

# GV- MNVR2100 System



### **INTRODUCTION**

Designed to withstand rugged environment, GV-Mobile NVR System operates at a wide range of temperature and comes with anti-vibration protection, making it ideal for railways, public transits and industrial environment.

For storage, it offers up to 2 hot swappable bays of HDD or SSD choice. With built-in GV-NVR, this fanless Mobile NVR system supports up to 32 channels of GV-IP megapixel cameras to provide an all-in-one solution (Live View, Playback, Recording, Backup, CMS) for rough conditions.

Recording solution for harsh environment:



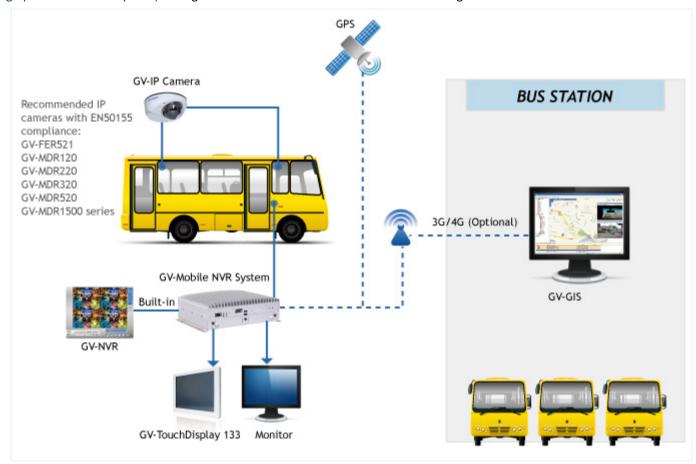




#### **APPLICATION**

The GV-Mobile NVR System is designed for digital surveillance of transportation. It can be set up in a public transit to record images from the GV-IP cameras installed in the vehicle and connected to dual monitors with one monitor displaying live view and the other displaying alarm-triggering events. The hot-swap storage drives also provide convenient access to recordings and allow data backup in minutes.

With the GPS receiver, the GV-Mobile NVR System is able to transmit the GPS data collected from the satellite to the GV-GIS (Geographic Information System) through mobile network connection for vehicle tracking.

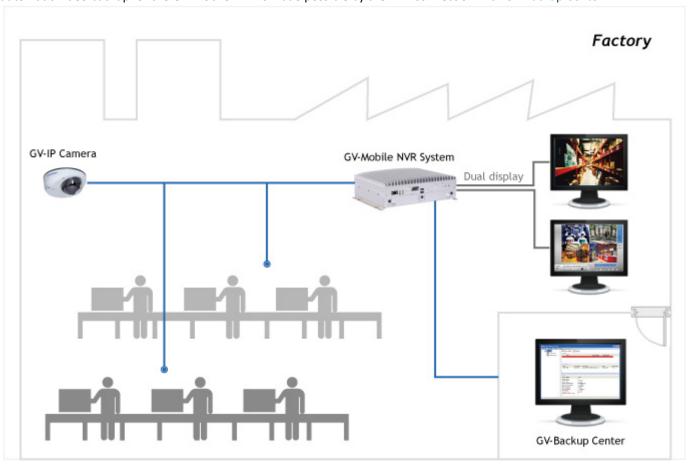


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Other than being applied in a public transit, the GV-Mobile NVR can be installed in a fixed and harsh place, such as a factory. In addition, the automatic video backup for the GV-Mobile NVR is made possible by the LAN connection with GV-Backup Center.



The GV-FER521 and GV-MDR120 / 220 / 320 / 520 / 1500 Series are complied with EN50155 and suitable for the installation with GV-Mobile NVR System. With a mobile device or an Internet browser, you can access the live view and recorded events anywhere.



#### **Models**

- GV-MNVR2100 System
- GV-MNVR2100 System with M12 Connector (Optional)
- GV-MNVR2100 System with EN50155 Certified (Coming)
- GV-MNVR2100 System with M12 Connector and EN50155 Certified (Coming)

GV-MNVR2100 System



### **KEY FEATURES**

- Powered by Intel Core i3 Processor
- 64-bit Windows Embedded Standard 7 SP1
- GPU Decoding
- 2 Hot Swappable HDD / SSD bays for up to 2 Terabytes
- Fanless System
- Vibration and Mechanical Shock Protection (2G at 5 ~ 500 Hz for SSD)
- Power Ignition Management (ACC)
- Wide Operating Temperature (-30°C ~ 60°C / -22°F ~ 140°F for SSD)
- 2 Gigabit LAN Ports
- Dual-monitor Display (VGA and DisplayPort)
- Wireless Communication (WiFi / 3G / 4G)
- GPS Support for Vehicle Tracking
- Built-in GV-NVR
- Up to 32 Channels
- 3rd Party IP Cameras with H.264 Compatible (License Required)
- Automatic Connection to GV-IP Cameras
- Video Analysis
- Dual Video Streams
- Fisheye Dewarping Function
- Smart Device Access (iOS and Android)
- E-Mark, EN50155 Certified
- 29 Languages

### **SPECIFICATIONS**

### **Hardware**

System				
CPU			Intel i3 Processor	
RAM			4 GB Dual Channels	
OS			64-bit Windows Embedded Standard 7 SP1	
No. of Drive Bay			2 (2.5" HDD / SSD)	
Internal Storage			32 GB (CFast)	
	Ethernet		RJ-45, 10 / 100 / 1000 Mbps x 2	
	Video Out	put	VGA and DisplayPort	
	USB 2.0		Front: 1 port; Rear: 1 port	
Connector	USB 3.0		Front: 1 port; Rear: 1 port	
	Power		DC 10 ~ 35V power port	
	Antenna	3G / 4G / WiFi	Front: 3 ports; Rear: 3 ports	
	Antenna	GPS	Rear: 1 port	
Power Adapter (Optional)			Input: AC 100 ~ 240V, 50 - 60 Hz	
rowel Adapte	(Optional)		Output: DC 24V, 5A	
Fan			N/A	
Environment				
Operating	Operating HDD		0°C ~ 60°C (32°F ~ 140°F)	
Temp.	SSD		-30°C ~ 60°C (-22°F ~ 140°F)	
Humidity			10 ~ 90% RH (non-condensing)	
Physical				
Color			Silver	
LED Indicator			4 (HDD, WWAN, Power and WLAN)	
Dimensions (W x H x D)			260 x 79.5 x 206 mm (10.24 x 3.13 x 8.11")	
Net Weight			2.5 kg / 5.51 lb (± 1 kg / 2.2 lb)	
Operating Shock			20 G	
Operating Vibration			1.5 G @ 5 ~ 500 Hz (HDD) 2 G @ 5 ~ 500 Hz (SSD)	

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Sensor and Alarm		
Inputs	4 / 8 / 16 ports (optional GV-I/O Box required)	
Outputs	4 / 8 / 16 ports (optional GV-I/O Box required)	

### **Software**

Video and Aud	lio				
Video Standard		NTSC, PAL			
Video Codec		MJPEG / MPEG4 / H.264			
Audio Codec		32 kHz / 16 bit	32 kHz / 16 bit		
Video Stream		Dual Streams from GeoVision IP Cameras	Dual Streams from 3rd-party IP Cameras		
	1 MP	31 channels	31 channels		
Video Innut	2 MP	25 channels	25 channels		
Video Input	3 MP	32 channels	32 channels		
	5 MP	32 channels	32 channels		
Audio Input		Up to 32 channels	Up to 32 channels		

**Note:** It is required to enable the dual-stream function on GeoVision and third-party IP cameras to have the maximum number of channels supported. For single streaming third-party IP cameras, please see "Maximum Channels and Frame Rate Supported" below.

	third-party in cameras, please see Maximum Channels and Frame Rate Supported below.		
Live View and Playback			
Image Control	Contrast / Brightness / Saturation / Hue		
Recording Mode	Round the Clock / Motion Detection / Sensor Detection / Pre & Post Recording / Schedule Recording		
Pre Recording	1 ~ 45 min.		
Instant Playback	10 sec. / 30 sec. / 1 min. / 5 min.		
Watermark	Supported		
Searching and Playback			
Search Method	Date / Time / Camera / Event type		
Packup Type	DVD+R (DL) / DVD-R (DL) / DVD+R / DVD+RW / DVD-R / DVD-RW		
Backup Type	Note: For backup function, you need to connect an external USB DVD/CD burner.		
Remote Monitoring			
Monitoring Environment	Web browser (IE, Chrome, Firefox and Safari)		
Monitoring Environment	Mobile device (iOS and Android)		
Live View	Max. 32-channel multi views		
Network Type	LAN, WAN, Internet		
System Monitoring and Recove	ry		
Power Restoration	Automatic restart after power outage		
Monitoring	Software watchdog		
Recovery	Automatic system rebuild from internal hard disk		
Certification			
Туре	CE, FCC, E-Mark (E13), EN50155 (coming)		
Language			
Туре	Arabic / Bulgarian / Czech / Danish / Dutch / English / Finland / French / German / Greek / Hebrew / Hungarian / Italian / Japanese / Lithuanian / Norwegian / Polish / Portuguese / Romanian / Russian / Serbian / Simplified Chinese / Slovakian / Slovenian / Spanish / Sweden / Thai / Traditional Chinese / Turkish		
Software License			
Free License	32 channels from GV-IP Cameras (dual streams)		
Maximum License	32 channels from third-party IP Cameras (dual streams)		
Increment for Each License	1 to 32 third-party IP Cameras at an increment of 2		
Optional Combinations	N/A		
Dongle Type	External		
Notes			

#### Note:

- 1. The Maximum License is a paid service.
- 2. All specifications are subject to change without notice.

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# **Maximum Channels and Frame Rate Supported**

# **Dual Streams from GeoVision and third-party IP Cameras**

Video resolution	Dual Streams		Cumparted Channel	Tatal France Data
	Stream 1 (H.264)	Stream 2 (H.264)	Supported Channel	Total Frame Rate
1 MP	1280 x 1024	320 x 256	31 Ch	930 fps
2 MP	1920 x 1080	448 x 252	25 Ch	750 fps
3 MP	2048 x 1536	320 x 240	32 Ch	640 fps
5 MP	2560 x 1920	320 x 240	32 Ch	320 fps

# Single Stream from GeoVision and third-party IP Cameras

Video resolution	Single Stream (H.264)	Supported Channel	Total Frame Rate
1 MP	1280 x 1024	25 Ch	750 fps
2 MP	1920 x 1080	19 Ch	570 fps
3 MP	2048 x 1536	15 Ch	300 fps
4 MP	2048 x 1944	13 Ch	195 fps
5 MP	2560 x 1920	11 Ch	110 fps

### **GV-Fisheye Cameras**

Video resolution	Single Stream (H.264)	Supported Channel	Total Frame Rate
1 MP	1280 x 1200	10 Ch	150 fps
2 MP	1440 x 1376	8 Ch	120 fps
4 MP	2048 x 1944	4 Ch	60 fps
5 MP	2560 x 1920	5 Ch	50 fps

# **Options**

GV-IO Box (4 Ports)	GV-IO Box 4 provides 4 inputs and 4 relay outputs, and supports both DC and AC output voltages. A USB port is also provided for PC connection.		
GV-IO Box (8 Ports)	GV-IO Box 8 provides 8 inputs and 8 relay outputs, and supports both DC and AC output voltages. A		
	USB port is also provided for PC connection.		
GV-IO Box (16 Ports)	GV-IO Box 16 provides 16 inputs and 16 relay outputs, and supports both DC and AC output voltages. A		
CT 10 20x (20 1 0.10)	USB port is also provided for PC connection.		
GV-Joystick V2	GV-Joystick V2 facilitates the PTZ camera control. It can be either plugged into the GV-Mobile NVR		
	System for independent use or connected to GV-Keyboard V3 to empower the operation.		
GV-Keyboard V3	The GV-Keyboard V3 is designed to program and operate the system, and it can also be connected with		
dv-keyboard v3	PTZ cameras directly for PTZ control.		
GV-IR Remote Control	Controls GV-Mobile NVR System with the Remote Control.		
GV-TouchDisplay133	The GV-TouchDisplay133 is a 13.3-inch touch panel designed for GV-Mobile NVR System. With the		
dv-rouchbispiay133	touch panel, you can monitor live images and operate GV-NVR by simply touching the screen.		
Power Adapter	Power adapters are available in 4 regions: U.S.A., Australia, U.K and Europe.		
	The 3G or 4G module allows data exchange for the GV-Mobile NVR through the network		
3G / 4G Module	connection covering wide area. It also empowers the application of GPS for the data transmission		
	to the GV-GIS for real-time vehicle tracking.		
WiFi Module	The WiFi module allows data exchange for the GV-Mobile NVR through wireless network		
WIFI WOULIE	connection within local area.		

# Note:

- 1. Please contact our sales representatives for more information when combining optional cards for your system.
- 2. The WiFi / 3G / 4G module will be built in the GV-Mobile NVR System and tested before shipment. Opening the case and installing the accessories yourself will void the warranty.

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### **Overview**

#### **Front View**



#### **Rear View**



### Wireless Antenna



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#### Note

- 1. You can freely arrange and switch WiFi and 3G / 4G antennas in ports.
- 2. GPS module is already built in the GV-Mobile NVR System. WiFi / 3G / 4G modules are optional.

# **Packing List**

- GV-MNVR2100 System
- 3-pin Terminal Block (for ACC Connection and DC In)
- HDD screw x 8
- GPS Antenna
- GV-NVR Dongle for third-party IP Camera Connection (Optional)
- DVD (User's Manual and Quick Start Guide included)

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