

# VS-8040U-RP VioStor NVR

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

Network Surveillance System for Enterprise  
QNAP Network Video Recorder for IP Cameras

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

*Secure Life, Secure Property*

**Environment Friendly**

- Quiet
- Power-saving

**Intelligent Video Analytics**

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

Intel® Core™2 Duo Processor  
**2.8GHz**

**2GB**  
DDRII Memory

**300W Redundant Power Inside**

### 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
- Touch-N-Go PC-less Installation by LCD Display

### High Reliability and Smart Features

- Intel® Core™ 2 Duo 2.8 GHz CPU and 2GB DDRII memory
- Advanced RAID (RAID 0/ 1/ 5/ 5 + hot spare/ 6/ 6 + hot spare/ JBOD) with hot-swap design
- Large storage capacity (up to 16TB) 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



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

# VS-8040U-RP

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

Secure Life, Secure Property



## High Performance Network Surveillance System for Enterprise

QNAP VS-8040U-RP VioStor NVR is the 8-bay, 2U chassis network surveillance system 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 40-channel M-JPEG, MPEG-4, MxPEG, H.264 recording from over 300 network camera models from many popular brands, e.g. **AXIS, ACTi, Arecont Vision, Canon, Cisco, D-Link, EDIMAX, ELMO, EtrоVision, GANZ, iPUX, IQeye, LevelOne, Linksys, Messoa, MOBOTIX, Panasonic BB/ BL/ i-Pro, SANYO, SONY, TOA, TOSHIBA, TRENDnet, VIVOTEK & Y-CAM.** The VioStor NVR can be also cascaded to other QNAP NVR servers to monitor up to 120 IP cameras.

The VS-8040U-RP VioStor NVR adopts Linux-embedded OS, Intel® Core™ 2 Duo 2.8GHz CPU, and 2GB DDRII memory to deliver high system reliability. It features hot-swap hard drive design and redundant power supply against system downtime caused by hard drive failure. Besides, the NVR supports diversified recording modes, e.g.

schedule recording, alarm recording, alarm recording schedule, motion-detection recording, pre-alarm, and post-alarm recordings. It offers **video search by intelligent video analytics (IVA), including motion detection, foreign object, missing object, out of focus, and camera occlusion.** An intuitive user interface is provided for the users to view the monitoring screens, connection status, recording status, and network bandwidth, search the recording data, and play the recording data at different speed.

Other class-leading server features of the VS-8040U-RP VioStor NVR include advanced data protection by RAID 0/ 1/ 5/ 5 + hot spare/ 6/ 6 + hot spare/ JBOD, Online RAID Capacity Expansion, Online RAID Level Migration, two Giga LAN ports for network failover, load-balancing, and multi-LAN setting, etc. Moreover, the VS-8040U-RP NVR can be easily set up in 6 simple steps by the web-based GUI using the IE browser or by the handy LCD panel. It is an excellent option for central monitoring and recording of numerous network cameras in a large-scale surveillance system.

## 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

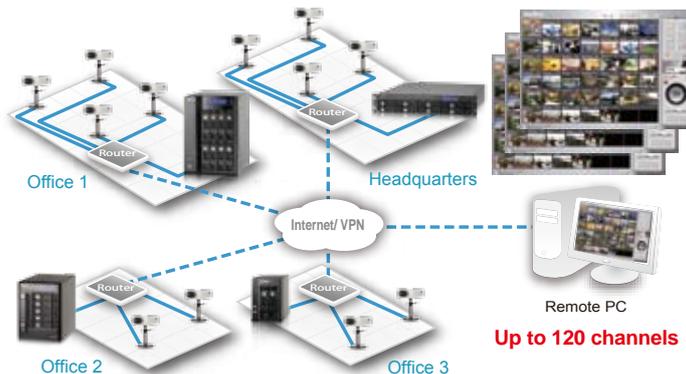
The snapshot function is supported on monitoring and playback page.

### • 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 D1/ VGA recording for each camera
  - High performance megapixel recording
  - Audio recording (vary by camera models)
- \* 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.

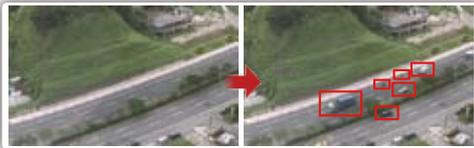


### • Data Search by Date & Time, Timeline, Event and Intelligent Video Analytics (IVA)

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:

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



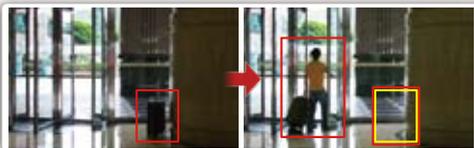
#### Foreign Object:

The foreign objects of the searching area are highlighted in yellow brackets.



#### Missing Object:

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.



## 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



## High Reliability and Smart Features

- **Advanced RAID (0/ 1/ 5/ 6/ 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**
- **Lockable HDD Tray**
- **DOM Architecture with Embedded Fail-safe Dual OS for Enhanced Reliability**

## Excellent Hardware Design

- **Intel® Core™ 2 Duo 2.8 GHz CPU and 2GB DDRII Memory**
- **Green NVR Solution: Linux-embedded System with Low Power Consumption**

### Power Consumption



### • Touch-N-Go PC-less Installation by LCD Display

The handy LCD display on the VioStor NVR provides a speedy and easy approach to initialize the NVR and set up the RAID configuration without using any computer. You can use the handy LCD to finish the first time installation in 3 simple steps.

### • Up to 16TB Storage Capacity for Long-term Recording

### • Redundant Power Supply

### • 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® Core™ 2 Duo 2.8 GHz processor

## Memory

- 2GB DDRII RAM, 128MB flash (DOM)

## HDD Capacity

- 8 x 3.5" SATA I/II HDD or 8 x 2.5" SATA HDD (the standard system is shipped without HDD)

## HDD Tray

- 8 x hot-swappable and lockable tray

## LAN Port

- 2 x Gigabit RJ-45 Ethernet port

## LED Indicators

- Status, LAN, HDD 1, HDD 2, HDD 3, HDD 4, HDD 5, HDD 6, HDD 7, HDD 8

## USB

- 4 x USB 2.0
- Back: for UPS device

## Buttons

- Power button, reset button

## LCD Panel

- Mono-LCD display with backlight and buttons for configuration

## Alarm Buzzer

- System warning

## Form Factor

- 2U rackmount

## 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

## Color Box Shipping Weight

- 16.7kg/ 36.82 lb

## Operation Environment

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

## Redundant Power Supply

- ATX 300W, Input: 100-240V AC, 47-63Hz, 5A-2.5A

## VGA

- Reserved

## RS-232

- RS-232 x 1

## Fan

- 3 x 8cm smart cooling fan

## 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, dual display mode

### Number of IP Cameras Supported (Recording):

- VS-8040U-RP: Up to 40 channels
- VS-8032U-RP: Up to 32 channels
- VS-8024U-RP: Up to 24 channels

### Multi-server Monitoring:

- Up to 120 channels monitoring from multiple QNAP NVRs

### Compression Format:

- M-JPEG, MPEG-4, MxPEG, and H.264 (vary by camera models)

### Video Setting:

- Resolution, quality, frame rate

### E-map:

- Upload E-map (JPEG)

## 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 & after Events):

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

### Recording Performance:

- Up to 30 fps at D1 or VGA for each camera
- \* Real performance may vary in different environment

### Megapixel Recording:

- Supports megapixel cameras

### File format:

- AVI (QNAP codec is needed for playback)

## Storage

### Disk Management:

- Single disk, RAID 0, RAID 1, RAID 5, RAID 5 + hot spare, RAID 6, RAID 6 + hot spare, and 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

## Playback

**Playback Channel:** Max 4-channel playback at the same time

### Playback Mode:

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

### Search Mode:

- By date & time, timeline, event, and intelligent video analytics

### Playback Enhancement:

- Full screen display, video snapshot, digital zoom

### Download:

- Download recordings via the web

## Security

### Operation System:

- Linux-embedded system

### On-line Users List:

- Record of the 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

### Authority Management:

- The right to monitor and playback each camera can be separately defined for each user (max 32)

### 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 Logs:

- Detailed record of event logs

## Utility Software

### QNAP Finder:

- Discovery and quick setup for NVR

### Watermark Proof:

- Checks if recordings on VioStor NVR are modified

## LCD Panel

- 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

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

## Client PC Requirements

(Suggested system requirements for better video performance)

**CPU:** \* Motion-JPEG format (up to 40 channels):

- Dual core CPU 2.4 GHz or above

- \* MPEG-4/ MxPEG/ H.264 format (up to 40 channels):

- Quad core CPU 2.4 GHz or above

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

### Memory:

- 1GB or above

### Operation System:

- Microsoft Windows XP/ Vista (32-bit)

### Web Browser:

- Internet Explorer 6.0 or later

### Network Interface:

- 10/100/1000 Mbps

### Display Resolution:

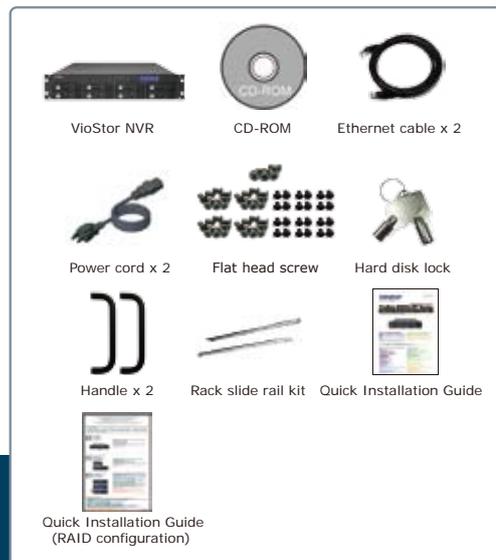
- Suggested 1024 x 768 pixels or above

## 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-8040U-RP	VS-8032U-RP	VS-8024U-RP
		40 channels	32 channels	24 channels
AXIS	208M/ 207/ 207N/ 207M/ 207MM/ 209FD/ RJ 209MFD/ RJ 210/ 210A/ 211A/ 211/ 211W/ 211M/ 212/ 213/ 214/ 215/ 216FD/ 216MFD/ 221/ 223M/ 225FD/ 231/ 232/ 233D/ P1311/ P3011/ P3301/ P3343/ 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/ 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-C50FI	●	●	●
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-IP2/ SN2230-IPW/ SN2232-IP/ TD4112-IP/ TD4114-IP2	●	●	●
EtroVision	EV3130/ EV3131/ EV3131A/ EV3830/ EV6130/ EV6332/ EV6530	●	●	●
GANZ	ZN-D2024/ ZN-PT304L/ ZN-PT304WL/ ZN-YH905/ ZV-S306	●	●	●
iPUX	ICS 1001/ ICS 1011/ ICS 1003/ ICS 1013/ ICS 1300/ ICS 1310/ ICS 130A/ ICS 131A	●	●	●
IOeye	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	●	●	●
MESSOA	ND2860 H2/ NIC835 HN5/ 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-C11/ 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/ BB-HCM180/ BL-C11/ BL-C31/ NF282/ NF284/ NP1000/ NP1004/ NP240/ NP244/ NS202(A)/ NS950/ NS954/ NW484/ NW960/ NW964/ VV-NF302/ VV-NP304/ VV-NP304V	●	●	●
SANYO	VCC-400W/ VCC-P450/ VCC-P470/ VCC-PT490/ VCC-PT500/ VCC-9600/ VCC-9800/ N6695/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-RZ50	●	●	●
TOA	N-CC2561/ N-VT-2010/ N-CC-2360	●	●	●
TOSHIBA	Ci8110-D/ Ci8210-D/ IK-WB21	●	●	●
TRENdnet	TV-IP212/ TV-IP212W/ TV-IP312/ TV-IP312W/ TV-IP410/ TV-IP410W/ TV-IP422/ TV-IP422W	●	●	●
VIVOTEK	IP3111/ IP3121/ IP3112/ IP3122/ IP3135/ IP3137/ PT3112/ PT3122/ PT3117/ PT3127/ FD6111W/ FD6121W/ FD6121V/ FD6122V/ IP6112/ IP6122/ IP6117/ IP6127/ P26122/ P26114/ S06112V/ S06112V/ FD7130/ FD7131/ FD7132/ FD7141/ IP7130/ IP7131/ IP7132/ IP7133/ IP7134/ IP7135/ IP7137/ IP7138/ IP7142/ IP7151/ IP7152/ IP7154/ IP7161/ IP7251/ IP7300/ LZ7151/ PZ7121/ PZ7112/ 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](http://www.qnapsecurity.com/pro_compatibility_camera.asp)

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