UioStor NVR Network Video Recorder
VS-12140U-RP Pro+
Network Surveillance System for IP Enterprise
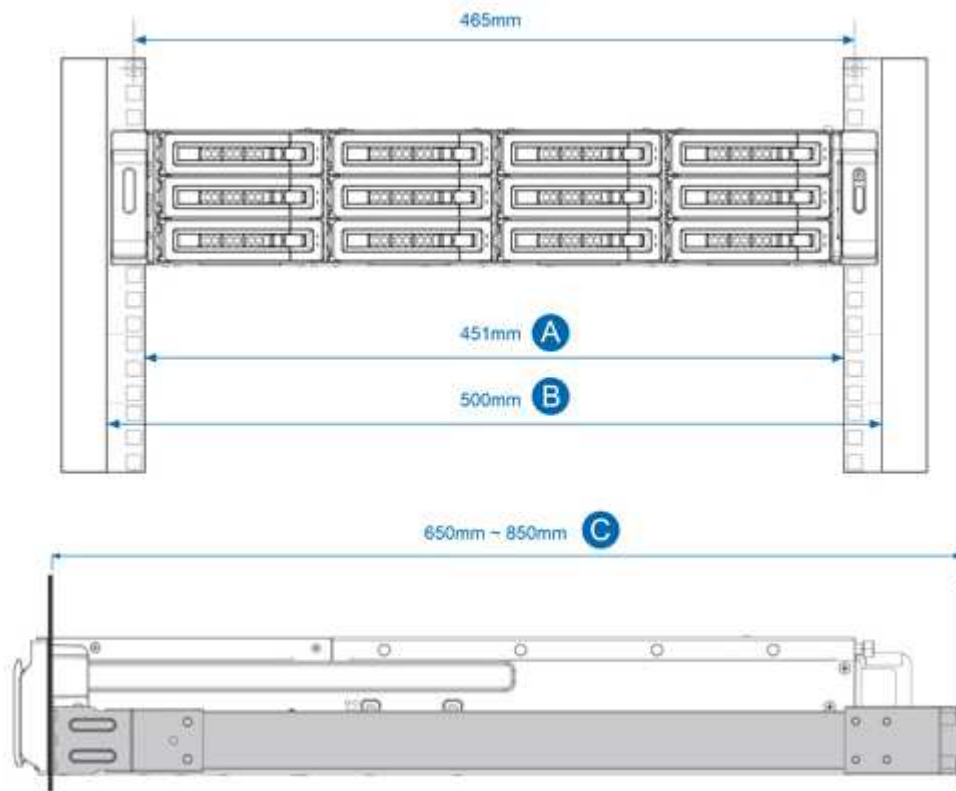QNAP Network Video Recorder for IP Cameras

VS-12140U-RP Pro+

Hardware Spec.

Processor	Quad Core Intel® Core™ i5 3.7GHz Processor
DRAM	8GB DDR3 RAM
HDD Capacity	12 x 3.5" SATA 6Gb/s, SATA 3Gb/s hard drive **NOTE:** 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 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
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: 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)
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-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: ≥ 451mm

B . Panel width: ≥ 500mm

C. Mounting post depth: 650mm~850mm

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.qnap.com/NVR/CompatibilityX01.html
Number of Channels Supported (Recording)	Up to 40
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	・Continuous/ schedule/ manual recording ・Alarm recording by multiple events ・Auto snapshot
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 1080P, 720P, VGA 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

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 and GPI devices 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	· 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/ Epson/ 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 Touch	VMobile
Windows Mobile (6.1, 6.5) Device	VMobile

Client PC Requirement (Suggested system requirement for better video performance)	
CPU	· M-JPEG format (up to 40 channels):
	Quad core CPU 2.33GHz or above
	· MPEG-4/ H.264/ MxPEG format (up to 40 channels):
	Core i7 CPU 2.8GHz or above
	* * For higher surveillance performance, please select more advanced PC models.
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.