GV- MNVR1000 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 1 hot swappable bay of HDD or SSD choice. With built-in GV-NVR, this fanless Mobile NVR system supports up to 24 channels of GV-IP megapixel cameras to provide an all-in-one solution (Live View, Playback, Recording, Backup, CMS) for rough conditions.
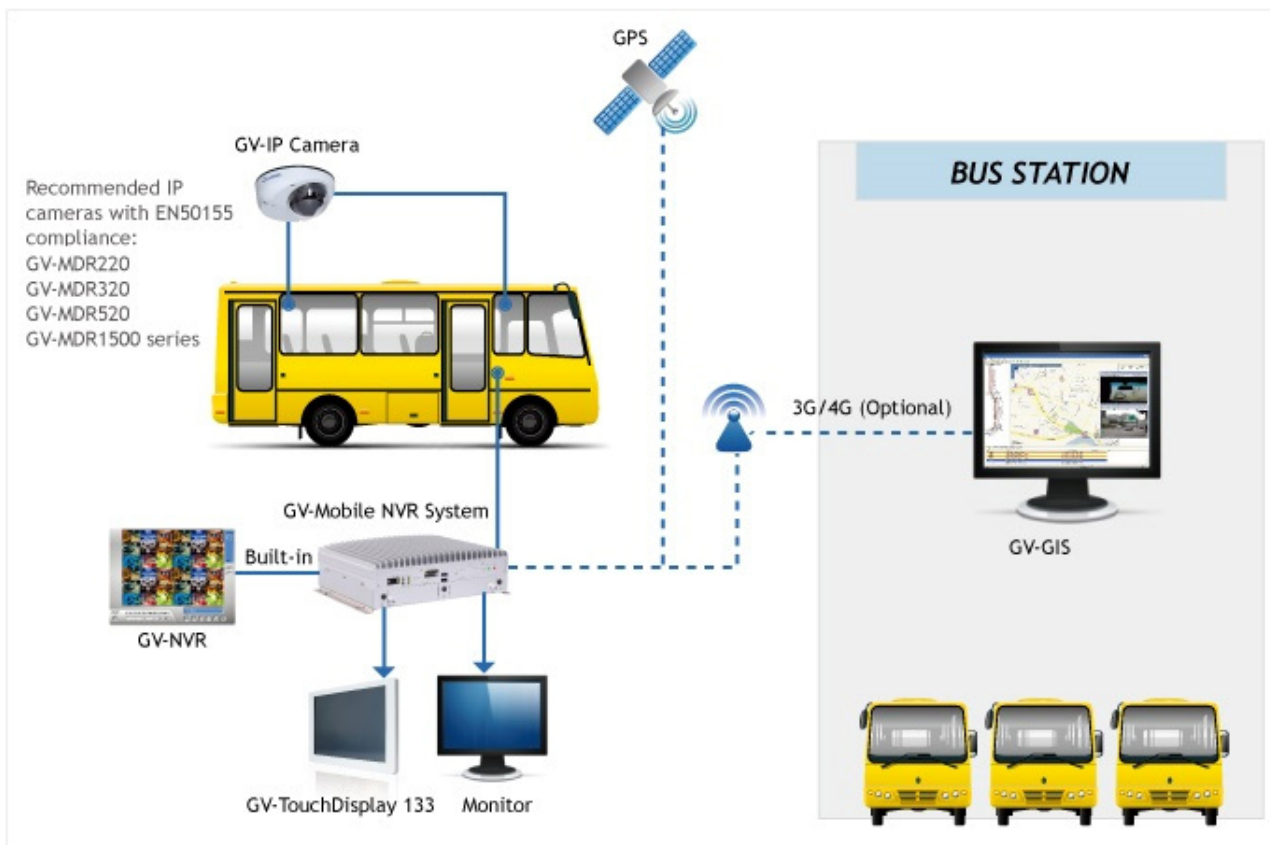
Recording solution for harsh environment:
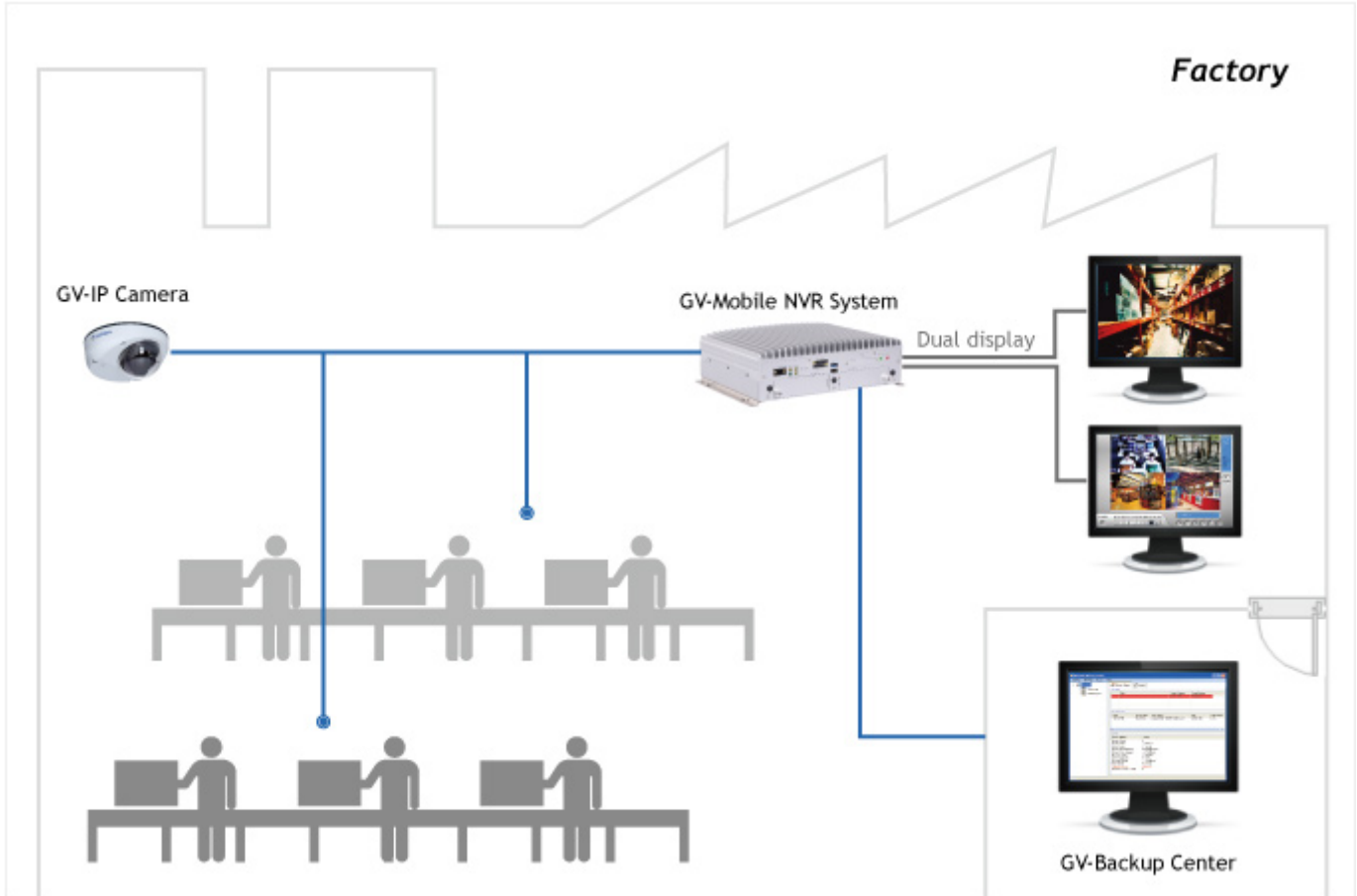

Bus   Train/Metro   Factory

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.

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-MDR220 / 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-MNVR1000 System
- GV-MNVR1000 System with 3G module
- GV-MNVR1000 System with 4G module
- GV-MNVR1000 System with M12 Connector
- GV-MNVR1000 System with M12 Connector and 3G module
- GV-MNVR1000 System with M12 Connector and 4G module
- GV-MNVR1000 System with EN50155 Certified (Coming)
- GV-MNVR1000 System with M12 Connector and EN50155 Certified (Coming)
- GV-MNVR1000 System with WiFi module

KEY FEATURES

- Powered by Intel Atom Processor
- 64-bit Windows Embedded Standard 7 SP1
- GPU Decoding
- 1 Hot Swappable HDD / SSD bay for up to 1 Terabyte
- Fanless System
- Vibration and Mechanical Shock Protection (2G at 5 ~ 500 Hz for SSD)
- Power Ignition Management (ACC)
- Wide Operating Temperature (-30°C ~ 70°C / -22°F ~ 158°F for SSD)
- 2 Gigabit LAN Ports
- Dual-monitor Display (VGA and DisplayPort)
- Optional Wireless Communication (WiFi / 3G / 4G)
- GPS Support for Vehicle Tracking
- Built-in GV-NVR
- Up to 24 Channels
- 3rd Party IP Cameras with H.264 and H.265 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
- 31 Languages

SPECIFICATIONS

Hardware

System			
CPU			Intel Atom Processor
RAM			4 GB
OS			64-bit Windows Embedded Standard 7 SP1
No. of Drive Bay			1 (2.5" HDD / SSD)
Internal Storage			32 GB (CFast)
Connector	Ethernet		RJ-45, 10 / 100 / 1000 Mbps x 2
	Video Output		VGA and DisplayPort
	USB 2.0		Rear: 2 ports
	USB 3.0		Front: 1 port
	Power		DC 10 ~ 35V (ACC, Vehicle Ignition)
	Antenna	3G / 4G / WiFi	Front: 4 ports
		GPS	Rear: 1 port
Power Adapter (Optional)			Input: AC 100 ~ 240V, 50 - 60 Hz Output: DC 24V, 5A
Fan			N/A
Environment			
Operating Temp.	HDD		0°C ~ 60°C (32°F ~ 140°F)
	SSD		-30°C ~ 70°C (-22°F ~ 158°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 50 x 176 mm (10.24 x 1.97 x 6.93")
Net Weight			2.1 kg / 4.63 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)

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 Audio		
Video Standard	NTSC, PAL	
Video Codec	MJPEG / MPEG4 / H.264	
Audio Codec	32 kHz / 16 bit	
Video Stream	Dual Streams from GeoVision IP Cameras	Dual Streams from 3rd-party IP Cameras
Video Input	1 MP	20 channels	20 channels
	2 MP	17 channels	17 channels
	3 MP	24 channels	24 channels
	5 MP	16 channels	16 channels
Audio Input	Up to 24 channels	Up to 24 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.

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
Backup Type	DVD+R (DL) / DVD-R (DL) / DVD+R / DVD+RW / DVD-R / DVD-RW **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) Mobile device (iOS and Android)
Live View	Max. 24-channel multi views
Network Type	LAN, WAN, Internet

System Monitoring and Recovery	
Power Restoration	Automatic restart after power outage
Monitoring	Software watchdog
Recovery	Automatic system rebuild from internal hard disk

Certification	
Type	CE, FCC, E-Mark (E13), EN50155 (Coming)

Language	
Type	Arabic / Bulgarian / Czech / Danish / Dutch / English / Finland / French / German / Greek / Hebrew / Hungarian / Indonesian / Italian / Japanese / Lithuanian / Norwegian / Persian / Polish / Portuguese / Romanian / Russian / Serbian / Simplified Chinese / Slovakian / Slovenian / Spanish / Sweden / Thai / Traditional Chinese / Turkish

Software License	
Free License	24 channels from GV-IP Cameras (dual streams)
Maximum License	24 channels from third-party IP Cameras (dual streams)
Increment for Each License	1 to 24 third-party IP Cameras at an increment of 2
Optional Combinations	N/A
Dongle Type	External

Mobile Network Connection (Optional)	
3G Module	WCDMA: 800 / 850 / 1900 / 2100 MHz GSM/GPRS/EDGE: 850 / 900 / 1800 / 1900 MHz
4G Module	**For EU area** LTE: 2100 (B1) / 1800 (B3) / 2600(B7) / 900 (B8) / 800 (B20) MHz WCDMA: 2100 (B1) / 1900 (B2) / 850 (B5) / 900(B8) MHz GSM/GPRS/EDGE: 850 / 900 / 1800 / 1900 MHz **For US area** LTE: 1900(B2) / AWS(B4) / 850(B5) / 700 (B13) / 700(B17) / 1900 (B25) MHz WCDMA: 2100 (B1) / 1900 (B2) / AWS (B4) / 850 (B5) / 900 (B8) MHz GSM/GPRS/EDGE: 850 / 900 / 1800 / 1900 MHz
WiFi Module	IEEE 802.11b/g/n, 2T2R

Note:

1. The Maximum License is a paid service.

2. All specifications are subject to change without notice.

Maximum Channels and Frame Rate Supported

Dual Streams from GeoVision and third-party IP Cameras

Video resolution	Dual Streams		Supported Channel	Total Frame Rate
	Stream 1 (H.264)	Stream 2 (H.264)		
1 MP	1280 x 1024	320 x 256	20 Ch	600 fps
2 MP	1920 x 1080	448 x 252	17 Ch	510 fps
3 MP	2048 x 1536	320 x 240	24 Ch	480 fps
5 MP	2560 x 1920	320 x 240	16 Ch	160 fps

Video resolution	Dual Streams		Supported Channel	Total Frame Rate
	Stream 1 (H.265)	Stream 2 (H.264)		
1 MP	1280 x 720	640 x 360	6 Ch	150 fps
2 MP	1920 x 1080	640 x 360	5 Ch	125 fps
3 MP	2048 x 1520	640 x 480	6 Ch	120 fps
4 MP	2560 x 1440	640 x 360	12 Ch	120 fps
5 MP	2592 x 1944	640 x 480	10 Ch	100 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	9 Ch	270 fps
2 MP	1920 x 1080	4 Ch	120 fps
3 MP	2048 x 1536	4 Ch	80 fps
4 MP	2048 x 1944	4 Ch	60 fps
5 MP	2560 x 1920	6 Ch	60 fps

GV-Fisheye Cameras

Video resolution	Single Stream (H.264)	Supported Channel	Total Frame Rate
1 MP	1280 x 1200	2 Ch	30 fps
2 MP	1440 x 1376	2 Ch	30 fps
4 MP	2048 x 1944	1 Ch	15 fps
5 MP	2560 x 1920	1 Ch	10 fps

Options

GV-IO Box (4 Ports V1.2)	GV-IO Box 4 Ports V1.2 provides 4 inputs and 4 relay outputs. It supports both DC and AC output voltages, and provides a USB port 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 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 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 touch panel, you can monitor live images and operate NVR surveillance software by simply touching the screen.
Power Adapter	Power adapters are available in 4 regions: U.S.A., Australia, U.K and Europe.
3G / 4G Module	The 3G or 4G module allows data exchange for the GV-Mobile NVR through the network 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 connection within local area.

Note: 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.
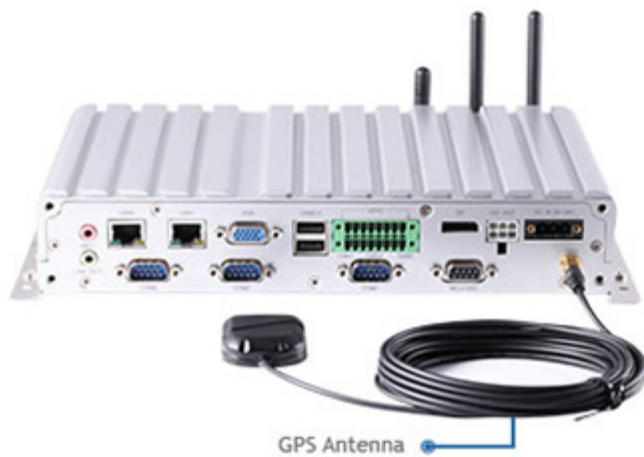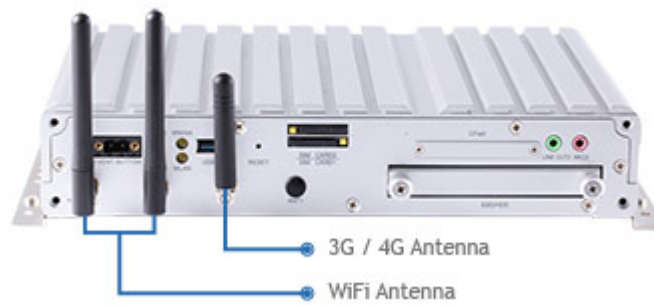
Overview

Front View

Rear View

Wireless Antenna

3G / 4G Antenna
WiFi Antenna

GPS Antenna

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-MNVR1000 System
- 3-pin Terminal Block (for ACC Connection and DC In)
- HDD screw x 4
- GPS Antenna
- GV-NVR Dongle for third-party IP Camera Connection (Optional)
- DVD (User's Manual and Quick Start Guide included)