

VS-4016 Pro

Hardware Spec.

CPU	Dual-core Intel® Atom™ processor
HDD	2.5/ 3.5" SATA x4 **NOTE:** 1. The system is shipped without HDD. 2. For the HDD compatibility list, please visit http://www.qnap.com/pro_compatibility.asp
HDD Tray	4 x Hot-swappable and lockable tray
LAN Port	2 x Gigabit RJ-45 Ethernet port
LED Indicators	Status, LAN, USB, eSATA, Power, HDD 1, HDD 2, HDD 3, HDD 4
USB	5 x USB 2.0 port (Front: 1; Back: 4) Support USB printer, pen drive, USB hub, and USB UPS etc.
eSATA	2 x eSATA port (reserved)
Buttons	System: Power button, USB One-Touch-Backup Button, Reset button
LCD panel	Mono-LCD display with backlight Enter button, Select button for configuration
Alarm Buzzer	System warning
Form Factor	Tower
Dimensions	177 (H) x 180 (W) x 235 (D) mm 6.97 (H) x 7.09 (W) x 9.25 (D) inch
Weight	Net weight: 3.65 kg (8.04 lbs) Gross weight: 4.65 kg (10.24 lbs)

Sound Level (dB)	w/o HDD installed: 34.7 dB Stand by: 34.1 dB In operation: 36.8 dB (with 4 x 500GB HDD installed)
Power Consumption (W)	Sleep mode: 19W In Operation: 35W Power-off (in WOL mode): 1W (with 4 x 500GB HDD installed)
Temperature	0~40˚C
Humidity	0~95% R.H.
Power Supply	Input: 100-240V AC, 50/60Hz, Output: 250W
Secure Design	K-lock security slot for theft prevention
VGA Connector	1 (for local display) Suggested video output resolution: 1920 x 1080 (Full HD)
Fan	1 x quiet cooling fan (9 cm, 12V DC)



Software Spec.

Recording	
Supported Camera Models	Please visit http://www.qnapsecurity.com/pro_compatibility_camera.asp
Number of Channels Supported (Recording)	Up to 16
Video Compression	H.264/ MPEG-4/ M-JPEG/ MxPEG (depending on the camera models)

Recording Mode	●Continuous/ manual/ schedule recording ●Alarm recording/ multiple alarm recording schedules
Buffer Storage for Alarm Images (before and after events)	●Pre-recording: Up to 300 sec ●Post-recording: Up to 300 sec
Recording Performance	Up to 30 fps at D1 or VGA for each channel * Real performance may vary in different environment
Megapixel Recording	Supports megapixel cameras (up to 8-megapixel)
Recording Settings	Video compression, resolution, frame rate, quality, audio recording
File Format	AVI (QNAP codec is required for playback)
Local Display	
Display Mode	1/4/6/8/9/10/12-channel display mode, sequential display mode
Local Monitoring Enhancement	Full screen display, event notification, PTZ control, digital zoom
Local Playback	Single view playback from local NVR server
Search Mode for Local Playback	By date & time
Playback Control	Play, pause, stop, reverse play, next/ previous video file, different speed control
Local Playback Enhancement	Full screen display, digital zoom
Remote Monitoring	
Display Mode	1/4/6/8/9/10/12/16/20/25/36/42-channel display, Picture-in-Picture, sequential mode, multi-display mode
Multi-server Monitoring	Up to 128-channel monitoring from multiple VioStor NVR servers
Monitoring Enhancement	Full screen display, video snapshot, manual recording, event notification, PTZ control, digital zoom
E-map	Upload E-map (JPEG)
Remote Playback	
Playback Channel	Max 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 Control	Play, pause, stop, reverse play, next/ previous frame, next/ previous

	video file, different speed control
Playback Enhancement	Full screen display, video snapshot, digital zoom, digital watermarking
Export	Convert recording files to one avi file
Download	Download recordings via the web
Advanced Event Management	
Events	Motion detection, alarm input, connection failure, recording failure, and user-defined event
Actions	Video recording, email alert, SMS alert, buzzer, PTZ camera control, alarm output, and user-defined action
Backup	
Schedule Remote Replication	Schedule video data backup to a NAS on the local network
Video Backup to External USB Storage by One-Touch-Auto-Video-Backup Button	Press and hold the one-touch-auto-video-backup button for 3 seconds. The recording data on VioStor will be copied to the external USB device instantly.
Security Control	
Authority Management	Different user groups and rights can be assigned to different users
Host Access Control	Specify the connections to be allowed and denied to access the VioStor NVR
Auto Logoff	Automatic user logoff from idling configuration pages
Event Logs	Detailed event logs
On-line Users List	Record of the users currently logged on and previously logged on to the VioStor NVR
Digital Watermarking	Verify whether or not the videos and snapshots are original
Reliability	
Operation System	Linux-embedded system, free from PC crash and virus attack
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

UPS	APC/ CyberPower/ MGE (USB UPS)
Network Services	
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
Services	Web File Manager, FTP, SMB/CIFS
LCD Panel	
LCD Panel	●PC-less RAID configuration for the first time setup ●When the system is ready, users can check or configure the IP settings, physical disk info, volume info, system info, shut down or reboot the NVR etc.
Language Support	
Language	Czech/ Danish/ Dutch/ English/ French/ Finnish/ German/ Hungarian/ Italian/ Japanese/ Korean/ Norwegian/ Polish/ Portuguese/ Russian/ Spanish/ Swedish/ Simplified Chinese/ Traditional Chinese/ Turkish
Client PC Requirement (Suggested system requirement for better video performance)	
CPU	●M-JPEG format (up to 16 channels): Dual core CPU 2.4 GHz or above ●MPEG-4/ H.264 format (up to 16 channels): Quad core CPU 2.33 GHz or above * For higher surveillance performance, please select more advanced PC models.
Memory	2 GB or above
Operation System	Microsoft Windows XP/ Vista/ 7
Web Browser	Internet Explorer 6.0 or above
Network Interface	10/100/1000 Mbps
Display Resolution	1024 x 768 pixels or above
Utility Software	
QNAP Finder	Discovery and quick setup of the VioStor NVR
VioStor Player	Play the recording files on your Windows computer easily
Watermark Proof	Check if the exported videos and snapshots were modified

VSMobile	Monitor the network cameras on the VioStor NVR by the Android phone, Android Tablet, iPhone, iPad, iPod touch, and Windows phone (6.1~6.5)