VS-2212 Pro+

Hardware Spec.

Processor	Quad-core Intel® 2.0GHz processor (burst up to 2.41GHz)
Memory	4GB DDR3L RAM
Flash Memory	512MB DOM
HDD Capacity	2 x 3.5-inch SATA 6Gb/s, SATA 3Gb/s hard drive **NOTE:** 1. The standard system is shipped without HDD. 2. For the HDD compatibility list, please visithttp://www.qnapsecurity.com/pro_compatibility.asp
HDD Tray	2 x hot-swappable and lockable tray
LAN Port	2 x Gigabit RJ-45 Ethernet port
LED Indicators	LAN, HDD1, HDD2, Power, Status, USB
USB	3 x USB 3.0 port (Front: 1, Rear: 2) Support pen drive, USB mouse, USB keyboard, USB sound card, and USB UPS etc.
Video Output	2x HDMI Suggested video output resolution: 1920 x 1080 (Full HD)
Alarm	Alarm In *6, Alarm Out*2 (reserved)
Audio	Audio In/Out for local display
Buttons	Power button, One-touch-auto-video-backup button, Reset button
Alarm Buzzer	System warning
Form Factor	Tower
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 (3.84lbs)

	Gross weight: 2.92 kg (6.44lbs)
Power Consumption (W)	In Operation: 16.34W (with 2 x 1TB HDD installed)
Operation Environment	Temperature 0~40˚C/ 32~104˚F
Relative Humidity	5~95% RH non-condensing, wet bulb: 27˚C.
Power Supply	External power adapter, 90W, 100-240V
Secure Design	K-Lock security slot for theft prevention
Fan	1 x quiet cooling fan (70 mm, 12V DC)
Certification	CE, FCC, VCCI, BSMI

Software Spec.

Central Management System (QSCM Lite App)	
QSCM Lite	Download and install for free from the QVR App Center to turn your NVR into CMS server
Central Management	Supports up to 256 channels and 16 servers
Dashboard	An interface that shows the current status and historical trends of key information
Apply-to-All Configuration	Some server settings can be synchronized by grouping identical NVR models, saving configuration time Some recording settings can be synchronized by grouping identical camera models, saving configuration time
Event Management	Centrally receive events from multiple NVRs
View Layout	Centrally configure the view, adding the cameras from multiple NVRs
Multi-layer E-map	Centrally setup unlimited-layer E-maps for multiple NVRs
User Management	QSCM Lite users can be created and assigned to different user groups. Each user group can have different permissions.
Quad-monitor Mode	Primary monitor: Select to show the live view, E-map, playback, and configuration page Sub monitor: Select to show the live view and E-map
View Content	Flexibly view content from mixed camera videos and E-maps
Bookmark	Place a vertical thin bar and text details on video footage for easier event investigation
Multi Web Browsers Support	Supports Google Chrome, Internet Explorer, Mozilla Firefox on Windows
Full HD Local Display	

Max. Resolution of HW Decode Supported per Ch.	Resolution up to Full HD (1920x1080) per channel (H.264)
Local Display Performance	Full HD 1080P 200FPS
Display Mode	Local monitoring: Multi-channel, sequential and full screen display modes
	Local playback: Multi-channel and full screen display modes
Max. Channel Supported per Page	Local monitoring: Up to 36 channels per page
	Local playback: Up to 4 channels per page
On-screen Event Alert	Yes
Local Monitoring Control	Dewarping function for fisheye cameras and ImmerVision lens Manual recording, (two-way) audio*, PTZ control (including optical zoom, focus control and preset position control), digital zoom
Joystick Support	Joystick support for PTZ and preset position control
Local Playback Control	Dewarping function for fisheye cameras and ImmerVision lens Play, pause, rewind, fast forward, slow motion, frame by frame search, audio, digital zoom
Recordings Export	Export multiple recordings to external USB storage as standard AVI files, optimized QNAP AVI files, QNAP encrypted AVI files
Local Configuration	Yes
Remote Monitoring (Windows)	
Multi-server Monitoring	QVR Client: Supports max. 128 channels
Display Mode	Multi-channel, sequential and full screen display modes dual display mode
Max. Channel Supported per Page	Up to 64 channels per page
E-map	Multi-layer dynamic E-map
On-screen Event Alert	Yes
Interactive Control Buttons	Manual recording, video snapshot, (two-way) audio*, dewarping function for fisheye cameras and ImmerVision lens, PTZ mode (including click & go, PTZ control, and auto cruisingby preset position), preset position control, digital zoom, instant playback, same-screen IP camera configurations, camera information
Options	Video window highlight when an event is triggered
Joystick Support	Joystick support for PTZ and preset position control
Remote Playback (Windows)	
Multi-channel Playback	Multi-channel, sequential display modes

Max. Channel Supported per Page	Up to 16 channels per page
On-screen Event Alert	Yes
Playback and Speed Control with Shuttle Bar	Play, pause, rewind, fast forward, slow motion, frame by frame search
Interactive Control Buttons	Audio, low bandwidth mode, video snapshot, IVA settings, dewarping function for fisheye cameras and ImmerVision lens, PTZ mode (including click & go, PTZ control, and auto cruising by preset position), digital zoom, averagely time-divided playback, camera information
Intelligent Video analytics (IVA)	Motion detection, missing object, foreign object, out of focus, and camera occlusion
Control	Preview videos with thumbnails Drag an area on the video window to zoom in to see details
Recordings Export	Export multiple recordings to a client PC or NVR as standard AVI/ MP4 file, different exporting resolutions supported
Options	Add a digital watermark to exported recordings
QVR Client for Mac	
QVR Client for Mac	Free download from the QNAP Download Center and Mac App Store
Display Mode	Monitoring: Multi-channel, sequential and full screen display modes Playback: Single-channel and full screen display modes
Max. Channel Supported per Page	Local monitoring: Up to 16 channels per page Local playback: Single channel per page
On-screen Event Alert	Yes
Monitoring Control	Audio, PTZ control (including optical zoom, focus control and preset position control), digital zoom *Multi-server monitoring and fisheye dewarping is not supported on Mac Client now
Playback Control	Play, pause, rewind, different speed control, audio, digital zoom
Recordings Export	Export multiple recordings to Mac
Configuration	Open an additional browser window for configuration
Mobile Surveillance	
Vmobile	Free download from the App Center (iOS) and Google Play (Android)
NVR Search	Yes, NVRs on the LAN can be easily searched

Display Mode	Mobile Monitoring: Multi-channel, sequential display mode
	Mobile Playback: Single-channel display mode
Mobile Monitoring Control	PTZ control, digital zoom, pause, snapshot, stream selection, image share (ex. Mail, Facebook…)
Event Notification	Yes, event notifications will be sent from Multiple NVRs
Mobile Playback Control	Digital zoom, snapshot Play, pause, fast forward, go to previous file, go to next file
Audio	Yes

Recording

Max. number of channels	12
Supported Models	[IP cameras](#) [Generic cameras](#) [Vcam](#) App to turn your mobile phone into an IP camera
Video Compression	H.264/ MPEG-4/ M-JPEG/ MxPEG (depending on the camera models)
Recording Mode	- Continuous/ scheduled/ manual recording - Alarm recording by multiple events - Pre-alarm and post-alarm recording - Round-the-clock recording and [smart recording](#) when[user-defined stream](#) is supported on the camera model [Edge recording](#) - Auto snapshot
Recording Performance	Up to 30 fps at 1080P, 720P, VGA for each channel * Real performance may vary by environment
Megapixel Recording	Supports megapixel cameras (up to 40-megapixel)
Recording Throughput	180 Mbps * Real performance may vary by environment
File Format	AVI (QNAP codec is required for playback)
Recording Enhancement	Real-time digital watermarking
Download	QVR File Station, FTP, SMB/CIFS Recordings export on local playback and remote playback (Windows and Mac)

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 & Expansion	
External Backup	Copy recordings from the local disk volume to an external storage device
One Touch Video Backup	Press the "One Touch Video Backup" button to backup recordings from external storage to USB storage
Remote Replication	Schedule video data backup to a NAS on the local network
Storage Expansion	Connect the VioStor NVR to a Turbo NAS via network to enlarge the total storage capacity of the VioStor NVR
Cloud Backup	Easily upload the data from the NVR to Amazon S3 or download the data from Amazon S3 to the NVR

Easy Configuration and Management	
Qstart	• Auto configuration Simplify system initialization with just a single click • Network switch control Easily setup camera IPs, manage PoE status and monitor traffic flow
QVR Desktop	• Multi-window, multi-tasking • Intelligent desktop Main menu, smart dashboard, drag-and-drop icons
File Station	• Access files using web browsers, anytime and anywhere • Securely share files by URL • Upload large files
myQNAPcloud	• Unique host name for VioStor NVR • Automatic port forwarding on a UPnP router • Cloud Backup
App Center	Download numerous free on-demand apps
License Upgrade	Flexibly expand the number of channels to meet your demands by purchasing additional licenses https://license.qnap.com/ModelBrowse.html?cid=93

Security Management	
User Privilege Management	Different user types and rights can be assigned to different QVR users
Network Access Protection	Specify the connections to be allowed and denied to access the VioStor NVR
Auto Logoff	Automatic user logoff from idling on configuration pages
Log System	System event logs, system connection logs, online users
Digital Watermarking	Can be used to authenticate videos and snapshots

Disk Management	
Max. number of HDD supported	2
RAID	RAID 0 (disk striping), RAID 1 (disk mirroring) Single, JBOD/ Linear
RAID Features	Online RAID Capacity Expansion, Online RAID Level Migration
HDD Utility	HDD S.M.A.R.T., bad blocks scan

Reliability	
Operation System	Linux-embedded system, free from PC crash and virus attack
Intelligent Automatic System Startup When Power Recovery	Yes
USB UPS device	APC/ CyberPower/ Epson/ MGE/ YEC

Network Service	
Protocol	Support HTTP, TCP/IP, DHCP, Static IP, DNS, DDNS, UPnP, FTP, NTP, and SMTP
Built-in DHCP Server	Yes
Multiple Gigabit LAN	Failover, load-balancing, multi-IP settings
File Services	FTP, SMB/CIFS

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/ Greek/ Romanian/ Thai

Client PC Requirement (Suggested system requirement for better video performance)	
CPU	• M-JPEG format (up to 12 channels): Intel Pentium 4 CPU, 3.0GHz or above • MPEG-4/ H.264/ MxPEG format (up to 12 channels): Dual core CPU, 2.8GHz or above

	* * For higher surveillance performance, please select more advanced PC models.
Memory	4 GB or above
Operation System	Microsoft Windows 7/ 8 or Mac OS X 10.7.x, 10.8.x, 10.9.x, 10.10.x
Web Browser	Microsoft Internet Explorer 10/11 (Windows PC, desktop mode, 32-bit)
	Google Chrome 38.0.2125.104 m (Windows PC)
	Mozilla Firefox 33.0 (Windows PC)
Network Interface	10/100/1000 Mbps
Display Resolution	1280 x 800 pixels or higher for better user experience
Switch Requirement	
Switch	A gigabit switch is highly recommended
Utility	
QNAP QFinder	The client application to discovery and quick setup of the VioStor NVR
QNAP QVR Client For Windows	The client application used to remotely access QNAP NVR servers for performing video monitoring and playback functions on client PC. *Watermark proof (Installed with QVR Client): Check if the exported videos and snapshots were modified
QNAP QVR Client For Mac	The client application used to remotely access QNAP NVR servers for performing video monitoring and playback functions on Mac. Please note that multi-server monitoring and fisheye dewarping functions and QSCM Lite App are not supported

* Two-way audio is only supported on one browser or local display at the same time.

Design and specifications are subject to change without notice.