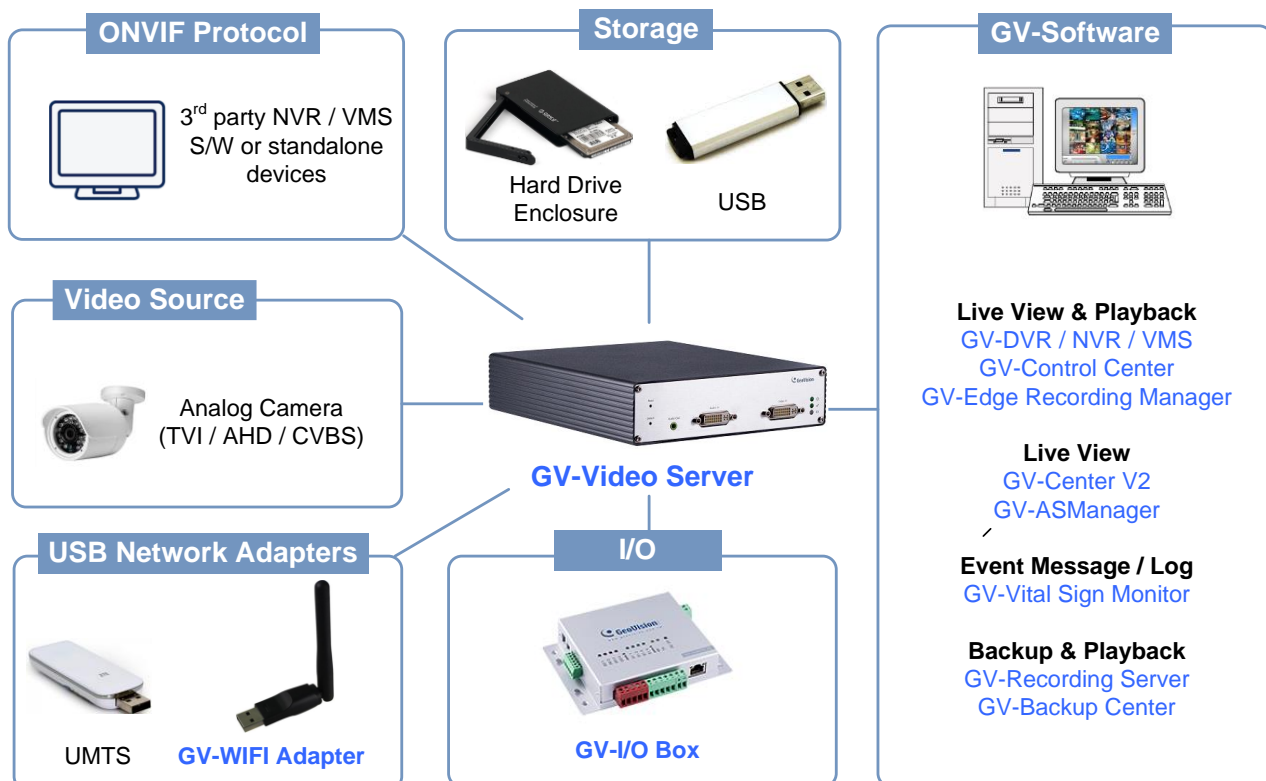# GV-VS21600 16CH H.264 Combo 1080p Video Server

- H.264
- 8-channel combo 18 fps at 3 MP / 15 fps at 4 MP / 12 fps at 5 MP / 30 fps at 1080p
- 16-channel combo 720p and analog 960H / D1 real-time video
- 12V DC
- Tampering Alarm
- USB HDD Storage
- UMTS / 3G / 3.5G / 4G
- Automatic switch between WiFi and 3G / 4G
- Smart streaming
- Supports over 50 PTZ models
- 29 languages on Web interface
- HD-TVI (1.0 / 2.0 standard) / HD-AHD
- ONVIF (Profile S) conformant

*Smart streaming is only supported by GV-DVR / NVR V8.7.0.0 or later and GV-VMS V16.10.3 or later

GV-VS21600 is a powerful H.264 Video Server with compact size. It supports real-time video with 8-channels between 3 MP and 5 MP, or up to 16 channels at 1080p, 720p, 960H and D1 resolution. It converts analog signals into digitized high-resolution images of up to 5 megapixels and can be fully integrated with GV-DVR / NVR / VMS to form a powerful IP surveillance solution. GV-VS21600 can record videos to a local USB storage, performing as a compact video recorder. It is also able to trigger Tampering Alarm alerts when the cameras are tampered with, which can be used to prevent criminal activities.

ONVIF Protocol

3rd party NVR / VMS S/W or standalone devices

Storage

Hard Drive Enclosure

USB

GV-Software

Live View & Playback
GV-DVR / NVR / VMS
GV-Control Center
GV-Edge Recording Manager

Live View
GV-Center V2
GV-ASManager

Event Message / Log
GV-Vital Sign Monitor

Backup & Playback
GV-Recording Server
GV-Backup Center

Video Source

Analog Camera
(TVI / AHD / CVBS)

GV-Video Server

USB Network Adapters

UMTS   **GV-WIFI Adapter**

I/O

GV-I/O Box

Specifications

Video			
Video Standard		NTSC, PAL	
Video Input		16 channels	
Compression		H.264	
Signal Type		Combo / CVBS	
Frame Rate	NTSC	- 18 fps per channel at 3 MP; 144 fps in total for 8 channels - 15 fps per channel at 4 MP; 120 fps in total for 8 channels - 12 fps per channel at 5 MP; 96 fps in total for 8 channels - 30 / 15 fps per channel at 1080p, 240 fps in total for 8 / 16 channels - 30 fps per channel at 720p / 960H / D1; 240 fps in total for 16 channels * The frame rate will be restricted to 15 fps when more than 8 channels are set at 1080p.	
	PAL	- 18 fps per channel at 3 MP; 144 fps in total for 8 channels - 15 fps per channel at 4 MP; 120 fps in total for 8 channels - 12 fps per channel at 5 MP; 96 fps in total for 8 channels - 25 / 15 fps per channel at 1080p, 200 / 240 fps in total for 8 / 16 channels - 25 fps per channel at 720p / 960H / D1; 240 fps in total for 16 channels * The frame rate will be restricted to 15 fps when more than 8 channels are set at 1080p.	

Note: More than 32 connections from clients may reduce system performance. In that case, lower frame rates can maintain smooth video stream.

Resolution	NTSC HD	Main Stream	2592 x 1944, 2560 x 1440, 2048 x 1536, 1920 x 1080 (Default), 1280 x 720, 640 x 360, 448 x 252 for Combo Signal
		Sub Stream	640 x 360, 448 x 252 (Default) for Combo Signal
	NTSC SD	Main Stream	960 x 480, 720 x 480 (Default), 480 x 240, 360 x 240 for Analog Signal
		Sub Stream	480 x 240, 360 x 240 (Default) for Analog Signal
	PAL HD	Main Stream	2592 x 1944, 2560 x 1440, 2048 x 1536, 1920 x 1080 (Default), 1280 x 720, 640 x 360, 448 x 252 for Combo Signal
		Sub Stream	640 x 360, 448 x 252 (Default) for Combo Signal
	PAL SD	Main Stream	960 x 576, 720 x 576 (Default), 480 x 288, 360 x 288 for Analog Signal
		Sub Stream	480 x 288, 360 x 288 (Default) for Analog Signal
Video Streaming			Configurable frame rate and bandwidth, Constant and variable bitrate
Video Adjustment			Brightness, Contrast, Saturation, Hue, Sharpness
Dual Streams			Yes
Coaxial Cable	Recommended Type		5C-FB or above
	Maximum Length		300 m (984 ft)

Audio	
Audio Input	16 RCA ports, 16 channels
Compression	G.711
Audio Support	Two-way

Management		
Event Management	Trigger	Schedule, Sensor Input, Motion Detection
	Action	● Store Video (AVI format) ● Send e-mails with captured images ● Upload captured images to FTP Server ● Monitor through Center V2 and Vital Sign Monitor ● Activate relay outputs to control external devices
Firmware Upgrade		Remote upgrade through Web interface or GV-IP Device Utility
Storage		USB HDD Storage
Client PC Requirements		Microsoft Internet Explorer 8.x or later
Security		IP address filtering

Language	Bulgarian / Czech / Danish / Dutch / English / French / German / Greek / Hebrew / Hindi / Hungarian / Italian / Indonesian / Japanese / Norwegian / Lithuanian / Persian / Polish / Portuguese / Romanian / Russian / Serbian / Simplified Chinese / Slovakian / Slovenian / Spanish / Thai / Traditional Chinese / Turkish
Max Number of Live Streams	64
Max Number of RTSP Streams	64
Network	
Interface	10/100/1000 Base-T Ethernet, 802.11b/g/n Wireless LAN (optional), Mobile broadband: UMTS, EDGE, etc. (optional)
Protocol	DHCP, DynDNS, FTP, HTTP, HTTPS, 3GPP/ISMA, NTP, ONVIF (Profile S), RTSP, SMTP, SNMP, TCP, UDP, UPnP, QoS (DSCP)
Security Feature	-No default ID and Password -802.1x authentication -HTTPS with an SSL certificate stored within the video server
External Interface	
Video Input	1 DVI socket supporting 16 video BNC ports
Audio Input	1 DVI socket supporting 16 audio RCA ports
Audio Output	1 port (stereo phone jack, 3.5 mm/0.14'')
Sensor Input	8 inputs
Alarm Output	8 outputs
PTZ	RS-485 +/-
Ethernet	RJ-45, 10/100/1000 Mbps
USB	2 ports (USB 2.0)
Power	Input	DC Jack (DC 12V, 3.0A)
Environment	
Operation Temp.	-20 ~ 50°C / -4 ~ 122°F
Humidity	0 ~ 90% RH (non-condensing)
Weather Resistance	Indoor use
Physical	
Dimensions (L x W x H)	200 x 175 x 40 mm / 7.87 x 6.88 x 1.57 in
Weight	1.1 kg / 2.42 lb
Regulatory	CE, FCC, RCM, RoHS compliant
Applications	
Software Supported	GV-VMS (V16.11.0.0), GV-DVR / NVR (V8.7.4.0), GV-Control Center (V3.4.0.0), GV-Backup Center (V1.2.0.0), GV-Edge Recording Manager (V1.3.0.0), GV-Center V2 (V16.11.0.0), GV-Recording Server / Video Gateway (V1.3.0.0), GV-Redundant / Failover Server (V1.1.0.0), GV-Remote ViewLog (V16.11.0.0)
Network Storage	GV-DVR / NVR / VMS, GV-Backup Center, GV-Recording Server
Mobile Phone Support	GV-Eye for iOS and Android
Live Viewing	IE, Firefox, Chrome, Safari, Edge
CMS Server support	GV-Control Center, GV-Center V2, GV-Vital Sign Monitor

Note:

1. It is required to apply patch files to all the supported software mentioned.
2. GV-Video Server cannot work with microphones that require power from the unit. Use microphones that have external power supply.
3. GV-VS21600 supports 1 external hard disk (2.5" or 3.5") with up to 14 TB capacities.
4. It is not recommended to use the flash USB drive with GV-VS21600 because of its slow read and write speed.
5. Product design and specifications are subject to change without notice.

Packing List

1. GV-VS21600
2. AC Power Cord
3. Power Adaptor
4. DVI to 16 Video BNC Breakout Cable
5. DVI to 16 Audio RCA Breakout Cable
6. Download Guide
7. Warranty Card

Options

Optional devices can expand your GV-Video Server's capabilities and versatility. Contact our dealer for more information.

GV-Relay V2	Working with the GV-Relay V2, the GV-Video Server can drive the loads of relay outputs over 5 volts.
GV-WiFi Adaptor V2	GV-WiFi Adaptor V2 is designed to connect the GV IP devices, such as GV-Video Server, to the wireless network.
Wall Hook	Wall Hook is used to mount GV-VS21600 to the wall.
DIN-rail Hook	DIN-rail Hook is used to mount GV-VS21600 to a 35-mm (1.38-in) DIN rail.
Rack Mount	Rack Mount is used to mount up to 2 video servers to a 19-in (482.6-mm) rack.

Supported Wireless LAN USB Adaptor

Vendors	Model
D-Link	DWA-140 (H/W version B1), DWL-G122 (version C1)
EDIMAX	EW-7318Ug, EW-7718Un, EW-7711UAn
Linksys	WUSB54GC, WUSB600 (version 1)
Pegatron	WL-166N11
Note: Linksys WUSB54GC ver. 3 is not supported.	

Supported Mobile Broadband Device

Vendors	Model
Bandluxe	C320, C501
HUAWEI	E156, E156B, E169, E220, E1692, E1750, E1752, E1756, E1756C, EC169C, EC189 USB Modem (HSDPA/UMTS/EDGE/GPRS/GSM)
Novatel	MC950D, MC996D, MC998D (HSDPA/UMTS/EDGE/GPRS/GSM)
Onda	MSA523HS
Sierra	250U
Verizon	USB727, USB728, USB760 Modem (EVDO)
Vodafone	K3565 (Rev 2)
ZTE	MF100