



VS-12164U-RP Pro

Hardware Spec.

Processor	Quad Core Intel®Xeon®Processor E3
HDD Capacity	12 x 3.5-inch 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	12 x hot-swappable and lockable tray
LAN Port	4 x Gigabit RJ-45 Ethernet port
LED Indicators	Status, 10 GbE, LAN, eSATA, hard drives *10 GbE (reserved), eSATA (reserved)
USB	2 x USB 3.0 (back:2) 4 x USB 2.0 (back:4) *Exporting recording file in playback by USB3.0 ports only.
Buttons	System: Power button, reset button
Alarm Buzzer	System warning
Form Factor	2U, Rack mountable
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: 15.88 kg (35.01 lb) Gross weight: 25.60 kg (56.44 lb)
Operation Environment	Temperature 0~40°C/ 32~104°F Humidity 0~90% R.H.
Power Supply	Input: 100-240V AC, 50/60Hz, Output: 600W
Power Consumption	167W Write/Read (with 12 x 2TB HDD installed)

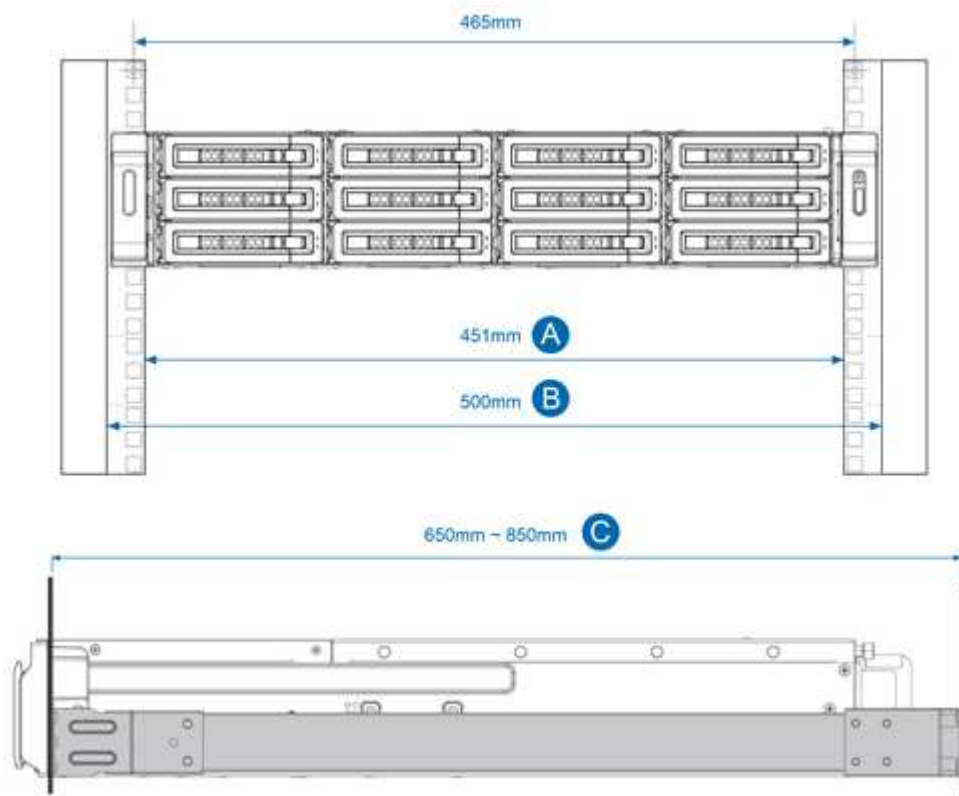
Video Output	1x VGA
Fan	3 x 6cm smart cooling fan
Certification	CE, FCC, VCCI, BSMI, C-Tick

Design and specifications are subject to change without notice.

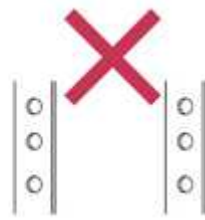
Remark:

The VS-12100U-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: $650\text{mm}\sim 850\text{mm}$



2. The rack kits for the VS-12100U-RP Pro rack mount series are only compatible with square-hole server racks.



Software Spec.

Recording	
Supported Camera Models	Please visit http://www.qnapsecurity.com
Number of Channels	Up to 64
Supported (Recording)	
Recording Mode	<ul style="list-style-type: none"> •Continuous/ manual/ schedule recording •Alarm recording/ multiple alarm recording schedules
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 H.264, 720P for each channel * Real performance may vary in different environment
Megapixel Recording	Supports megapixel cameras (up to 10-megapixel)
Network Throughput	450 Mbps
File Format	AVI (QNAP codec is required for playback)
Recording Enhancement	Real-time digital watermarking, auto snapshot

Local Display	
Display Mode	1, 4, 6, 8, 9, 10, 12, or 16-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	By date & time

Playback

Playback Control	Play, pause, stop, reverse play, next/ previous video file, different speed control
Local Playback	Full screen display, digital zoom
Enhancement	
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

Display Mode	1, 4, 6, 8, 9, 10, 12, 16, 20, 25, 36, or 42-channel display, Picture-in-Picture, sequential mode, multi-display mode
Video Compression	H.264/ MPEG-4/ M-JPEG/ MxPEG (depending on the camera models)
Video Setting	Resolution, Quality, Frame Rate
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
Dynamic E-map	Uploading the digital maps and indicating the locations of the IP cameras and GPI devices of a monitoring location or region

Remote Playback

Playback Channel	Max 16-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
Display Mode	Single playback view, 4 playback views, 9 playback views, 16 playback views
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	Schedule video data backup to a NAS on the local network
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Replication

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 (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

Language Support

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

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

CPU	<ul style="list-style-type: none">●M-JPEG format (up to 42 channels): Quad core CPU 2.33GHz or above●MPEG-4/ H.264/ MxPEG format (up to 42 channels): Core i7 CPU 2.8GHz or above <p>* For higher surveillance performance, please select more advanced PC models.</p>
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
VMobile	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)