



The VS-1004L VioStor NVR is the 1-bay network surveillance system for home and SOHO security applications. The Linux-based system supports 4-channel H.264, MPEG-4, and M-JPEG recording from ONVIF-compliant IP cameras and surveillance devices from [AXIS](#), [ACTi](#), [A-MTK](#), [Arecont Vision](#), [AVTECH](#), [Brickcom](#), [Canon](#), [Cisco](#), [CNB](#), [DIGITUS](#), [D-Link](#), [EDIMAX](#), [ELMO](#), [EtroVision](#), [GANZ](#), [Honeywell](#), [iPUX](#), [IPX](#), [IQeye](#), [LevelOne](#), [Linksys](#), [Messo](#), [MOBOTIX](#), [NAKAYO](#), [Panasonic BB/BL/i-Pro](#), [Pelco](#), [SANYO](#), [SHANY](#), [SONY](#), [TOA](#), [TOSHIBA](#), [TRENDnet](#), [Vidosec](#), [VIOSECURE](#), [VIVOTEK](#), and [Y-CAM](#).

The unique multi-server monitoring feature of the VioStor NVR allows monitoring of up to 128 IP cameras from multiple NVR servers at the same time. No extra software is required. Instant alarm icon will be shown and the alarm channel will be highlighted to inform the administrator immediately if an event occurs.

The VioStor NVR supports diversified recording features, such as scheduled recording, alarm recording by multiple alarm events, alarm recording schedule, and pre-alarm and post-alarm recordings. Advanced event management is provided for the administrator to define the handling options when events or alarms are triggered. The VioStor NVR also offers enhanced video search by intelligent video analytics (IVA), such as motion detection, foreign object, missing object, out of focus, and camera occlusion. Moreover, you can use the video surveillance application "VMobile" to monitor the IP cameras with your iPad, iPhone, iPod touch, and Windows PDA phones anytime, anywhere

Powerful Features of VS-1004L :

Powerful Features of VioStor NVR (Network Video Recorder):

- Real-time monitoring and recording (video/audio) from multiple IP cameras (up to 4 channels)
- High quality H.264, MPEG-4, and M-JPEG recording ([depending on the camera models](#))
- Complete recording features
- [Multi-server monitoring](#) (up to 128 channels)
- Dual display mode
- Video search by date and time, timeline, and event
- [Intelligent video analytics \(IVA\)](#)
- Multi-view playback from multiple NVR servers
- [Digital watermarking](#)

- [Advanced event management](#)
- [Real-time SMS and email alert](#)
- Live monitoring on [iPad, iPhone, iPod Touch](#) and [Windows PDA phone](#) by VMobile
- Trouble-free installation
- Linux-embedded, highly reliable standalone NVR
- UPS Support for 24/7 service
- Intelligent auto power on after power recovery
- Energy-saving design (only 7W in operation)

Surveillance Features

Complete Recording Functions

High Quality H.264, MPEG-4, and M-JPEG Recording ([depending on the camera models](#))

All-in-one Recording Functions

- Continuous/manual/scheduled recording*
- Alarm recording (by multiple events), alarm recording schedule*
- Pre-alarm and post-alarm recording
- Audio recording

* You can set different recording schedules for different cameras.



[Generic IP Cameras](#) Support

VioStor NVR provides an interface for the users to enter the JPEG CGI command of their IP cameras to retrieve the video and audio data from the IP cameras.



Network Surveillance by Web-based Interface (IE Browser)

Real-time Remote Monitoring

Multi-server Monitoring

You can connect to one VioStor NVR and monitor up to 128 channels from other VioStor NVR servers over LAN or WAN by an IE browser.

Diversified Remote Monitoring Modes

- 1/4/6/8/9/10/12/16/20/25/36/42-channel and sequential display mode
- Exclusive Picture-in-Picture mode
- Multi-display mode

Smart Control of PTZ & Speed Dome Cameras

You can adjust the PTZ cameras directly by the web user interface of VioStor NVR.



Preset Position Control and [Auto Cruising](#)

You can view the preset positions of an IP camera by clicking the corresponding number buttons on the monitoring page. You can also choose the preset positions and configure the time interval on the PTZ cameras for periodic monitoring.



Instant Event Notification

When alarm recording is enabled and an event occurs, an alarm icon is shown instantly on the monitoring page. You can click the icon to view the alert details.



Digital Zoom

You can zoom in or zoom out the video image on the monitoring and playback interfaces.



Dynamic E-map

The VioStor NVR provides an E-map function for users to upload the digital maps and indicate the locations of the IP cameras of a monitoring location or region.



Remote Video Playback

Multi-view Playback

You can use the multi-view playback feature to divide a video equally into multiple sessions for playback in a multi-view window, or play the videos of multiple IP cameras in the multi-view window simultaneously.



Video Search by Date and Time, Timeline, Event, [Intelligent Video Analytics \(IVA\)](#)

VioStor NVR supports quick video search by date and time, timeline, event, and intelligent video analytics (IVA), including motion detection, foreign object, missing object, out of focus, and camera occlusion.

❖ [How to use intelligent video analytics on playback](#)

[Digital Watermarking](#)

VioStor NVR supports digital watermarking to protect the exported videos and snapshots from unauthorized modification. You can use the Watermark Proof utility to verify whether or not the videos and snapshots are original.



Event Management

[Advanced Event Management](#)

VioStor NVR supports various event handling options for different kinds of events.



- 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.

[Real-time SMS and Email Alert](#)

You can configure the SMTP server and SMSC server settings on the NVR in order to receive instant system warning or error messages by email and/or SMS.



Convenient Backup Solution

[Scheduled Remote Replication](#)

VioStor NVR supports scheduled remote replication for secure data backup to a remote NAS on the local network.

One-Touch-Auto-Video-Backup

You can configure the one-touch-auto-video-backup button on the front of the NVR to copy the data from the NVR to an external storage device when the button is pressed.

Security Control

Authority Management

You can create multiple users on VioStor NVR. The users created on the NVR can be assigned to different user groups (administrator/system manager/user) with different rights of monitoring, playback, PTZ control, and audio monitoring.



Auto Logoff

VioStor NVR supports automatic user logoff from idling configuration pages. The administrator can set the timeout period to log off the users when the idling time has reached.



Host Access Control

You can specify the host or IP connections to be allowed and denied to access NVR.



On-line User List

You can view the record of users currently logged on and previously logged on to the NVR.



Detailed Event Logs

VioStor NVR provides detailed event logs of system warning, hard disk error, network disconnection, UPS status, users' networking services and recordings access record.



Automatic System Startup after Power Recovery

VioStor NVR supports automatic power-on when power resumes after power outage.



UPS Support for 24/7 Service

VioStor NVR supports APC, CyberPower, and MGE UPS devices to provide continuous services 24/7 against unexpected power outage.



Network Services

Built-in DDNS Service

VioStor NVR supports dynamic DNS (DDNS). You can register a unique domain name from a DDNS service provider and assign it to your NVR.

Built-in NTP Server

You can enable this feature to allow the connected IP cameras to synchronize their date and time settings with the NVR.

Convenient Data Access

The video data of VioStor NVR can be accessed by the following protocols with proper access rights:



- Network Places (SMB/CIFS)
- Web file management (HTTP)
- FTP server

Easy Configuration and Management

System Setup in Simple Steps

You can set up the NVR easily in simple steps by the local display and web-based interface.

Web-based User Interface

All system configurations, monitoring, and playback can be finished by the web-based interface.

Smart Search of IP Camera for Quick Settings

provides an intelligent software utility Finder for quick IP camera search and system settings.

Excellent Hardware Design

Green NVR Solution: Energy-Saving Linux-embedded System

VioStor NVR is a Linux-embedded system which is more power-saving and less vulnerable to virus attack compared to PC-based surveillance solutions.

Consumption

1004L NVR Write/Read
NVR solution Write/Read



Software Specification

Recording	
Supported Camera Models	
Number of Channels Supported (Recording)	Up to 4
Video Compression	H.264/ MPEG-4/ M-JPEG (depending on the camera models)
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
Network Throughput	28 Mbps
Recording Settings	Video compression, resolution, frame rate, quality, audio recording
File Format	AVI (codec is required for playback)
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
UPS	APC/ CyberPower/ MGE (USB UPS)
Network Services	
Support	HTTP, TCP/IP, SMTP, DHCP, Static IP, DNS, DDNS, FTP, NTP
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
Client PC Requirement (Suggested system requirement for better video performance)	
CPU	<ul style="list-style-type: none"> ●M-JPEG format (up to 4 channels): Pentium 4 CPU 2.4 GHz or above ●MPEG-4/ H.264/ MxPEG format (up to 4 channels): Dual core CPU 2.0 GHz 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
Utilities	
QFinder	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 iPad, iPhone, iPod Touch, and Windows PDA phone

Hardware Specification

CPU	Marvell 6281 1.2GHz
DRAM	256MB DDRII RAM
Flash Memory	16MB
Hard Disk Drive	<p>1 x 3.5" SATA I/II hard disk drive (HDD)</p> <p>NOTE:</p> <ol style="list-style-type: none"> 1. The system is shipped without hard disk drives. 2. For the HDD compatibility list, please visit

LAN Port	1 x Gigabit RJ-45 Ethernet port
LED Indicators	USB, Status, HDD, eSATA, LAN, Power
USB	3 x USB 2.0 port (front: 1; back: 2) Support USB pen drive, and USB UPS etc.
Buttons	System: Power button, one-touch-auto-video-backup button, reset button
Alarm Buzzer	System warning
Form Factor	Portable
Dimensions	165.5 (H) x 60 (W) x 218.4 (D) mm 6.52 (H) x 2.36 (W) x 8.60(D) inch
Weight	Net weight: 0.79 kg/1.74 lb Gross weight: 1.7 kg/ 3.75 lb
Power Consumption (W)	In operation: 7W (with 1 x 500GB HDD installed)
Temperature	0-40°C 32-104°F
Humidity	0-95% R.H.
Power	External Power Adapter, 36W, 100-240V
Secure Design	K-lock security slot for theft prevention
Fan	1 x quiet cooling fan (4 cm, 12V DC)

