (administrator/system manager/user) with different rights of monitoring, playback, PTZ control, and audio monitoring.



#### Auto Logoff

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



#### Host Access Control

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



#### Detailed Event Logs

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



#### On-line User List

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

## **High Reliability and Smart Features**



Automatic System Startup after Power Recovery
 When enabled, the VioStor NVR turns on automatically
 when the power recovers after an outage.



#### UPS Support for 24/7 Service\*

VioStor NVR supports APC, CyberPower and MGE UPS devices to enable stable and continuous recording 24x7.

\* NVR-104P/ 104V only support APC UPS device.



#### Advanced RAID (0/ 1/ 5/ 5 +hos spare/ 6/ 6 + hot spare/ JBOD)\*

\* VS-2012/ 2008/ 2004 Pro and NVR-104P/ 104V offer RAID 0, 1, single, and JBOD disk configurations. The RAID function of NVR-104 is enabled via an external eSATA device.



#### Online RAID Capacity Expansion\*

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

\* NVR-104P/ 104V do not support this feature.



#### 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.

\* NVR-104P/ 104V do not support this feature.

### **Network Services**

#### Dual Gigabit LAN Ports for Failover, Load-balancing, or Multi-IP Setting\*

#### ► Failover

This mode allows VioStor NVR to sustain the failure of one network port to provide continuous services.

#### ► Load-balancing

This mode provides bandwidth aggregation to boost the file transfer speed (works with managed Ethernet switch with 802.3ad configured).

#### ► Multi-IP Setting

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



<sup>\*</sup> NVR-104P/ 104V support one Gigabit RJ-45 Ethernet port only.

#### • Built-in DDNS Support

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

#### Built-in NTP Server

The NTP server feature allows the connected IP cameras to synchronize their date and time settings with the NVR.

#### Convenient Data Access

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

## **Easy Configuration and Management**

#### Easy System Setup in Simple Steps

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

#### • Intuitive User Interface

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

#### Smart Search of IP Cameras for Quick Settings

Search for the IP cameras on the local network for quick camera configuration.

#### Quick Links to the Network Cameras

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

## **About QNAP Security**



QNAP Security is a world class provider of professional PC-less Network Video Recorder (NVR) surveillance solutions for small, medium, and large facilities that integrate IP cameras, advanced surveillance video analytics and RAID storage technologies to help companies provide a safe environment for employees and protect company assets. QNAP VioStor NVR solutions provide 1 to 120 channels of networked video surveillance with multi-server monitoring that allow individual monitoring and alarm generation parameters for each channel and are scalable for monitoring a single facility or an entire enterprise.







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#### **Customer Service**

Email: q\_support@qnap.com MSN: q.support@hotmail.com Skype: qnapskype

## **Updates & Download**

http://www.qnapsecurity.com/download.asp

## **Product Information**

http://www.qnapsecurity.com

Dealer Seal



Designs and specifications are subject to change without notice.

For more detailed information, please visit QNAP Security website: http://www.qnapsecurity.com/
51000-022919-RS 2010/10 (A)

## **Software Specifications**

#### Recording

#### Video Compression: (\*1)

 H.264/ MPEG-4/ M-JPEG/ MxPEG (depending on the camera models)

#### Recording Mode:

- · Continuous/ manual/ schedule recording
- Alarm recording/ multiple alarm recording schedules
- Pre-alarm recording: up to 300 sec; post-alarm recording: up to 300 sec

#### Recording Performance: (\*1)

- Up to 30 fps at D1 or VGA for each channel
- · Supports megapixel cameras
- \* Real performance may vary in different environment

#### Recording Settings:

 Video compression, resolution, frame rate, quality, audio recording

#### File format: AVI

(QNAP codec is required for playback)

#### Local Display (2)

#### Display Mode:

 1/ 4/ 6/ 8/ 9/ 10/ 12-channel display, sequential display mode

#### **Advanced Monitoring Features:**

Full screen display, event notification, PTZ control, digital zoom

#### Local Playback:

· Single view playback from local NVR

Search Mode: By date & time

#### Playback Control:

 Play, pause, stop, reverse play, next/previous video file, different speed control

#### Advanced Playback Features:

Full screen display, digital zoom

#### Remote Monitoring

#### Multi-server Monitoring:

 Up to 120 channels monitoring from multiple VioStor NVR servers

#### Display Mode:

• 1/ 4/ 6/ 8/ 9/ 10/ 12/ 16/ 20/ 25/ 36/ 42channel display, Picture-in-Picture, sequential mode, dual display mode

#### Advanced Monitoring Features:

 Full screen display, video snapshot, manual recording, event notification, PTZ control, digital zoom

E-map: Upload E-map (JPEG)

#### Remote Playback

#### Playback Channel:

 Maximum 4-view playback from multiple NVR servers simultaneously

#### Search Mode:

 By date & time, timeline, event, and intelligent video analytics (IVA)

#### Intelligent Video Analytics (IVA):

 Motion detection, missing object, foreign object, out of focus, and camera occlusion

#### Playback Mode:

 Play, pause, stop, reverse play, next/ previous frame, next/ previous video file, different speed control

#### Advanced Playback Features:

 Full screen display, video snapshot, digital zoom, digital watermarking

#### Export:

 Convert recording files to one AVI file Download:

· Download recordings via the web

#### Storage

#### Disk Management:

- Single disk, RAID 0, RAID 1, RAID 5, RAID 5 + hot spare, RAID 6, RAID 6 + hot spare, and JBOD/ Linear (\*1)
- Online RAID Capacity Expansion, Online RAID Level Migration (\*3)
- HDD S.M.A.R.T., bad blocks scan (\*3)

#### Services:

· Web File Manager, FTP, SMB/CIFS

#### LCD Panel (\*4)

- PC-less RAID configuration for the first time setup
- Checks or configures the IP settings, physical disk info, system info, shut down or reboot the NVR etc.

#### **Network**

#### Support:

HTTP, TCP/IP, SMTP, DHCP, Static IP, DNS, DDNS, FTP, NTP, UPnP, failover, load-balancing, multi-IP setting (\*1)

#### Dual Gigabit LAN: (\*5)

Failover/ load-balancing/ multi-IP setting

#### Security Control

#### Authority Management:

 Multiple accounts creation with different rights of monitoring, playback, PTZ control, and audio monitoring

Host Access Control: Control of allowed and denied access to the NVR

Auto Logoff: Automatic user logoff from idling configuration pages

On-line Users List: Logon status of active

users and logon history

UPS: APC/ CyberPower/ MGE (USB type) (\*1)

Event Logs: Detailed event logs

#### Language Support

Czech, Danish, Dutch, English, French, Finnish, German, Hungarian, Italian, Japanese, Korean, Norwegian, Polish, Portuguese, Russian, Spanish, Swedish, Simplified Chinese. Traditional Chinese. Turkish

#### Client PC Requirements

(Suggested system requirements)

**Operation System:** Microsoft Windows 7, Vista, XP

Web Browser: Internet Explorer 6.0 or later Network Interface: 10/100/1000 Mbps Display Resolution:

- Suggested 1024 x 768 pixels or above
- \* For higher surveillance performance, please select more advanced PC models.

(\*1) Vary by NVR models

(•2) VioStor Pro series only

(\*3) NVR-104P/ 104V do not support these features

(\*4) LCD-equipped models only

(\*5) Dual LAN supported models only

## **Network Camera Compatibility List**

Brand	Models			
AXIS	2100/ 2110/ 206/ 206W 207/ 207W/ 207W/ 207W/ 209MFD(-R)/ 209MFD(-R)/ 210/ 210A/ 211A/ 211A/ 211A/ 211A/ 211B/ 212 PTZ(-V)/ 213 PTZ/ 214 PTZ/ 215 PTZ/ 216FD(-V)/ 216MFD(-V)/ 221/ 223W 225FD/ 231D+/ 232D+/ 233D/ M1011(-W)/ M1031-W/ M1054/ M1113/ M1114M3011/ M3014/ M3203(-V)/ M3204(-V)/ P1311/ P1343/ P1344/ P1346/ P3301(-V)/ P3343/ P3344/ P5534/ Q1755/ Q6032-E/ 241S/ 241SA/ 241QA/ 243SA/ 247S/ M7001/ Q7401/ Q7401/ Q7404			
ACTI	ACM-1011/ ACM-1231/ ACM-1232/ ACM-1311/ ACM-1431/ ACM-1432/ ACM-1511/ ACM-301/ ACM-301/ ACM-3011/ ACM-3211/ ACM-3211/ ACM-3401/ ACM-3511/ ACM-3601/ ACM-3601/ ACM-3601/ ACM-3703/ ACM-4000/ ACM-4001/ ACM-4001/ ACM-4201/ ACM-4201/ ACM-5011/ ACM-5611/ ACM-5611/ ACM-5711/ ACM-7511/ ACM-7511/ ACM-8201/ ACM-8201/ ACM-8201/ ACM-5201/ CAM-5201/ CAM-5321/ CAM-5321/ CAM-5321/ CAM-610/ CAM-6620/ CAM-6620/ CAM-7300/ CAM-7301/ CAM-7321/ CAM-7322/ TCM-4101/ TCM-4301/ TCM-5312/ TCM-7411ACD-2000Q/ ACD-2100/ ACD-2200/ ACD-2300/ ACD-2400/ SED-2120/ SED-2140/ TCD-2500			
A-MTK	AM9060M/ AM9120M/ AM9130M/ AM9539/ AM9730/ AM6221			
Arecont Vision	AV1300/ AV1305/ AV1355/ AV2100/ AV2105/ AV2155/ AV3130/ AV3100/ AV3105/ AV3135/ AV3155/ AV5100/ AV5105/ AV5155/ AV8180/ AV8185/ AV8360/ AV8365			
AVTECH	AVI201/ AVI202/ AVI203/ AVI204/ AVI322/ AVN211/ AVN212/ AVN252			
Brickcom	CB-100Ae/ CB-100Ap/ FB-100Ae/ FB-100Ap/ FD-100Ae/ FD-100Ap/ WCB-100Ae/ WCB-100AP/ WFB-100Ae/ WFB-100Ap			
Canon	VB-C300/ VB-C300B/ VB-C50iR/ VB-C50F9i/ VB-C50F9i/ VB-C500D/ VB-C60			
Cisco	CIVS-IPC-2500(W)/ PVC-300/ WVC-210/ PVC-2300/ WVC-2300			
CNB	IDC4000T/ IDP4000VR/ IDP4030VR/ IGP1030/ INS2000/ IVP4000VR/ IVP4030VR/ ISMC1063X			
DIGITUS	DN16050/ DN16051/ DN16052/ DN16055			
D-Link	DCS-900(A)/ DCS-900(B1)/ DCS-900(B2)/ DCS-910/ DCS-920/ DCS-2102/ DCS-2120/ DCS-2121/ DCS-3110/ DCS-3220(G)/ DCS-3410/ DCS-3420/ DCS-5220/ DCS-5300(G)/ DCS-6620(G)			
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	EV6130/ EV6150/ EV6250A/ EV6332/ EV6356A/ EV6530/ EV6531A/ EV6551A/ EV6552A/ EV8150/ EV3130A/ EV3131A/ EV3151(A)/ EV3830H			
GANZ	ZN-D2024/ ZN-PT304L/ ZN-PT304WL/ ZN-YH305/ ZV-S306			
Hikvision	DS-2CD732F-E/ DS-2CD752MF-E/ DS-2CD752MF-FB/ DS-2CD762MF-FB/ DS-2CD792PF-E/ DS-2CD802PF-E/ DS-2CD852MF-E/ DS-2CD892PF-E/ DS-6101HFI-IP-A			
iPUX	ICS-1001/ ICS-1011/ ICS-1003/ ICS-1013/ ICS-1100/ ICS-1110/ ICS-1300/ ICS-1310/ ICS-130A/ ICS-131A/ ICS-1600/ ICS-1700/ ICS-6000			
IQeye	QQ40SI/			
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/ FCS-5011			
Linksys	PVC-2300/ WVC-2300/ PVC-300/ WVC-210/ WVC54GCA			
MESSOA	NCB855/ NCR875/ NDF820/ NDR890/ NDZ860/ NIC835/ NIC836			
MOBOTIX	D12Di-IT/ D12Di-Sec/ D22M-Basic/ D22M-IT/ D22M-Sec/ D24M-IT/ M10D-Night/ M12-DevKit-Board/ M12D-IT-Dnight/ M12D-Sec/ M12M-IT/ M12M-Sec/ M12M-Web/ M22M-Night/ M22M-Night/ M22M-Sec/ M24M-Sec- M24M-Sec- M12M-IT/ M12M-Sec/ M22M-Basic/ Q24M-Basic/ Q24M-Sec			
NAKAYO	IPCAMDH			
Panasonic	BB-HCM100/ BB-HCM110/ BB-HCM311/ BB-HCM331/ BB-HCM371/ BB-HCM381/ BB-HCM403/ BBHCM481/ BB-HCM511/ BB-HCM531/ BB-HCM515/ BB-HCM527/ BB-HCM547/ BB-HCM580/ BB-HCM581/ BB-HCM705/ BB-HCM50/ BB-			
Panasonic i-Pro	NF282/ NF384/ NF302/ NP1000/ NP1004/ NP240/ NP244/ NP304(V)/ NP502/ NS202(A)/ NS950/ NS954/ NW484(S)/ NW960/ NW964			
SANYO	VCC-400N/VCC-9600/VCC-HD2500/VDC-HD3100/VCC-HD3300/VDC-HD3300/VDC-HD3300/VCC-3500/VDC-3500/VCC-HD4000/VCC-HD4600/VCC-HD695/VCC-P450/VCC-P470/VCC-PT490/VCC-PT500			
SHANY	SNC-1010/ SNC-1030DN/ SNC-2150/ SNC-LM1040/ SNC-MR1010DN/ SNC-MR2110DN			
SONY	SNC-CM120/ SNC-CH140/ SNC-CH240/ SNC-CS10/ SNC-CS11/ SNC-CS20/ SNC-CS50/ SNC-DH140(T)/ SNC-DH180/ SNC-DF40/ SNC-DF50/ SNC-DF70/ SNC-DF80/ SNC-DF80/ SNC-DF85/ SNC-DS10/ SNC-DS60/ SNC-DM110/ SNC-DM160/ SNT-EP154/ SNT-EX154/ SNC-P1/ SNC-P5/ NCRX530/ SNC-RX550/ SNC-RX570/ SNC-RZ55/ SNC-RZ30/ SNC-RZ50/ SNC-Z20/ SNT V704/ SNC-RH124/ SNC-RH164/ SNT-EX104			
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			
VIOSECURE	AC930M/ AC3530HQIP/ EV241X/ VFD150HQIP			
VIVOTEK	IP3111/ IP3112/ IP3112/ IP3112/ IP3132/ IP3135/ IP3137/ PT3112/ PT3122/ PT3112/ PT3122/ PT3117/ PT3127/ FD6111V/ FD6121V/ FD6112V/ FD6112V/ IP6112/ IP6127/ IP6127/ IP6127/ PZ6112/ PZ6122/ PZ6114/ PZ6124/ SD6112V/ FD7130/ FD7131/ FD7132/ FD7131/ FD7132/ IP7133/ IP7134/ IP7135/ IP7138/ IP7138/ IP7139/ IP7151/ IP7152/ IP7152/ IP7154/ IP7154/ IP7154/ IP7151/ IP7251/ IP730/ IP7361/ IZ7151/ PZ71X1/ PZXX1X1/ PZXX1X1/ PZXX1X1X1/ PZXX1X1X1/ PZXX1X1X1/ PZXX1X1X1X1/ PZXX1X1X1X1/ PZXX1X1X1X1/ PZXX1X1X1X1X1/ PZXX1X1X1X1X1X1X1X1X1X1X1X1X1X1X1X1X1X1X			
Y-CAM	Y-Cam White/ Y-Cam Black			

<sup>►</sup> For the latest information of the supported cameras, please visit QNAP Security website: http://www.qnapsecurity.com/pro\_compatibility\_camera.asp

<sup>▶</sup> All the other trademarks mentioned herein are the property of their respective companies.



## **Comparison of VioStor NVR Series**











Product Photo					• H • H • H • H • H
NVR Model	VS-8040U-RP/ 8032U-RP/ 8024U-RP	VS-8040/ 8032/ 8024	VS-6020/ 6016/ 6012 Pro	VS-5020/ 5012	VS-4016U-RP/ 4012U-RP/ 4008U-RP Pro
Target Market	Enterprise	Enterprise	Enterprise and SMB	Enterprise and SMB	Enterprise and SMB
Operation System	Linux-embedded	Linux-embedded	Linux-embedded	Linux-embedded	Linux-embedded
Number of Channels(Recording)	Up to 40/ 32/ 24	Up to 40/ 32/ 24	Up to 20/ 16/12	Up to 20/ 12	Up to 16/ 12/ 8
Video Server Support	Yes	Yes	Yes	Yes	Yes
HD Local Display			Yes		Yes
Multi-server Monitoring	Yes (up to 120 channels)				
Compression Format	H.264, MPEG-4 M-JPEG & MxPEG (depending on camera models)				
Recording Performance	Up to 30 fps at D1 or VGA for each channel	Up to 30 fps at D1 or VGA for each channel	Up to 30 fps at D1 or VGA for each channel	Up to 30 fps at D1 or VGA for each channel	Up to 30 fps at D1 or VGA for each channel
Megapixel Recording	Yes (up to 8-megapixel)				
Multi-view Playback	4-view	4-view	4-view	4-view	4-view
Intelligent Video Analytics (Playback)	Motion detection, missing object, foreign object, out of focus, and camera occlusion	Motion detection, missing object, foreign object, out of focus, and camera occlusion	Motion detection, missing object, foreign object, out of focus, and camera occlusion	Motion detection, missing object, foreign object, out of focus, and camera occlusion	Motion detection, missing object, foreign object, out of focus, and camera occlusion
Digital Watermarking	Yes	Yes	Yes	Yes	Yes
Advanced Event Management	Yes	Yes	Yes	Yes	Yes
Remote Replication*	Yes	Yes	Yes	Yes	Yes
HDD Capacity**	Up to 16TB (8 x 3.5-inch SATA/2.5-inch SATA/ SSD)	Up to 16TB (8 x 3.5-inch SATA/2.5-inch SATA/SSD)	Up to 12TB (5x 3.5-inch SATA/2.5-inch SATA/SSD)	Up to 10TB (5x 3.5-inch SATA/2.5-inch SATA/SSD)	Up to 8TB (4 x 3.5-inch SATA/2.5-inch SATA/SSD)
RAID Protection	RAID 0/ 1/ 5/ 5+ Hot spare/ 6/ 6+ Hot spare/ JBOD	RAID 0/ 1/ 5/ 5+ Hot spare/ 6/ 6+ Hot spare/ JBOD	RAID 0/ 1/ 5/ 5+ Hot spare/ 6/ 6+ Hot spare/ JBOD	RAID 0/ 1/ 5/ 5+ Hot spare/ 6/ 6+ Hot spare/ JBOD	RAID 0/ 1/ 5/ 5+ Hot spare/ 6/ JBOD
Processor	Intel® Core™2 Duo 2.8 GHz	Intel® Core™2 Duo 2.8 GHz	Dual-core Intel® Atom™	Intel® Celeron® 1.6GHz	Dual-core Intel <sup>®</sup> Atom™
LCD Panel	Yes	Yes	Yes	Yes	
Gigabit LAN Port	2	2	2	2	2
Redundant Power Supply	Yes	_	-		Yes
Hardware Dimensions	88.9(H) x 482.6(W) x 531.5(D) mm 3.5(H) x 19(W) x 20.93(D) inch	298(H) x 200(W) x 270(D) mm 11.73(H) x 7.87(W) x 10.63(D) inch	175(H) x 257(W) x 235(D) mm 6.89(H) x 10.12(W) x 9.25(D) inch	261.1(H) x 188.5(W) x 261.1(D) mm 10.28(H) x 7.42(W) x 10.28(D) inch	44(H) x 439(W) x 499(D) mm 1.73(H) x 16.97(W) x 19.65(D) inch
Color Box Shipping Weight	16.7Kg/ 36.82 lb	9.8Kg/ 21.61 lb	6.5Kg/ 14.33 lb	8Kg/ 17.64 lb	12.06Kg/ 26.59 lb

<sup>\*</sup> The remote replication is supported in LAN only.

\*\* The standard system is shipped without HDD.

Designs and specifications are subject to change without notice. For more detailed information, please visit QNAP Security website: http://www.qnapsecurity.com/







VS-4016/ 4012/ 4008 Pro	VS-2012/ 2008/ 2004 Pro	NVR-104P/ 104V	
Enterprise and SMB	SMB and SOHO	SOHO and Home	
Linux-embedded	Linux-embedded	Linux-embedded	
Up to 16/ 12/ 8	Up to 12/8/4	Up to 4	
Yes	Yes	Yes	
Yes	Yes		
Yes (up to 120 channels)	Yes (up to 120 channels)	Yes (up to 120 channels)	
H.264, MPEG-4 M-JPEG & MxPEG (depending on camera models)	H.264, MPEG-4 M-JPEG & MxPEG (depending on camera models)	H.264, MPEG-4 & M-JPEG (depending on camera models)	
Up to 30 fps at D1 or VGA for each channel	Up to 30 fps at D1 or VGA for each channel	Up to 30 fps at CIF for each channel	
Yes (up to 8-megapixel)	Yes (up to 8-megapixel)	Yes	
4-view	4-view	4-view	
Motion detection, missing object, foreign object, out of focus, and camera occlusion	Motion detection, missing object, foreign object, out of focus, and camera occlusion	Motion detection, missing object, foreign object, out of focus, and camera occlusion	
Yes	Yes	Yes	
Yes	Yes	Yes	
Yes	Yes		
Up to 8TB (4 x 3.5-inch SATA/2.5-inch SATA/SSD)	Up to 4TB (2 x 3.5-inch SATA/2.5-inch SATA/SSD)	Up to 1TB (1 x 3.5" SATA I/II HDD) Expandable to 2TB through external eSATA device	
RAID 0/ 1/ 5/ 5+ Hot spare/ 6/ JBOD	RAID 0/ 1/ JBOD	RAID is enabled via external eSATA device with preference hard disk	
Dual-core Intel® Atom™	Dual-core Intel® Atom™	RISC	
Yes			
2	2	1	
	_	-	
177(H) x 180(W) x 235(D) mm 6.97(H) x 7.09(W) x 9.25(D) inch	150(H) x 102(W) x 216(D) mm 5.91(H) x 4.02(W) x 8.5(D) inch	165.5(H) x 60(W) x 218.4(D) mm 6.52(H) x 2.36(W) x 8.60(D) inch	
4.65Kg/ 10.24 lb	2.92 Kg/ 6.44 lb	1.57 Kg/ 3.46 lb	

## **QNAP Unique Utilities**

#### **QNAP Finder**

The QNAP Finder is a value-added utility developed to help you quickly search all the VioStor NVR servers and all major brands of IP-based cameras and network video servers.



#### VioStor Player

The VioStor Player allows you to play the recording files on your Windows computer or the VioStor NVR servers.



# Watermark Proof (Installed with VioStor Player)

You can select to add digital watermark on the exported videos and snapshots. The Watermark Proof allows you to check if the exported files were modified.



#### V-Mobile

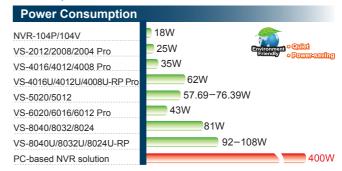
#### (for Windows PDA Phone, iPad, iPhone, iPod)

The V-Mobile is a mobile video surveillance utility for you to monitor the network cameras on the VioStor NVR. With V-Mobile installed on Windows PDA phone, iPad, iPhone, and iPod, you can monitor your home and office, check the safety of the children at home and be alerted by the intrusion alarm anytime, anywhere.



## **Green NVR Solution**

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



## **NVR Applications**

VioStor NVR is a dedicated network storage device for storing the recordings of the network cameras. It integrates the advanced recording functions of popular network cameras into a user-friendly web UI.

The NVR can record the video actively from various IP cameras located in local or remote sites without running extra software on a personal computer. It also supports real-time monitoring everywhere via the web.









Shopping Mall

Home

Schools / Kindergardens



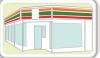




Bank / ATMs

Childcare

Hospitals







Retail Stores

Factories

Security Station







City / Town

Fauna Conservation Area

Parking Lot







Road Traffic

Sports Events

Elder Care



# NVR Innovative Network Video Recorder

**Network Surveillance System for IP Cameras** 





