

VS-8148U-RP Pro+

Hardware Spec.

Processor	Dual Core Intel® Core™ i3 3.3GHz Processor
DRAM	4GB DDR3 RAM
HDD Capacity	8 x 3.5" SATA 6Gb/s, SATA 3Gb/s hard drive NOTE: <ol style="list-style-type: none"> 1. The system is shipped without HDD. 2. For the HDD compatibility list, please visit here
HDD Tray	8 x hot-swappable and lockable tray
LAN Port	4 x Gigabit RJ-45 Ethernet port
LED Indicators	10 GbE(reserved), Status, LAN, eSATA(reserved), hard drives
USB	2 x USB 3.0 port (rear) 4 x USB 2.0 port (rear) Support USB pen drive, USB hub, and USB UPS etc.
Buttons	System: Power button, reset button
LCD Panel	Mono-LCD display with backlight Enter button, Select button for configuration
Alarm Buzzer	System warning
Form Factor	2U, Rackmount
Dimensions	88(H) x 439(W) x 520(D) mm 3.46(H) x 17.28(W) x 20.47(D) inch
Weight	Net weight: 12.52 kg (27.61 lb) Gross weight: 23.42 kg (51.63 lb)
Operation Environment	Temperature 0~40°C/ 32~104°F

Humidity 0~90% R.H.

Power Supply	Input: 100-240V AC, 47-63Hz, Output: 300W
Power Consumption	130W Write/Read (with 8 x 1TB HDD installed)
Expansion Slot	2 (reserved for network and storage expansion)
Video Output	1x HDMI 1x VGA
Fan	3 x 6 cm smart cooling fan
Certification	CE, FCC, VCCI, BSMI, LVD

Remark:

The VS-8100U-RP Pro+ rack mount series comply with ANSI/EIA-RS-310-D rack mounting standards.

Before purchasing the server racks for these models, please make sure the server racks conform to the following

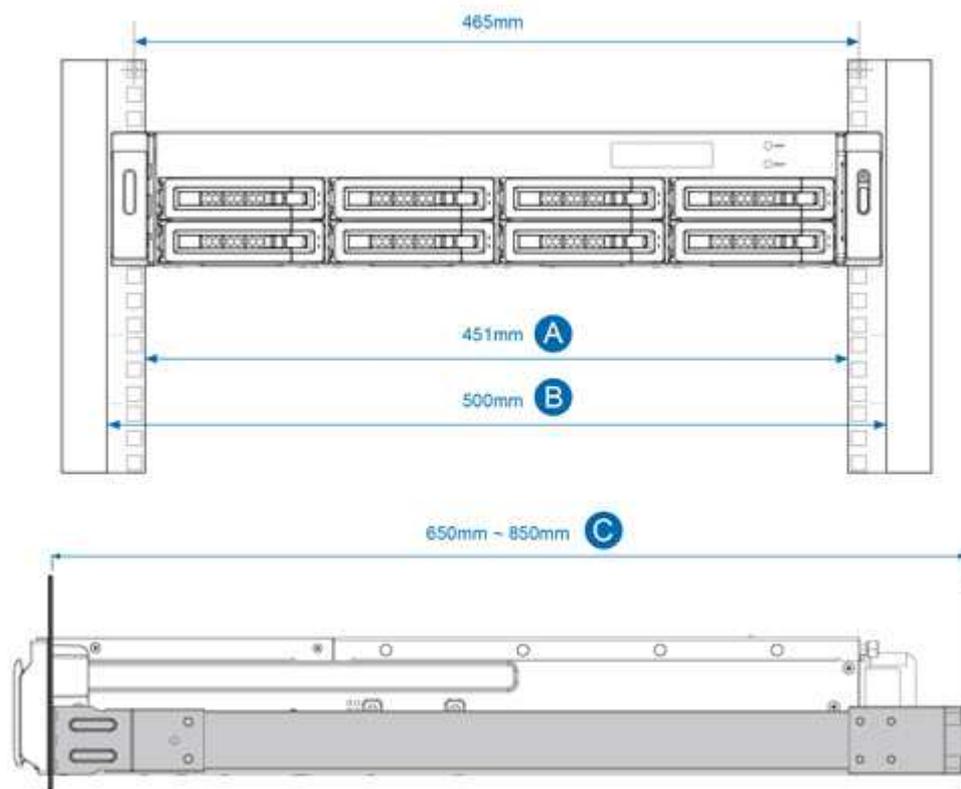
criteria:

1. Rack size

A. Mounting post width: $\geq 451\text{mm}$

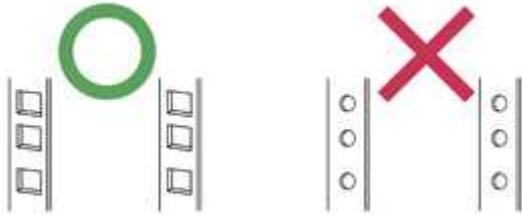
B. Panel width: $\geq 500\text{mm}$

C. Mounting post depth: 650mm~850mm



2. The rack kits for the VS-8100U-RP Pro rack mount series are only compatible with square-hole server

racks.



Software Spec.

Recording

Supported Camera Models	Please visit http://www.qnap.com/NVR/CompatibilityX01.html
Number of Channels	Up to 48
Supported (Recording)	
Video Compression	H.264/ MPEG-4/ M-JPEG/ MxPEG (depending on the camera models)
Video Setting	Video compression, resolution, quality, frame rate, audio
Recording Mode	<ul style="list-style-type: none">• Continuous/ manual/ schedule recording• Alarm recording/ multiple alarm recording schedules• Auto snapshot
Buffer Storage for Alarm Images (before and after events)	<ul style="list-style-type: none">• Pre-recording: Up to 300 sec• Post-recording: Up to 300 sec
Recording Performance	Up to 30 fps at 1080P, 720P, VGA for each channel * Real performance may vary in different environment
Megapixel Recording	Supports megapixel cameras (up to 10-megapixel)
Network Throughput	400 Mbps
File Format	AVI (QNAP codec is required for playback)
Recording Enhancement	Real-time digital watermarking

Application

Fisheye Dewarping Support the specific fisheye IP Cameras on remote monitoring/playback and

local display interface

* Please visit <http://www.qnap.com/NVR/CompatibilityX01.html> to get the compatibility list

360° Panomorph Video Support the specific IP camera with panomorph lens on remote monitoring/playback and local display interface

Local Display

Display Mode	1, 4, 6, 8, 9, 10, 12 or 16-channel display mode, sequential display mode
Hardware Decode	Full HD 1080P 300FPS *The NVR will auto detect H.264 stream format and activate hardware decoder for 12 CH live view.
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
Export	Convert multiple recording files to the external USB device instantly
System Administration	Quick configuration, administration password, network settings, time settings, disk volume configuration, camera settings

Remote Monitoring (Windows)

Display Mode	1, 4, 6, 8, 9, 10, 12, 16, 20, 25, 36,42 or 64-channel display, sequential mode
Dual-display mode	Up to 2 monitors
Multi-server Monitoring	Up to 128-channel monitoring from multiple VioStor NVR servers (Browser-based)
Monitoring Enhancement	Full screen display, video snapshot, manual recording, event notification, PTZ control, digital zoom
E-map	Uploading the digital maps and indicating the locations of the IP cameras of a monitoring location or region

Remote Playback (Windows)

Display Mode	1, 4, 6, 8, 9, 10, 12 or 16-channel display
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
Playback Enhancement	Full screen display, video snapshot, digital zoom, digital watermarking
Export	Convert multiple recording files to client PC instantly
Download	Download recordings via the web

QNAP Surveillance Client for Mac

Display Mode	1, 4, 6, 8, 9, 10, 12, or 16-channel display mode, sequential display mode
Monitoring Enhancement	Full screen display, event notification, PTZ control, digital zoom
Playback	Single view playback
Search Mode for Playback	By date & time
Playback Control	Play, pause, stop, reverse play, next/ previous video file, different speed control
Playback Enhancement	Full screen display, digital zoom
Export	Convert multiple recording files to Mac device instantly

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
------------------------------------	--

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	<ul style="list-style-type: none"> · 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/ YEC (USB UPS)

Network Services

Support	HTTP, TCP/IP, SMTP, DHCP, Static IP, DNS, DDNS, FTP, NTP, UPnP, failover, load-balancing, multi-IP setting
Multiple Gigabit LAN	Failover/ load-balancing/ multi-IP setting
Services	Web File Manager, 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
-----------------	--

Remote Surveillance

Client PC	Google Chrome, Internet Explorer, Mozilla Firefox (Browser-based) QNAP Surveillance Client for Windows
Mac	QNAP Surveillance Client for Mac
Android Tablet, phone	VMobile

iPad, iPhone, iPod VMobile

Touch

Windows Mobile (6.1, VMobile

6.5) Device

Client PC Requirement (Suggested system requirement for better video performance)

CPU	<ul style="list-style-type: none">· M-JPEG format (up to 48 channels):Quad core CPU 2.33GHz or above· MPEG-4/ H.264/ MxPEG format (up to 48 channels):Core i7 CPU 2.8GHz or above <p>* * For higher surveillance performance, please select more advanced PC models.</p>
Memory	4 GB or above
Operation System	Microsoft Windows Vista/ 7/ 8 or Mac OS X 10.7.x, 10.8.x
Web Browser	Microsoft Internet Explorer 8/9/10 (Windows PC, desktop mode, 32-bit) Google Chrome 24.0.1312.57 m (Windows PC) Mozilla Firefox 18.0.2 (Windows PC)
Network Interface	10/100/1000 Mbps
Display Resolution	1280 x 800 pixels or higher for better user experience

Utility Software

QNAP Finder	The client application to discovery and quick setup of the VioStor NVR
QNAP Surveillance Client For Windows	The client application used to remotely access QNAP NVR servers for performing video monitoring and playback functions on client PC.
QNAP Surveillance Client For Mac	The client application used to remotely access QNAP NVR servers for performing video monitoring and playback functions on Mac.
QNAP Codec	The video codec to play the recording files on Windows Media Player.
VMobile	The Mobile App to monitor the network cameras on the VioStor NVR by the Android phone, Android tablet, iPhone, iPad, iPod touch, and Windows mobile (6.1, 6.5) device.