GV-Storage System V3 (Rev. B) – 3U, 16-Bay

Introduction

Large Storage Capacity

GV-Storage System V3 (Rev. B), an IP SAN storage system, is a high-performance RAID storage system based on the latest iSCSI technology for users looking for a cost-effective and shared storage solution over the network. Compared to the desktop PC and consumer NAS system which only allow for 2 ~ 8 hard disks for data storage, GV-Storage System V3 (Rev. B) is equipped with 16 hard disk drives, storage capacity up to 160 TB (with 10 TB HDD). GV-Storage System V3 (Rev. B) can increase storage up to 256 hard disks with 2560 TB through GV-Expansion Systems V3.

High Availability

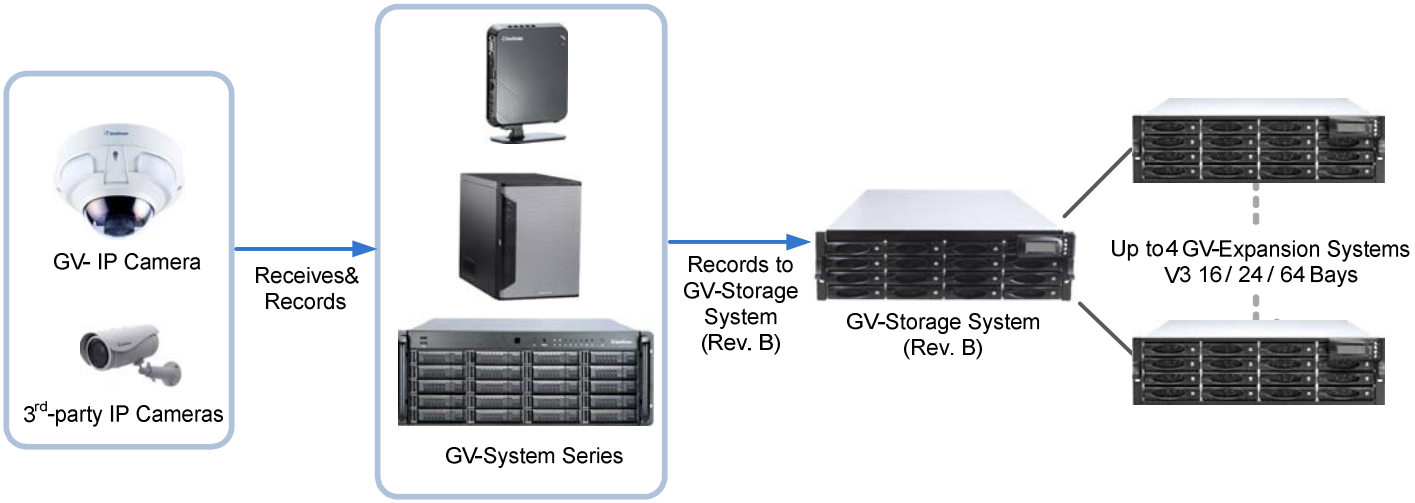
GV-Storage System V3 (Rev. B) has fully redundant components including power supplies, fan modules, and SAS JBOD expansion ports linked to GV-Expansion System V3. All of these components are hot-swappable to create a high availability platform and provide non-stop services.

Compatibility with GeoVision Surveillance Systems

GV-Storage System V3 (Rev. B) is compatible with GeoVision Surveillance Systems and Software. With its large storage capacity and high availability, GV-Storage System V3 (Rev. B) is an ideal choice for safe and long-term data storage.

Compatible GeoVision Products

- GV-Hot Swap System V5 Series
- GV-NVR System Lite V2 Series
- GV-Tower / DVR / NVR / VMS System
- GV-DVR / NVR / VMS / Recording Server / Backup Center / Redundant Server / Failover Server



Features

- 3U 16-bay hot-swappable SAS/SATA HDD for data storage
- Storage capacity up to 160 TB (with 10 TB HDD)
- Multi-Ethernet Ports
  4 x 1 Gigabit Ethernet ports & 2 x 10 Gigabit Ethernet ports
- RAID level 0, 1, 3, 5, 6, 10, 50, 60, JBOD
- Fully redundant & hot pluggable designs: power supplies and fans
- Background logical drive rebuilding
- Automatic rebuilding onto hot spare (Local & Global Hot Spare)
- Multi-path and load-balancing Features
- Real-time drive activity and status indicators
- Locally audible event notification alarm
- Storage expandable up to 2560 TB with 256 hard drives through up to 4 GV-Expansion Systems V3 16 / 24 / 64 Bays

Specifications

System	
CPU	Intel Xeon Processor
RAM	8GB DDR4 ECC
Ports	Multi-Ethernet Ports • 4 x 1 Gigabit Ethernet ports • 2 x 10 Gigabit Ethernet ports • 1 x Ethernet RJ-45 port (Management port of RAID card) • 1 x IPMI LAN port (Management port of motherboard IPMI) 2 x PSU ports 4 x USB 3.0 ports 1 x VGA port 1 x RS232 port (Phone Jack) for UPS 2 x AC Power Sockets 1 x COM1 Serial port 1 x Mini SAS HD port for connecting to GV-Expansion System V3 16 / 24 / 64 Bays
No. of Hot Swap Drive Bays	16
HDD Type	2.5” and 3.5” SAS III / SATA III
Power	AC 100 ~ 240 V Full Range 10 ~ 5 A, 47 ~ 63 Hz
Fan	Hot pluggable and redundant fan x 2
Physical	
LCD Front Panel	Yes (System Status, Network Configuration, Password Settings, Alarm Buzzer Settings)
LED Indicator	Yes (System, Access, Fail)
Color	Black
Form Factor	3U 19 inch rack-mountable chassis
Dimensions (W x H x D)	482 x 133 x 730 mm / 18.98 x 5.26 x 28.74 in
Weight	30 kg / 66.14 lb (Diskless)
Regulatory	CE / FCC / BSMI / RoHS
Environment	
Operating Temperature	10 ~ 40°C / 50 ~ 104 °F
Humidity	10 ~ 85% RH (non-condensing)
Management	
Management Method	Web UI
RAID Mode	RAID level 0, 1, 3, 5, 6, 10, 50, 60, JBOD
Automatic RAID Creation	Yes
RAID Migration	Yes
RAID Expansion	Yes
Alert	Email, SNMP, System Buzzer
Security	CHAP authentication
HDD Health Detection	S.M.A.R.T. diagnostics
Language	English / German / Japanese / Korean / Russian / Simplified Chinese / Traditional Chinese

Note:

1. If you are in an area with unstable voltage, make sure to install an automatic voltage regulator (AVR) or a UPS power supply with AVR function, to maintain a constant voltage.

2. All damages to the power supply caused by unstable voltage are not included in the 2-year warranty service.
3. All specifications are subject to change without notice.

Maximum Recorded Channels:

The maximum number of channels supported by GV-Storage System V3 (Rev. B) varies with the resolution and video compression method, as listed below. It's highly suggested to keep the total bitrates under 2700 Mbps for better recording performance.

H.264 Compression

Video Streaming		Complex Scenes		Normal Scenes	
Resolution	Frame rate	Bitrate	Recorded Channels	Bitrate	Recorded Channels
1.3 MP	30 fps	3.99 Mbps	681	0.54 Mbps	5038
2 MP	30 fps	6.12 Mbps	438	0.87 Mbps	3127
3 MP	30 fps	8.68 Mbps	313	1.05 Mbps	2590
4 MP	15 fps	9.21 Mbps	295	1.15 Mbps	2365
5 MP	25 fps	9.19 Mbps	296	1.61 Mbps	1689
8 MP	25 fps	13.5 Mbps	201	2.2 Mbps	1236
12 MP	15 fps	14.47 Mbps	188	3.41 Mbps	866

H.265 Compression

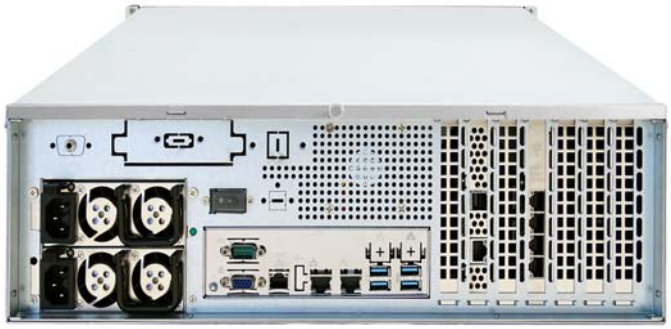
Video Streaming		Complex Scenes		Normal Scenes	
Resolution	Frame rate	Bitrate	Recorded Channels	Bitrate	Recorded Channels
1.3 MP	30 fps	2.64 Mbps	1030	0.45 Mbps	6045
2 MP	30 fps	4.31 Mbps	631	0.74 Mbps	3676
3 MP	30 fps	5.35 Mbps	508	1.01 Mbps	2698
4 MP	25 fps	7.87 Mbps	345	1 Mbps	2720
5 MP	30 fps	8.29 Mbps	538	1.55 Mbps	1755

Note: The tests were conducted using RAID 5 with 4 HDDs in a group, each HDD of 8 TB.

Overview

Front Panel

Back Panel



Packaging

- GV-Storage System V3 (Rev. B)
- Power Cord x 2
- Ethernet LAN Cable x 6 (For 1 Gigabit Ethernet Ports only)
- RS-232 Cable (For UPS, phone jack to DB9 male)
- Rail Kit
- Screws (packet)
- PSFM Blanking Plate
- Download Guide