

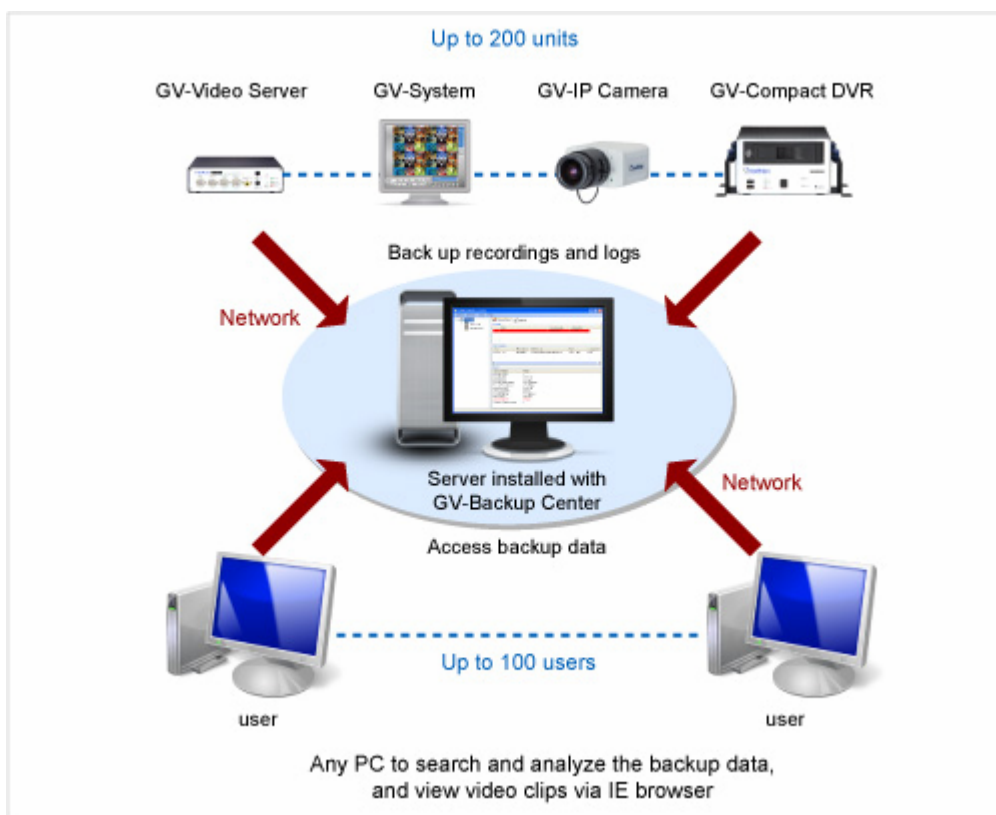
## GV-Hot Swap Backup Center System (Rev. B) – 4U, 20-Bay



### Introduction

The GV-Hot Swap Backup Center System, designed for large-scale video surveillance deployments, provides a secure remote backup solution with a powerful data storage capacity for the GV-System and GV-IP Devices. It comes with a selection of 4U (20-bay) or 3U (16 / 8-bay) hot-swappable SATA mobile racks. Depending on the HDD size, the GV-Hot Swap Backup Center System can store more than 60 terabytes of recorded data.

The built-in GV-Backup Center can automatically store a copy of recordings and logs to the offsite location. Using the GV-Backup Center, the recording data remain safe in a different location if the GV-System and GV-IP Devices are damaged.



## Features

- Windows Embedded 7 64-bit (x64)
- Powered by Intel Core i7 Processor
- Maximum storage capacity of more than 60 TB (4U 20-Bay) / 48 TB (3U 16-Bay) / 24 TB (3U 8-Bay)
- 20 (4U), 16 / 8 (3U) hot-swappable SATA drive bays
- Four Gigabit LAN ports
- Four USB 2.0 ports and four USB 3.0 ports
- Recovery DVD in case of failure
- Remote backup
- Up to 200 units of GV-System and GV-IP Devices supported
- Up to 10 backup rules for working and non-working days independently
- Support for backing up GV-System recordings according to event types (all types, motion or I/O trigger)
- E-Mail alerts for low disk space, disconnection and file transfer failure
- Online data analysis by Event Count, File Size and Time
- Failover support (GV-IP Devices only)
- Web interface for event query
- Support for 16 languages
- RAID 0 / 1 / 5 / 6 / 00 / 10 / 50 / 60 data protection (optional)



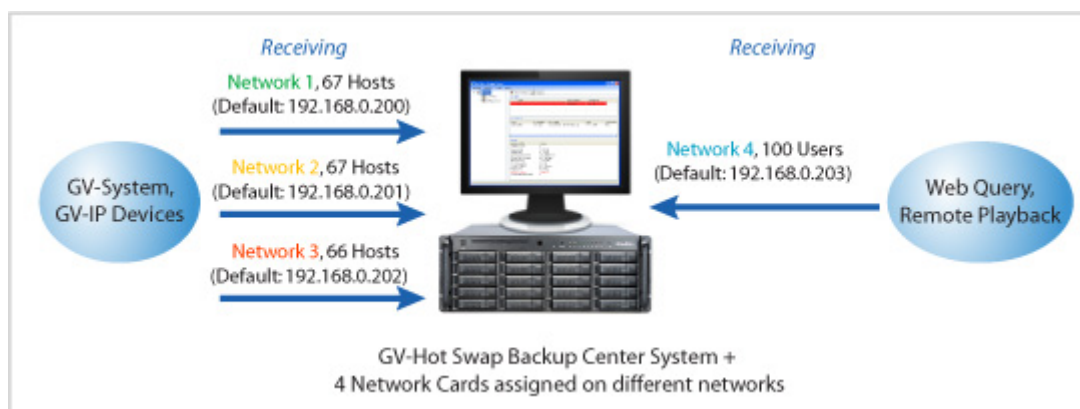
## Specifications

System		
CPU	Intel Core i7 Processor	
RAM	4 GB Dual Channels	
OS	64-bit Microsoft Windows 7 Embedded	
DirectX	11	
No. of HDD	20 (3.5" HDD)	
Internal Storage	500 GB (3.5" HDD)	
Connector	Ethernet	RJ-45, 10 / 100 / 1000 Mbps x 4
	Video Output	3 displays with outputs VGA, DVI-D (DVI-D signal Only) and HDMI
	USB 2.0	Front : 2 ports, Rear : 2 ports
	USB 3.0	Rear: 4 ports
DVD (±) RW	Slim	8X
Fan	12 cm (4 3/4")	3 units
	8 cm (3 1/8")	2 units
Power		Output: 1000 W Input: 90-264 V, 47-63 Hz
Backup Type		DVD+R (DL) / DVD-R (DL) / DVD+R / DVD+RW / DVD-R / DVD-RW / CD-R / CD-RW
System Monitoring and Recovery		
Power Restoration		Automatic restart after power outage
Monitoring		Two independent Watchdogs (Hardware Watchdog + Software Watchdog)
Recovery DVD		Automatic system rebuild from DVD
Environment		
Operating Temp.		0 ~ 45 °C / 32 ~ 113 °F
Humidity		0 ~ 80% RH (non-condensing)
Physical		
LED Indicator		Yes (Fan, Power, HDD)
Color		Black
Dimensions (W x H x D)		483 x 178 x 660.4 mm / 19 x 7 x 26 in
Weight		23.5 kg / 51.8 lb (± 1 kg / 2.2 lb)
Software Specifications		
Number of hosts		200 units of GV-System and GV-IP Devices
Number of user accounts		100 in total including Supervisors and Users
Backup schedule		Yes (for GV-System and GV-IP Devices)
Backup rules		10 rules for working and non-working days independently
Resuming backup after losing connection to hosts		Yes

Software Specifications	
E-mail alert	Low disk space, disconnection, file transfer failure
Disk space recycle	Yes
Keep Day	Definable and unlimited in number
System Log query	Web-based query pages
Video playback	Available through web-based query pages, or Remote ViewLog Playback program additionally installed from Software DVD
Language	Danish / English / French / German / Hebrew / Hungarian / Italian / Japanese / Polish / Portuguese / Russian / Serbian / Simplified Chinese / Spanish / Traditional Chinese / Turkish

## Network Deployment

The GV-Hot Swap Backup Center System, equipped with 4 network interface cards, has the capacity of receiving 200 hosts for GV-System and GV-IP Devices. It can also receive up to 100 users for Web query or remote playback. It is recommended to set three network interface cards for receiving video and one network interface card for Web query or remote playback.



## Recommended Network and Hard Disk Requirements

The system's backup speed and transmitting capacity depends on the number of Gigabit connections. The numbers of Gigabit network cards required to receive 200 hosts and to support remote access of backed up data are listed below according to the resolution of the source video.

Also note the maximum number of hosts supported by a single hard disk to calculate the number of hard disks required. For example, at least 7 hard disks are required for up to 200 hosts supported with 1.3 / 3 M resolution.

Resolution	FPS	Codec	Gigabit Network Cards Required		Max. hosts per HDD
			Receiving 200 hosts	For Playback / Web Query access	
1.3 MP	30 fps	H.264	Gigabit network card x 2 (up to 100 hosts per card)	Gigabit Network Card x 1	32 hosts
2 MP	30 fps	H.264	Gigabit Network Card x 3 (up to 67 hosts per card)	Gigabit Network Card x 1	21 hosts
3 MP	20 fps	H.264	Gigabit network card x 2 (up to 100 hosts per card)	Gigabit Network Card x 1	32 hosts
4 MP	15 fps	H.264	Gigabit Network Card x 3 (up to 67 hosts per card)	Gigabit Network Card x 1	24 hosts
5 MP	10 fps	H.264	Gigabit Network Card x 3 (up to 67 hosts per card)	Gigabit Network Card x 1	24 hosts

Overview

Front View



Rear View



Packing List

- GV-Hot Swap Backup Center System x 1
- AC Power Cord x 1
- Recovery DVD x 1
- Software DVD x 1
- Self-Stick Rubber Pad x 4
- User’s Manual x 1
- Quick Start Guide x 1

Options

Gigabit Network Card	The Gigabit Network Card can support 2 gigabit ports. The number of gigabit ports supported varies based on models and combination of optional cards. Up to 5 gigabit ports can be supported. ** By replacing 1 built-in single network card with 1 optional dual network cards, the GV-Hot Swap Backup Center System 3U (16-bay) and 4U (20-bay) can support up to 5 gigabit ports.
Redundant Power Supply	The Redundant Power Supply comes with 2 hot-swap modules for 3U models and 3 hot-swap modules for 4U models. When 1 module is down, the remaining module(s) can still supply full power to the system. - 3U models: 600 W 1+1 mode; 100 ~ 240 V, 50/60 Hz - 4U models: 1000 W N+1 mode; 100 ~ 240 V, 50/60 Hz
RAID Card	The RAID Card supports a maximum of 20 SATA hard drives and enhances data protection. The supported RAID types include RAID 0, RAID 1, RAID 5, RAID 6, RAID 00, RAID 10, RAID 50 and RAID 60.

- Note:
1. The optional accessories will be built in the GV-Hot Swap Surveillance System V5 (Rev. B) and tested before shipment. Opening the case and installing the accessories yourself will void the warranty.
  2. The optional accessories are only supported in GV-Hot Swap Surveillance System V5 (Rev. B) or later.
  3. Please contact our sales representatives for more information when combining optional cards for your system.