

GV-HOT SWAP DVR SYSTEM V2 (H Series)

**GV-2016H V2 / 2008H V2 / 1480H V2 /
1240H V2 / 1120H V2**



- Powered by Intel® Core™2 Duo
- New rear panel design
- Dual Gigabit LAN ports
- 2 / 4 / 6 / 8 / 10 hot-swappable SATA HDD for data storage
- RAID data protection (optional) only for 8 & 10 bay
- Maximum storage capacity of more than 7.5 terabytes
- Operates on Windows XP Embedded
- GV-Keyboard and GV-IR Remote Control included
- Built-in 4 Inputs and 4 Outputs *
- Available in 14 languages
- Complete product information and testing reference
- FCC/CE/RoHS/WEEE certification
- Global warranty

* Not available for the 2-bay model

The GV-Hot Swap DVR System V2 features a powerful data storage capacity. It comes with a selection of 2, 4, 6, 8 or 10 bays via hot-swappable SATA mobile racks. Depending on HDD size, the GV-Hot Swap DVR System V2 can reach the maximum storage capacity of 7.5 terabytes. Support for hot-swapping makes data storage and management more convenient.

GeoVision Surveillance System empowers the GV-Hot Swap DVR System V2 with a maximum of 16 audio and video channels, and a recording rate of up to 480 FPS (NTSC) / 400 FPS (PAL). GeoVision's new compression formats deliver superior video transmission and quality. The remote access and control of the system is made possible by its networking capability. In addition, compatibility with other GeoVision accessories can cater to any kind of needs or budget.

Package

1. GV-Hot Swap DVR System V2 x 1
2. D-Type Video Cable x 2 *
(1 x 1-8 Channels Black Cable, 1 x 9-16 Channels Blue Cable)
3. D-Type Audio Cable x 2
(1 x 1-8 Channels Red Cable, 1 x 9-16 Channels Red Cable)
4. AC Power Cord x 1
5. RJ-11 to DB9 Cable x 1
6. Lock Key x 2
7. GV-Keyboard Package x1
8. IR Remote Control Package x 1
9. Self-Stick Rubber Pad x 4
10. Recovery DVD x 1
11. Nero Express CD x 1
12. Surveillance System Software CD x 1
13. GV-Hot Swap DVR System V2 User's Manual x 1
14. GV-Hot Swap DVR System V2 Quick Start Guide x 1
15. Surveillance System New Feature Guide x 1
16. Surveillance System Installation Guide x 1

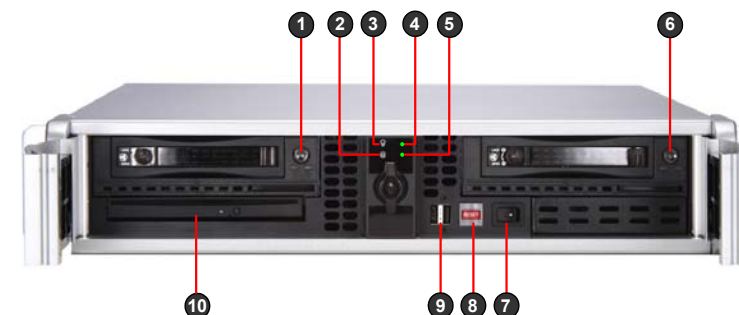
* Available for the 2-bay model.

Models

GV-2016H V2	- Sixteen-channel digital video recorder - Records up to 480 (NTSC) / 400 (PAL) fps at the D1 resolution - Has the option of 4 / 6 / 8 / 10 hot-swap SATA drive bays
GV-2008H V2	- Eight-channel digital video recorder - Records up to 240 (NTSC) / 200 (PAL) fps at the D1 resolution - Has the option of 2 / 4 / 6 / 8 / 10 hot-swap SATA drive bays
GV-1480H V2	- Sixteen-channel digital video recorder - Records up to 480 (NTSC) / 400 (PAL) fps at the CIF resolution - Has the option of 2 / 4 / 6 / 8 / 10 hot-swap SATA drive bays
GV-1240H V2	- Eight-channel or sixteen-channel digital video recorder - Records up to 240 (NTSC) / 200 (PAL) fps at the CIF resolution - Has the option of 2 / 4 / 6 / 8 / 10 hot-swap SATA drive bays
GV-1120H V2	- Sixteen-channel digital video recorder - Records up to 120 (NTSC) / 100 (PAL) fps at the CIF resolution - Has the option of 2 / 4 / 6 / 8 / 10 hot-swap SATA drive bays

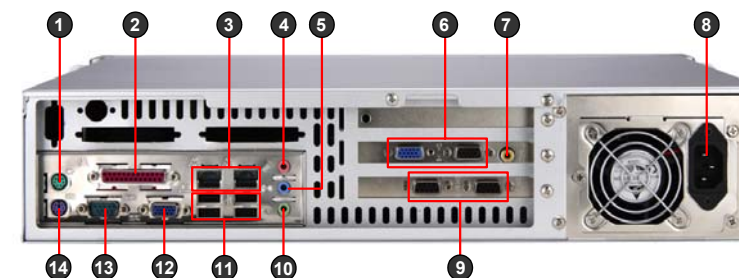
Front View (2 Bay)

IPC Case 2U Rackmount 483(W) x 89(H) x 528(D)mm (19 x 3.5 x 21 inch)



1	HDD 2 (Power Switch)	6	HDD 1 (Power Switch)
2	Hard Drive Activity LED	7	Power Switch
3	Power LED	8	Reset Button
4	HDD 1 Activity LED	9	USB Port x 2
5	HDD 2 Activity LED	10	Slim DVD (±) RW Drive

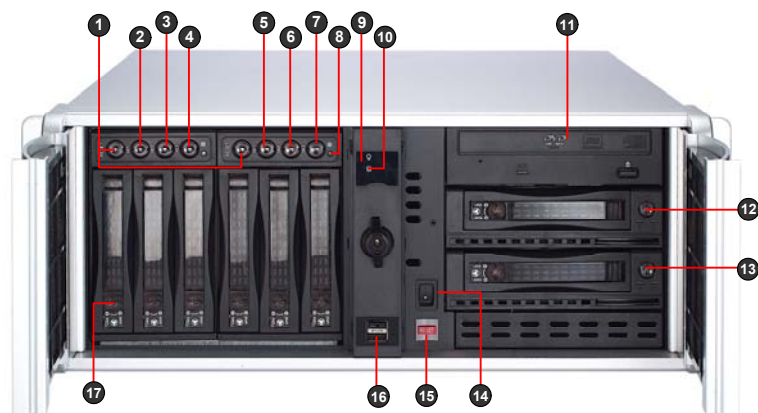
Rear View (2 Bay)



1	D-Type Audio Port x 2	8	LPT Parallel Printer Port
2	Audio Line Out Port	9	Ethernet Port x 2
3	USB Port x 4	10	Audio microphone In Port
4	VGA Monitor Port	11	Audio Line In Port
5	DB-9 Serial Input	12	D-Type Video Port x 2
6	PS/2 Keyboard Input	13	RCA TV Output
7	PS/2 Mouse Input	14	AC Power Input (Full range)

Front View (4 / 6 / 8 Bay)

IPC Case 4U Rackmount 483(W) x 178(H) x 528(D)mm (19 x 7 x 21 inch)



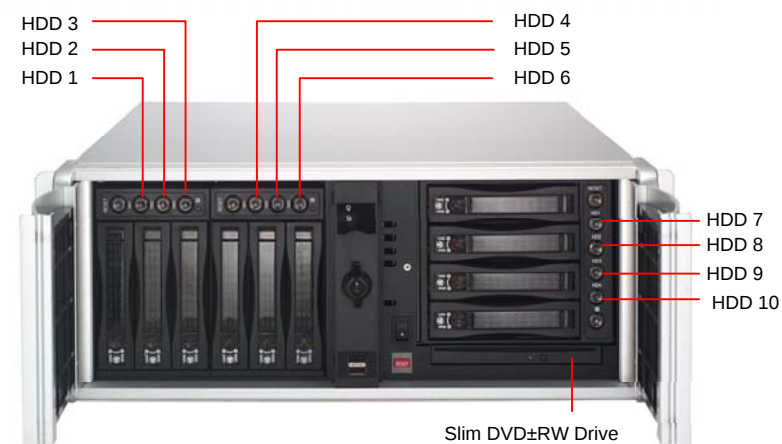
1	SATA Backplane Reset Switch	10	Hard Drive Activity LED
2	HDD 1 (Power Switch)	11	DVD (±) RW Drive
3	HDD 2 (Power Switch)	12	HDD 7 (Power Switch)
4	HDD 3 (Power Switch)	13	HDD 8 (Power Switch)
5	HDD 4 (Power Switch)	14	Power Switch
6	HDD 5 (Power Switch)	15	Reset Button
7	HDD 6 (Power Switch)	16	USB Port x 2
8	Fan Sensor LED	17	Safety Lock
9	Power LED		

※ The 2-bay & 10-bay model of GV-Hot Swap DVR V2 series are available upon special request with buyer lead time, please contact your sales representative for further information.

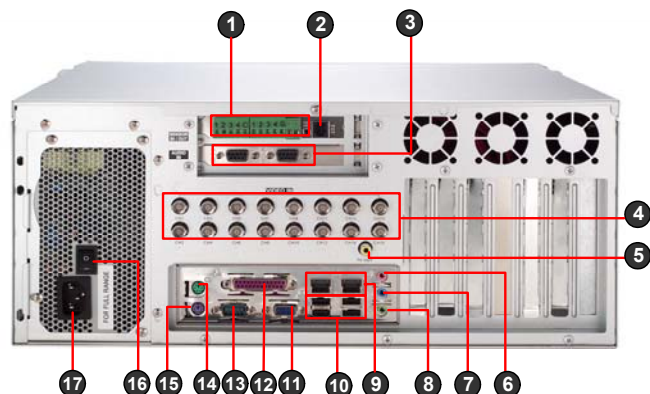
Front Panel Variation (10 Bay)

All 10-bay models of GV-Hot Swap DVR V2 are equipped with slim DVD±RW drives, while the sizes of DVD±RW drives on the 4-bay, 6-bay and 8-bay models are 5.25 inch. The location of the DVD±RW drive on the front panel of 10-bay models is different from those on the other models.

The front panel presented below is of the 10-bay model, and it indicates the location of the slim DVD±RW drive.



Rear View (4 / 6 / 8 / 10 Bay)



1	RS-485 ± for PTZ Control	10	USB Port x 4
2	RJ-11 Port	11	VGA Monitor Port
3	D-Type Audio Port x 2	12	LPT Parallel Printer Port
4	BNC Connector x 16	13	DB-9 Serial Input
5	RCA TV Output	14	PS/2 Mouse Input
6	Audio Microphone In Port	15	PS/2 Keyboard Input
7	Audio Line In Port	16	AC Power Switch
8	Audio Line Out Port	17	AC Power Input (Full range)
9	Ethernet Port x 2		

Basic System Specifications

System

Model		GV-2016H V2	GV-2008H V2	GV-1480H V2	GV-1240H V2	GV-1120H V2
CPU		Intel® Pentium Core™ 2 Duo Processor				
RAM		2 GB	1 GB			
		Dual Channel	Dual Channel			
Drive Bay		4/ 6/ 8/10 bays	2/ 4/ 6/ 8/ 10 bays			
OS		Microsoft Windows XP Embedded				
VGA		Intel GMA 3000				
DirectX		9.0c				
DVD (±)	5.25"	16X				
RW	Slim	8X				
Power		2 bays: 350 W, 90-264 V, 47-63 Hz				
		4/ 6/ 8/ 10 bays : 450 W, 110-230 V, 60-50 Hz				

* Multiple options for the HDD capacity, amount of RAM and type of VGA are available to meet different needs.

Video

Model		GV-2016H V2	GV-2008H V2	GV-1480H V2	GV-1240H V2	GV-1120H V2
Video Standard		NTSC, PAL				
Video Input		16 channels	8 channels	16 channels	8 / 16 channels	16 channels
Input Level		1.0 Vp-p (± 10%) composite, 75 Ω				
TV Output		1.0 Vp-p composite				
Video Loop Output (Optional)		16 channels				
Compression		H/W: MPEG-2, MPEG-4 (ASP)		Geo MPEG4 / Geo Mpeg4 (ASP) / Geo H264		
		S/W: Geo MPEG4 / Geo Mpeg4 (ASP) / Geo H264				
Display Frame (Max)	NTSC	480 FPS	240 FPS	480 FPS		
	PAL	400 FPS	200 FPS	400 FPS		
Display Resolution	NTSC	360x240 / 720x480 / 720x480 De-interlace		320x240 / 640x480 / 640x480 De-interlace / 720x480 / 720x480 De-interlace /		
	PAL	360x288 / 720x576 / 720x576 De-interlace		320x240 / 640x480 / 640x480 De-interlace / 720x576 / 720x576 De-interlace /		
Camera Name		Max. 32 characters				
Screen Split Control		1x1 / 2x2 / 1+5 / 1+7 / 3x3 / 2+8 / 1+12 / 1+16 / 4x4				
Screen Rotate Control		1 ~ 10 sec.				
Image Control		Contrast / Brightness / Saturation / Hue				

Audio

Model	GV-2016H V2	GV-2008H V2	GV-1480H V2	GV-1240H V2	GV-1120H V2
Audio Input	16 channels	8 channels	16 channels	8 / 16 channels	16 channels
Input Level	0.5 ~ 1 Vp-p composite				
Compression	ADPCM / G.723				

Recording

Model		GV-2016H V2	GV-2008H V2	GV-1480H V2	GV-1240H V2	GV-1120H V2
Recording Frame	NTSC	H/W: 480 (D1)	H/W: 240 (D1)	S/W: 480 (CIF)	S/W: 240 (CIF)	S/W: 120 (CIF)
	PAL	H/W: 400 (D1)	H/W: 200 (D1)	S/W: 400 (CIF)	S/W: 200 (CIF)	S/W: 100 (CIF)
Image Compression Dimensions	NTSC	720x480 / 720x480 De-interlace		320x240 / 640x480 / 640x480 De-interlace / 720x480 / 720x480 De-interlace /		
	PAL	720x576 / 720x576 De-interlace		320x240 / 640x480 / 640x480 De-interlace / 720x576 / 720x576 De-interlace /		
Recording Mode		Round the Clock / Motion Detection / Sensor Detection / Pre & Post Recording / Schedule Recording				
Schedule		96 groups per day by 15 min.				
Instant Playback		10 sec. / 30 sec. / 1 min. / 5 min.				
Pre Recording		1~ 90 sec. (1 FPS)				
Water Marking		Support				

Searching and Playback

Search Method	Date / Time
Date / Time / Event Search	Selectable on the tree list and calendar
Log Search	Through the log data to find the video event / time
Backup Type	DVD+R (DL) / DVD-R (DL) / DVD+R / DVD+RW / DVD-R / DVD-RW / CD-R / CD-RW

Remote Client Software

Monitoring Environment	WebCam / Twin Server / CenterV2 / VSM / Control Center / Remote Playback Server / Remote View / IP Multicast / GView for PDA / MSView for Microsoft Smartphone / SSView Version 2 for Symbian Smartphone / SSView Version 3 for Nokia S60 2 nd and 3 rd / 3G Mobile Phone
WebCam Live View	Max. 16 channels transmission (Max. 200 channels accessible)
Remote Search	WebCam's Remote Playback / Remote Playback Server

System Monitoring and Recovery

Power Restoration	Power restored after AC power loss
Monitoring	Two independent Watchdogs (Hardware Watchdog + Software Watchdog)
Recovery DVD	Automatic system rebuild

Alarm

Sensor Input	Standard *	4 inputs
	GV-IO 12-In Card (Optional)	16 inputs
	GV-IO w/ GV-RELAY Box (Optional)	8 ~ 72 inputs
Alarm Output	Standard *	4 outputs
	GV-IO 12-Out Card (Optional)	16 outputs
	GV-IO w/ GV-RELAY Box (Optional)	16 ~ 144 outputs
Motion Detection	16 channels	

* Not available for the 2-bay model

Connector

Video Input	BNC 8 / 16 ports
Video Loop Output (Optional)	BNC 16 ports
Audio Input	RCA 8 / 16 ports
Audio Microphone In	Mini stereo jack
Audio Output	Mini stereo jack
TV Output	RCA
RS±485 for PTZ Control	2-pin terminal
Ethernet	RJ-45, 10/100/1000 Mbps x 2
USB 2.0	Front: 2 ports, Rear: 4 ports
VGA Output	15-pin female D Sub
Remote Access	TCP/IP

Environment

Operating Temp.	0 ~ 50 °C (32 ~ 122 °F)
Humidity	0 ~ 80% RH (non-condensing)

Physical (2 Bays)

Model	GV-2008H V2	GV-1480H V2	GV-1240H V2	GV-1120H V2
IPC Case	2U Rackmount			
Color	Silver			
Dimensions	483 (W) x 89 (H) x 528 (D) mm (19 x 3.5 x 21 inch)			
Weight	14.1Kg			

Physical (4 / 6 / 8 / 10 Bays)

Model	GV-2016H V2	GV-2008H V2	GV-1480H V2	GV-1240H V2	GV-1120H V2
IPC Case	4U Rackmount				
Color	Silver				
Dimensions	483 (W) x 178 (H) x 528 (D) mm (19 x 7 x 21 inch)				
Weight	4 Bays	18.1 Kg	17.9 Kg	17.8 Kg	
	6 Bays	18.9 Kg	18.7 Kg	18.6 Kg	
	8 Bays	19.9 Kg	19.7 Kg	19.6 Kg	
	10 Bays	19.8 Kg	19.6 Kg	19.5 Kg	

PTZ Support

	PTZ Manufacturer & Model	GV-System PTZ Option
1	Ademco (Juptier)	Ademco (Juptier)
2	Bosch (TC700/8560)	Bosch (TC700/8560)
3	Canon VC-C3	VCC3
4	Canon VC-C4	VCC4
5	CBC GANZ (ZC-S120 Series)	CBC GANZ (ZC-S120 Series)
6	Chiper (V9KRV)	Chiper (V9KRV)
7	D-Max Version Protocol	D-Max Dome
8	DiGi Dome (DOH-240)	DongYang Dome (DOH-240) / D-Max Dome
9	Direct Perception (PTU-D46)	Direct Perception (PTU Series)
10	DynaColor D-7720	DynaColor (D-7720/D7722) / DynaColor Dome
11	DynaColor D-7722	DynaColor Dome
12	DynaColor Version Protocol	DynaColor Dome
13	Elbex (Matrix/1000)	ELBEX (Matrix/1000)
14	Elitar (EL-PT830)	Pelco Dome
15	GKB (SPD-221)	GKB (SPD-221)
16	Hi-Sharp (HS-CC600)	HiSharp Pelco D
17	Hi-Sharp (HS-CC610)	HiSharp Pelco P
18	JEC Version Protocol	JEC Dome
19	JEC (ETXK8000)	Pelco Dome / JEC Dome
20	JVC (TK-S576B/S655)	JVC (TK-S576B/S655)
21	Kalatel Cyber Dome with KTD-312	Kalatel Cyber Dome
22	Kampro 230X CCD Zoom Camera (GE Security)	Pelco Dome
23	Kampro Technology (K-ZC23)	Kampro Technology (K-ZC23)
24	Kenko (DMP23-H1)	Kenko (DMP23-H1)
25	LiLin PIH-7000 (17X)	Lilin (PIH)
26	LiLin PIH-7600 (22X)	Lilin (PIH)
27	LiLin PIH-7600PL	Lilin (PIH)
28	LiLin PIH-7625 (25X)	Lilin (PIH)
29	LG (LPT-OS553HQ)	LG (LPT-OS553HQ)
30	Mintron (54G2AHN/P)	Mintron
31	MESSOA (SDS600 Series)	MESSOS (SDS600 Series)
32	Minking Version Protocol	Minking Dome
33	Mintron (54G2AHN/P)	Mintron (54G2SHN/P)
34	MZC (IR6018DN)	Pelco Dome
35	NanWang (NVD 2300PNT)	NanWang (NVD 2300PNT)
36	Panasonic WV-CS850	Panasonic (WV-CS850)
37	Panasonic WV-CS854	Panasonic (WV-CS850)

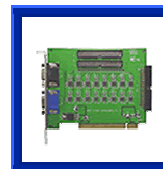
38	PTZ in I/O	PTZ in I/O
39	Pelco/P-version Protocol	Pelco Dome
40	Pelco/D-version Protocol	Pelco Dome
41	Pelco (Spectra III)	Pelco (Spectra III)
42	SAE (DR-E588)	SAE (DR-E588)
43	Samsung (SPD-1600)	Samsung (SPD-1600)
44	Samsung (SPD-3300)	Samsung (SPD-3300)
45	Samsung (SCC-641)	Samsung (SCC-641/643)
46	Samsung (SCC-643)	Samsung (SCC-641/643)
47	Sensormatic (Ultra IV)	Sensormatic (Ultra IV)
48	Sony EVI-D100	Sony (EVI-D100)
49	Sony EVI-D100T	Sony (EVI-D100)
50	TOA (CC551)	TOA (CC551)
51	VIDO Dome	VIDO Dome
52	YAAN Version Protocol	YAAN Dome
53	Yoko (YK-2E00)	Pelco Dome

Note:

This list is limited to the original models from the company mentioned above. Any third-party camera models, even claiming of the same protocol compatibility, may or may not work properly with GV-System V2. GeoVision takes no responsibility of such incompatibility.

GeoVision Optional Products

Optional devices can expand your GV-Hot Swap DVR V2's capabilities and versatility. Contact your dealer or go to GeoVision website for more information.



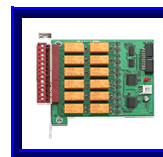
GV-Video Loop Through Card *

This card can take the video signal from the GV-DVR and then split it into 16 signals while maintaining video quality. It can meet the need for multiple spot monitors.



GV-IO 12-In Card V3 *

With 12 digital inputs, the GV-IO 12-In Card is designed to work with the GV-NET/IO Card to provide an interface for your external devices such as sensors and detectors.



GV-IO 12-Out Card *

With 12-point relay outputs, this card can expand the GV-DVR up to 16 alarm outputs.



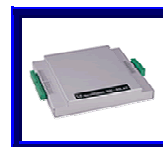
GV-Multi Quad Card *

With this card, the GV-DVR can connect up to 5 TV screens. The screen divisions on the TV screens can be definable.



GV-I/O Box V2

The GV-I/O Box provides 16 inputs and 16 relay outputs. The new version of GV-I/O Box supports both DC and AC output voltages, and provides a USB port as well.



GV-RELAY Box

With 8-point relay outputs, this unit must be used in combination with GV-I/O Box. Up to 2 GV-RELAY Boxes can connect to 1 GV-I/O Box, highly expanding the GV-DVR's I/O capability.



GV-Data Capture V3 /V3E

GV-Data Capture V3 can integrate the GV-DVR to an electronic POS system, while GV-Data Capture V3E can establish such integration through LAN or Internet.



GV-Hub Box

An easy way for serial port extension. This hub can add 4 RS-232/RS-485 serial ports through the GV-DVR's USB port.



GV-COM Box

This unit can add 1 RS-232/RS-485 serial port through the GV-DVR's USB port.

* Not available for the 2-bay model

Other Optional Products

RAID Controller (0 / 1 / 5 / 6)	The RAID Controller supports a maximum of 10 SATA hard drives and enhances data protection. The supported RAID types include RAID 0, RAID 1, RAID 5 and RAID 6. This card is only available in the 8-bay and 10-bay GV-Hot Swap DVR V2.
VGA Card *	With the VGA card, the dual display for monitoring and playback is made possible.
RAM	Multiple options for the amount of RAM are available to meet different needs.
Hard Disk	Multiple options for the HDD capacity are available to meet different needs.
GV-DOM (Disk on Module)	GV-DOM, a solid-state hard drive, is used for operating system and system software to get higher performance under harsh conditions.

* Not available for the 2-bay model

Language

English / Czech / French / German / Hebrew / Hungarian / Italian / Japanese / Polish / Portuguese (Brazil) / Russian / Spanish / Simplified Chinese / Traditional Chinese

Warranty

2 Years

Order Information

Model	Item		GV-2016H V2	GV-2008H V2	GV-1480H V2	GV-1240H V2	GV-1120H V2
Default	Bay		4 / 6 / 8 /10	2 / 4 / 6 / 8 /10	2 / 4 / 6 / 8 /10	2 / 4 / 6 / 8 /10	2 / 4 / 6 / 8 /10
	VGA		Single Output	Single Output	Single Output	Single Output	Single Output
	RAM		2 GB Dual Channel	1 GB Dual Channel			
Other Optional Products	HDD (GB)	2 Bay	You can choose the number of HDDs and HDD capacity of 320GB, 400GB, 500GB or 750GB. The maximum number of the HDDs is based on the number of the drive bays equipped on the system.				
		4 Bay					
		6 Bay					
		8 Bay					
		10 Bay					
	VGA		Dual Output	Dual Output	Dual Output	Dual Output	Dual Output
	RAM (Total)		No	2GB	2GB		
	RAID Controller	8 Bay	0 / 1 / 5 / 6	0 / 1 / 5 / 6	0 / 1 / 5 / 6	0 / 1 / 5 / 6	0 / 1 / 5 / 6
		10 Bay	0 / 1 / 5 / 6	0 / 1 / 5 / 6	0 / 1 / 5 / 6	0 / 1 / 5 / 6	0 / 1 / 5 / 6
	GV-DOM (Disk On Module)		Yes / No	Yes / No	Yes / No	Yes / No	Yes / No
GeoVision Optional Products	GV-Video Loop Through Card *		Yes / No	Yes / No	Yes / No	Yes / No	Yes / No
	GV-IO 12-In Card *		Yes / No	Yes / No	Yes / No	Yes / No	Yes / No
	GV-IO 12-Out Card *		Yes / No	Yes / No	Yes / No	Yes / No	Yes / No
	GV-Multi Quad Card *		Yes / No	Yes / No	Yes / No	Yes / No	Yes / No
	GV-I/O Box		Yes / No	Yes / No	Yes / No	Yes / No	Yes / No
	GV-Relay Box		Yes / No	Yes / No	Yes / No	Yes / No	Yes / No
	GV-Data Capture		V3 / V3E	V3 / V3E	V3 / V3E	V3 / V3E	V3 / V3E
	GV-Hub		Yes / No	Yes / No	Yes / No	Yes / No	Yes / No
	GV-Com		Yes / No	Yes / No	Yes / No	Yes / No	Yes / No

* Not available for the 2-bay model

※ The 2-bay & 10-bay model of GV-Hot Swap DVR V2 series are available upon special request with buyer lead time, please contact your sales representative for further information.

Note:

- GV-Hot Swap DVR Systems V2 comes with default specifications with standard price list.
- All the optional products shown on the table can be ordered separately, you need to contact your dealer or sales representative for pricing and ordering of optional products.
- The purchased optional products will be added on the GV-Hot Swap DVR V2 before shipment.

- * Product design and specifications are subject to change without prior notice.
- * All brand names and registered trademarks referred herein to are the properties of their respective owners.
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