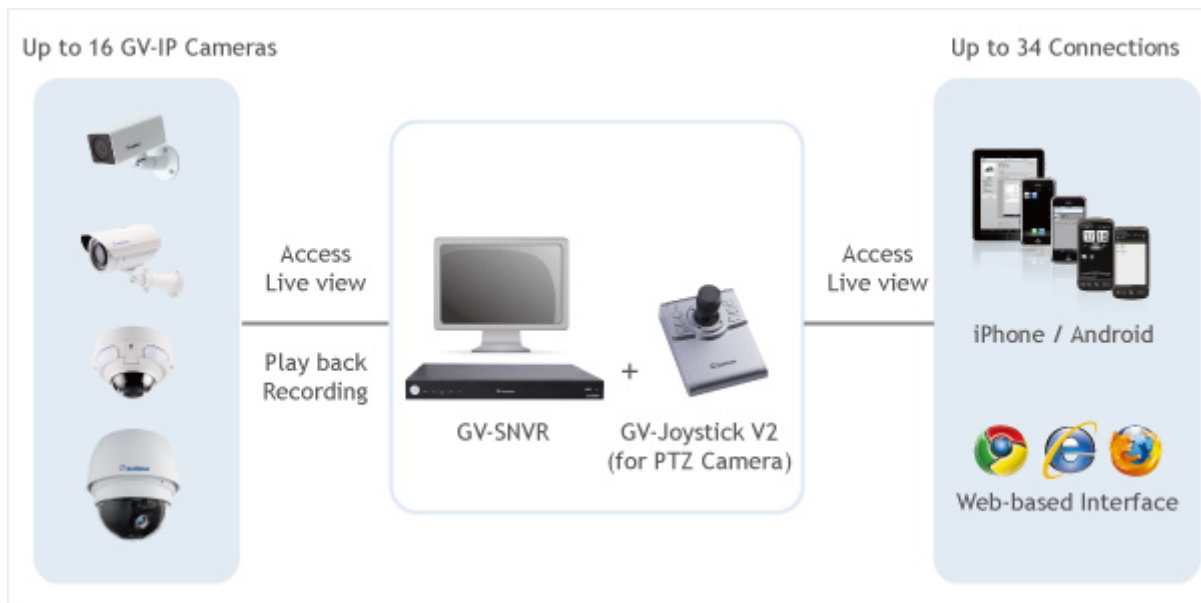# GV-SNVR1600

Introduction

The GV-SNVR1600 is a Linux-embedded Standalone Network Video Recorder which records video files directly to the internal hard drive, supporting up to 16 channels of GV-IP Cameras for network surveillance. With the feature of a Full HD HDMI video output, the GV-SNVR eliminates the need for a separate PC to view and play back video from the unit. Its five USB ports allow you to connect a storage device to import or export system settings, update firmware, save snapshot files and back up video in AVI format.

Optionally, you can connect a GV-Joystick V2 to control PTZ cameras. Moreover, you can remotely access the live view through mobile devices or Web browsers with advanced video features.

Features

- 16-Channel video recording
- Automatic search and set-up for IP cameras
- Up to 1920 x 1080 resolution for each channel
- Dual streams support
- Continuous, motion and scheduled recordings
- Timeline playback
- Multi-channel playback
- Display of HDD status and system temperature
- DST (Daylight Saving Time) support
- NTP (Network Time Protocol) support
- GeoVision DDNS server support
- E-mail notification for recording error and password retrieval
- Recording export
- Remote live view through Web browser
- PTZ control using GV-Joystick V2 or on-screen panel
- 1080p HDMI video output
- 4 SATA HDD drawer (3.5") for up to 16 TB storage
- Smart device access (iOS and Android)
- Support for 9 languages

Specifications

Hardware

System		
OS		Embedded Linux
No. of Drive Bay		4 (3.5" HDD)
Power Source		Input: AC 100 ~ 230V, 50 ~ 60 Hz Output: Max. 100 W
Connectors	Gigabit Ethernet	2 ports, RJ-45
	Video Output	HDMI and D-Sub
	Audio	2 stereo jacks for a speaker and a headphone
	USB 2.0	Front: 1 port, Rear: 4 ports

Note: For GV-SNVR1600, when 2 Ethernet ports are used together, one is LAN port and the other is WAN port.

LED Indicator	5 LEDs: Power, LAN, WAN, HDD Status, HDD Error
Operating Temperature	0°C ~ 50°C (32°F ~ 122°F)
Humidity	0% ~ 80% RH (non-condensing)
Dimensions (L x W x H)	424.6 x 445 x 43.8 mm (16.72 x 17.52 x 1.72")
Net Weight	4.1 kg (9.04 lb)
Regulatory	FCC , CE , RCM , RoHS compliant

Software

Video and Audio	
Video Compression	H.264
Video Stream	Dual streams from H.264
Video Resolution	Up to 1920 x 1080 each channel
Video Output	1080p (HDMI / VGA)
Display Division	1 / 4 / 9 / 16
Audio Compression	G.711
Audio Support	Yes
Two-Way Audio	N/A

Operation	
Recording Bandwidth	Max. 100 Mbps for 16 channels
Recording Mode	Round the clock / Motion Detection / Schedule Recording
Pre Recording	1 ~ 10 sec.
Post Recording	30 sec.
Instant Playback	3 min.
Backup Type	USB storage device of FAT32 format

Note: For backup efficiency, it is suggested to use the external hard drive to back up recordings.

Management	
Language	English / Traditional Chinese / Spanish / Russian / Portuguese / French / German / Italian / Japanese
Firmware upgrade	Upgrade through OSD or GV-IP Device Utility

Network	
Network Type	LAN, WAN, Internet
Protocol	DHCP, DynDNS, HTTP, NTP, TCP, UDP

System Monitoring and Recovery	
Power Restoration	Automatic restart after power outage
Monitoring	Software Watchdog

Remote Viewing	
Live View	Max. 34 channels connection
Monitoring Environment	IE, Chrome, Firefox and mobile devices
Smart Device Access	GV-Eye for iOS and Android
Access from Web Browser	Live View, Image Snapshot, Picture in Picture, Picture and Picture, Digital PTZ

Note: Product design and specifications are subject to change without notice.

Accessories

GV-Joystick V2	The GV-Joystick V2 facilitates the PTZ camera control. It can be plugged into the GV-SNVR for independent use to empower the operation of PTZ cameras.
GV-POE Switch	The GV-POE Switch is designed to provide power along with network connection for IP devices. The GV-POE Switch is available in various models with different numbers and types of ports.
Slide Rail Kit	The Slide Rail Kit is used to mount a rail for the GV-SNVR1600 in a 19" cabinet.

Requirements

Supported GV-IP Cameras

1. GV-Target Series IP Camera (Firmware V1.0 or later)
2. GV-SD220/220-S (Firmware V1.02 or later)
3. All the other GV-IP Cameras (Firmware V2.11 or later) EXCEPT the models below:
   o GV-BX110
   o GV-BL110
   o GV-Fisheye IP Camera
   o GV-MFD110
   o GV-PT110
   o GV-PTZ010D
   o GV-SD010/200/200-S

Note:
1. The GV-SNVR supports the recording frame rate of up to 30 fps only.
2. The GV-SNVR 1600 supports the recording bandwidth of up to 100 Mbps only.

Recommended Hard Disks

GV-SNVR1600 supports 4 SATA HDD (3.5") with total up to 16 TB capacities. For system efficiency, it is recommended to use the enterprise-level hard disk drives instead of desktop-level or green HDD. For tested hard disk drives, see Appendix in GV-SNVR User's Manual.

Note: The GV-SNVR does not support the 2.5" SATA HDD.

Supported Web Browsers

4. Internet Explorer 8 or later
5. Google Chrome 33.0 or later
6. Mozilla Firefox 28.0 or later

Overview

Front Panel

Back Panel

Packing List

GV-SNVR01600 Package
1. GV-SNVR1600
2. AC power cord
3. SATA cable x 4

4. HDD Mounting Bracket Kit (4 pairs and 32 screws included)
5. Rack Mount Kit (2 L-shaped brackets and 6 screws included)