

## GV-GNVRC0810-P



- 8-channel video recording
- Connection to GV-Cloud VMS or GV-Center V2 supported
- AI deep learning: AI Perimeter Protection & Classification (Human, Vehicle)
- Up to 8 MP resolution
- Dual streams from H.265 and H.264
- 1-channel HDMI, 1-channel VGA; HDMI at up to 4K
- 1 SATA HDD, up to 10 TB
- Two-way audio capable
- Camera-based AI analytics supported
- NVR-based AI analytics (Line Crossing, Region Entrance, Region Exiting, Region Intrusion, Face Detection)
- Smart device access (iOS and Android) with Push Notification support
- ONVIF cameras supported
- GV-VPN supported
- 31 languages supported

### Introduction

GV-GNVRC0810-P is an H.264/H.265 Linux-embedded Standalone Network Video Recorder, which records video files directly to the internal hard drive. GV-GNVRC0810-P supports up to 8 IP camera channels for video surveillance. It has an 8-port built-in PoE+ (IEEE 802.3at), functioning to carry network and power to connected IP cameras. Featuring video output with up to 4K resolution, GV-GNVRC0810-P eliminates the need for a separate PC to view and play back video from the unit. Its USB ports allow you to connect a USB mouse and a flash drive to back up videos.

GV-GNVRC0810-P also features advanced AI functions, including face detection, and various analysis functions for perimeter protection. When integrated with compatible AI-capable GV-IP cameras, it provides a wide range of analytics to meet your diverse perimeter protection and surveillance needs.

GV-GNVRC0810-P supports connecting a regular camera to GV-Cloud VMS for cloud-based monitoring or to GV-Center V2 for central monitoring.

### Specifications

| System           |                                                                          |
|------------------|--------------------------------------------------------------------------|
| Operating system | Embedded Linux                                                           |
| No. of Drive Bay | 1 (3.5" SATA HDD), up to 10 TB <sup>(5)</sup>                            |
| Video and Audio  |                                                                          |
| Compression      | Audio: G.711<br>Video: H.264 / H.265                                     |
| Resolution       | 8 MP, 6 MP, 5 MP, 4 MP, 3 MP, 2 MP (1080P), 1.3 MP (960P), 1.0 MP (720P) |

| Decoding               |               |                                                                                                                                                                                                                                                                                                                                     |
|------------------------|---------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Live / Playback        | AI Off        | 8 MP: 30 fps in total (1 CH max.)<br>5 MP: 60 fps in total (2 CH max.)<br>4 MP: 120 fps in total (4 CH max.)<br>2 MP: 120 fps in total (4 CH max.)<br>720p: 240 fps in total (8 CH max.)                                                                                                                                            |
|                        | AI On         | 8 MP: 30 fps in total (1 CH max.)<br>5 MP: 30 fps in total (1 CH max.)<br>4 MP: 90 fps in total (3 CH max.)<br>2 MP: 90 fps in total (3 CH max.)<br>720p: 240 fps in total (8 CH max.)                                                                                                                                              |
| Playback               |               | 8 CH max.                                                                                                                                                                                                                                                                                                                           |
| Operation              |               |                                                                                                                                                                                                                                                                                                                                     |
| Max. Bandwidth         | Input         | 80 Mbps                                                                                                                                                                                                                                                                                                                             |
|                        | Output        | 80 Mbps                                                                                                                                                                                                                                                                                                                             |
| Playback Function      |               | Fast forward/backward (2x, 4x, 8x, 16x, 32x)<br>Slow forward (1/2x, 1/4x, 1/8x, 1/16x, 1/32x)                                                                                                                                                                                                                                       |
| Live View Display      |               | 1 / 4 / 6 / 8 / 9                                                                                                                                                                                                                                                                                                                   |
| Web Browser            |               | Safari V14.0 or above<br>Firefox V87 or above<br>Google Chrome V89 or above<br>Edge V89 or above                                                                                                                                                                                                                                    |
| Maintenance            |               | Firmware upgrade through Local Interface or Web Browser                                                                                                                                                                                                                                                                             |
| Interface              |               |                                                                                                                                                                                                                                                                                                                                     |
| Monitor                | VGA           | 1 (1024 x 768, 1280 x 1024, 1920 x 1080)                                                                                                                                                                                                                                                                                            |
|                        | HDMI          | 1 (1024 x 768, 1280 x 1024, 1920 x 1080, 3840 x 2160)                                                                                                                                                                                                                                                                               |
| Connector              | Ethernet      | 1 port, RJ-45 10/100/1000 Mbps                                                                                                                                                                                                                                                                                                      |
|                        | PoE           | 8 ports, RJ-45, PoE+ (IEEE 802.3at)                                                                                                                                                                                                                                                                                                 |
|                        | USB           | USB 2.0 x 1 (front)<br>USB 2.0 x 1 (rear)                                                                                                                                                                                                                                                                                           |
|                        | Audio In      | 1 RCA                                                                                                                                                                                                                                                                                                                               |
|                        | Audio Out     | 1 RCA                                                                                                                                                                                                                                                                                                                               |
| LED Indicator          |               | 3 LEDs: REC, NET, PWR                                                                                                                                                                                                                                                                                                               |
| General                |               |                                                                                                                                                                                                                                                                                                                                     |
| Language               |               | Arabic, Bulgarian, Chinese Traditional, Croatian, Czech, Dutch, English, French, German, Greek, Hungarian, Italian, Japanese, Korean, Lithuanian (Lithuania), Macedonian, Persian, Polish, Portuguese, Romanian, Russian, Serbian, Slovak, Slovenian, Spanish, Spanish (Latin America), Thai, Turkish, Ukrainian, Uzbek, Vietnamese |
| Dimensions (W x D x H) |               | 300 x 249.4 x 45 mm (11.81 x 9.82 x 1.77 in)                                                                                                                                                                                                                                                                                        |
| Weight                 |               | 1.08 kg (2.38 lb)                                                                                                                                                                                                                                                                                                                   |
| Rack Mount             |               | N/A                                                                                                                                                                                                                                                                                                                                 |
| Power                  | Power Adapter | Input: AC 100 ~ 240 V, 50 ~ 60 Hz<br>Output: DC 48 V, 1.8 A                                                                                                                                                                                                                                                                         |
|                        | PoE Switch    | Max. 72 W in total                                                                                                                                                                                                                                                                                                                  |
| Power Consumption      |               | 10 W (excluding HDD and IP cameras)                                                                                                                                                                                                                                                                                                 |
| Operating Temperature  |               | -10°C ~ 50°C (14°F ~ 122°F)                                                                                                                                                                                                                                                                                                         |
| Humidity               |               | 0% ~ 90% RH (non-condensing)                                                                                                                                                                                                                                                                                                        |
| Certification          |               | CE, FCC, LVD, RoHS compliant                                                                                                                                                                                                                                                                                                        |

| AI Integrated Function  |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|-------------------------|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| AI Analytics            | AI by Camera | <b>Face Event:</b> Face Detection<br><b>Smart Event:</b> <ul style="list-style-type: none"> <li>- <b>Perimeter Protection:</b> Line Crossing, Region Intrusion, Region Entrance, Region Exiting (all with Human &amp; Vehicle classification)</li> <li>- Target Counting by Line, Target Counting by Area, Video Metadata (all with Human &amp; Vehicle classification)</li> <li>- Loitering Detection, Illegal Parking Detection, Crowd Density Detection, Fire Detection, Temperature Detection, Heat Map</li> <li>- People Counting</li> <li>- LPR</li> </ul> <p>* These functions are supported only when the GV-GNVR is connected to the compatible AI cameras listed in the <i>Compatible GV-IP Cameras for Camera-Based AI Analytics</i> section below.</p>            |
|                         | AI by NVR    | <b>Face Event:</b> Face Detection<br><b>Smart Event:</b> <ul style="list-style-type: none"> <li>- <b>Perimeter Protection:</b> Line Crossing, Region Intrusion, Region Entrance, Region Exiting (all with Human &amp; Vehicle Classification)</li> </ul> <p>* AI by NVR supports up to 4 MP resolution.<br/> 4 MP: 1 CH max.<br/> 2 MP: 2 CH max.</p> <p>* AI by NVR is available only when its engine is enabled.</p> <p>* Face Event and Smart Event cannot be processed by the camera at the same time (Smart Event enabled by default), but can be processed by the NVR AI engine at the same time.</p> <p>* For compatible non-AI cameras, some AI by NVR features may not be fully supported at this stage. Additional support will be provided in future releases.</p> |
| Video Metadata          |              | <b>People:</b> Gender, Age, Top / Bottom (Type, Color), Accessories (Hat, Bag, Face Mask, Glasses)<br><b>Vehicle:</b> Type, Color, Brand, Model<br><b>Non-Motor Vehicle:</b> Type<br><p>* This function is supported only on compatible AI cameras that provide video metadata. For the list of supported cameras, see this <a href="#">document</a>.</p>                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Network                 |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Protocol                |              | 802.1X authentication (EAP-TLS, EAP-MD5), DDNS, DHCP, FTP, HTTP, HTTPS, IPv4, IPv6, PPPoE, RTCP, RTP, RTSP, SMTP, SNMP, UDP, UPnP                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Remote Monitoring       |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Access from Web Browser |              | Live View, Image Snapshot, Digital PTZ, Playback, Smart Search (Face / People / Attribute / Vehicle Search), System Configuration                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Application             |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Software Supported      |              | GV-Control Center (V4.3.2 or later, coming soon), GV-Edge Recording Manager Windows Version (V2.3.3 or later, coming soon), GV-VPN (V1.2.0 or later), GV-Center V2 (V20.1.0.2 or later), GV-Dispatch Server (V20.1 or later), GV-Cloud VMS (V1.7.0 or later, coming soon), GV-IP Device Utility (V9.0.8 or later, coming soon)                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Smart Device Access     |              | GV-Eye for iOS and Android (V3.7.0 or later, coming soon)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Remote Connection       |              | Up to 3 simultaneous remote client connections, with max. 24-channel Live View across all clients                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |

**Note:**

1. GV-GNVR supports connecting IP cameras to either GV-Cloud VMS or GV-Center V2, but not both at the same time.
2. While connecting IP cameras to GV-Cloud VMS through GV-GNVR, video playback is currently not supported.
3. Local fisheye dewarping is not supported by the GV-GNVR.
4. Certain GV-IP cameras are not supported by the GV-GNVR. See the [technical notice](#) for details.
5. For optimal system efficiency, we recommend using enterprise-level hard disk drives. For a list of verified HDDs, see the [GV-SNVR HDD Compatibility Table](#).
6. Specifications are subject to change without notice.

## Compatible GV-IP Cameras for Camera-Based AI Analytics

- GV-BX2802, BX4802
- GV-GBL4900, GBL4911, GBLF2802, GBLF4802, GBLF4813, GBLN4800, GBLP8900
- GV-GEB4900, GEBF2802, GEBF4802, GEBF4813, GEBF4911, GEBN4800, GEBP8900
- GV-GDR2801, GDR4900, GDRF4800, GDRN4800
- GV-GFER6900
- GV-GPTZ4810
- GV-GVD4810, GVD4910
- GV-TMEB5800
- GV-3D People Counter V3
- GV-LPR4913 (coming soon)

## Compatible GV-IP Devices for GV-GNVR Applications

- Parking Lot Management –GV-LPR4913 (coming soon)
- People Flow Statistics – GV-3D People Counter V3

## Topology Diagrams

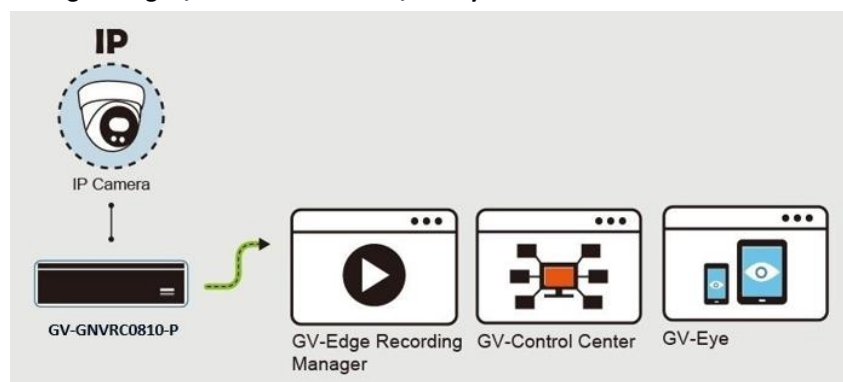
### GV-Cloud VMS



### GV-Center V2



### GV-Edge Recording Manager / GV-Control Center / GV-Eye



## GV-Cloud VMS Licenses

To use GV-GNVRC0810-P with GV-Cloud VMS, select the license that best meets your surveillance requirements. GV-Cloud VMS provides three license options: **Basic**, **Standard**, and **Premium**. For details on GV-Cloud VMS licenses, see the [datasheet](#).

### Basic, Standard, and Premium Licenses

| Camera Resolution    | Basic | Standard | Premium |
|----------------------|-------|----------|---------|
| 8 / 5 / 4 / 2 / 1 MP | 8 CH  |          |         |

**Note:** The cloud backup feature of the Premium License is currently not supported for GV-GNVRC0810-P.

## Packing List

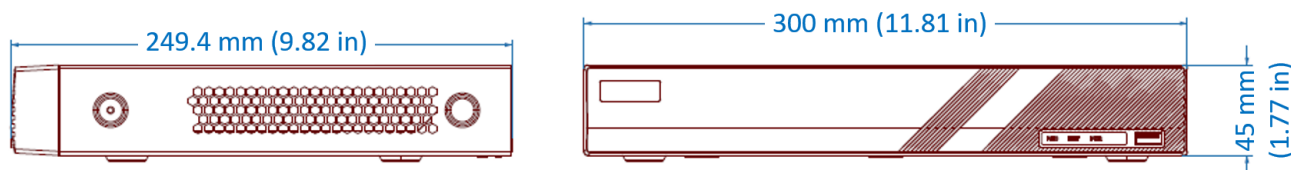
- |                        |                   |
|------------------------|-------------------|
| 1. GV-GNVRC0810-P      | 6. Power Cord     |
| 2. SATA Cable          | 7. Download Guide |
| 3. Screw Kit (for HDD) |                   |
| 4. USB Mouse           |                   |
| 5. Power Adapter       |                   |

## Accessories

### [GV-POE Switch](#)

GV-POE Switch is designed to provide power along with network connection for IP devices. It is available in various models with different numbers and types of ports.

## Dimensions



## Rear Panel

