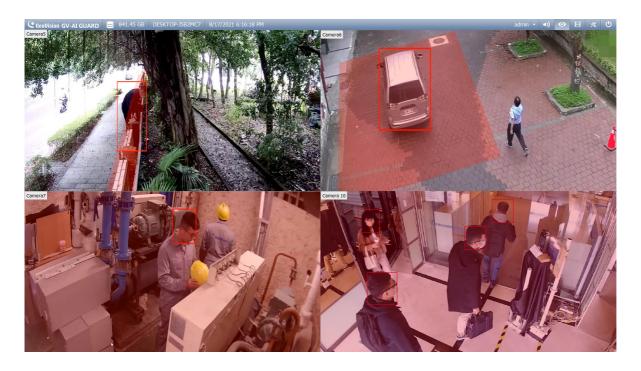# GV-AI Guard

INTRODUCTION

GV-AI Guard Basic is a full-featured video management software, powered by AI video analytics. GV-AI Guard Basic provides a spate of AI video analytics functions which include **PVD Motion Detection** for identifying human and vehicle motion from other moving objects, **Intrusion** for setting up virtual fences, **Violation Stay** for parking and pedestrian violation, **Hard Hat Detection** for warning people not wearing hard hats, as well as **Social Distancing Detection**, **Face Mask Detection** and **Crowd Detection** for practicing the COVID-19 safety measures.

Through intelligent video analytics, GV-AI Guard Basic can recognize the specific conditions on its own, raise alarms to intruders or violators, and notify operators of potential issues instantly. GV-AI Guard Basic is ideal for you to safeguard premises, road and construction site safety, and even the health of the public to against COVID-19.

KEY FEATURES

- Up to 16 camera channels for AI video analytics
- PVD Motion Detection for identifying human and vehicle motion from other moving objects
- Intrusion Detection for triggering alarms when people or vehicles across defined areas
- Violation Stay for detecting people or vehicles caught staying at no standing areas
- Social Distancing Detection for alerting people not keeping a safe distance from each other
- Hard Hat Detection for alerting people not wearing hard hats before entering a construction site
- Face Mask Detection for alerting people not wearing masks
- Crowd Detection for detecting overcrowding of people or vehicles
- LPR recognition for vehicle violation stay for the following countries/areas: France, Hungary, Slovakia, Taiwan, Myanmar, Euro and Ukraine
- Event alerts: alarm output, e-mail notification and computer noise alarm
- Popup live view upon AI events
- Query by AI events
- AI event detection schedule
- Support for GV-Center V2 / GV-Vital Sign Monitor (V18.3.0) central monitoring upon AI events
- Support for GV-Cloud Center (V2.0) and GV-Notify app (V1.3.2) for push notifications upon AI events

Note: The integration of AI events from GV-AI Guard to GV-Cloud Center and GV-Notify app is coming soon.

MINIMUM SYSTEM REQUIREMENTS

OS	64-bit	Windows 10 / Server 2016 / Server 2019
CPU		Intel Core i7-8700 Processor
Memory		16 GB (8 GB x 2)
Graphics Card		Intel UHD Graphics 630, 26.20.100.7262 (9/25/2019) or later

Note:

1. For AI video analytics, the utilization of the graphics processor of 8th-gen Intel Core i7 / i9 or above is required, which only works when a monitor is connected to its PC.

2. Only Intel Core processors are compatible with GV-AI Guard; other brands of CPU do not work with GV-AI Guard.

3. GV-AI Guard does not support virtual machine installation.

4. For system efficiency, we recommend the enterprise-level hard disk drives with 7200 RPM at least and average R/W speed above 110 MB/s. Avoid using desktop-level hard disks which may affect system efficiency.

5. To use fisheye dewarping, the graphics card must support DirectX 10.1 or above.

6. The system requirements are determined in round-the-clock recording settings with live view only, while remote connections and video analysis being disabled.

7. H.265 decoding and searching of face recognition events by face images requires 6th Generation Intel Desktop Processor (Skylake) or above, which comes with onboard GPU.

LICENSE

GV-AI Guard Basic Version is paid software that requires a GV-USB Dongle, with at least 1-ch AI Analytics, to start.

License Type	1. **AI Analytics:** 16 Ch 2. **Recording:** 32 Ch 3. **3rd Party IP Device:** 32 Ch 4. **LPR Recognition:** 32 Ch
Increment of each license type	1 Ch
Dongle Type	Internal / External

Note: GV-USB Dongle comes in internal and external dongles. Internal dongle is recommended for its Hardware Watchdog function, which automatically restarts the PC when Windows crashes or freezes.

OPTIONAL LICENSE

Optional Combination	1. GV-AI Guard + GV-POS S/W Capture (with options of 4 serial POS and 32 network POS devices) 2. GV-AI Guard + GV-POS Text Sender (with options of 1, 2, 4, 8, 12 and 32 ports)

SPECIFICATIONS

Video Resolution	Up to 12 Megapixels per channel
Video Codec	H.264, H.265
Frame Rate	By Key Frame (each channel detected once per second)
AI Analytics Channels	Up to 16 Ch
Recording Channels	Up to 32 Ch
Detection Objects	Human / Vehicles (Car, Bus, Truck, Bicycle, Motorcycle)
Max Number of Detected Objects	- **PVD Motion Detection, Violation Stay, Intruder, Social Distancing Detection, Crowd Detection:** 30 per channel - **Face Mask Detection, Hard Hat Detection:** 10 per channel
Event Alerts	Alarm Output, E-mail, Computer Noise Alarm
Language	English, Traditional Chinese

Note: All specifications are subject to change without notice.

GPU DECODING SPECIFICATIONS

GPU (Graphics Processing Unit) decoding can lower the CPU loading and increase the total frame rate supported by your system.

GV-AI Guard only supports Intel onboard GPU: **8th -9th Generation Intel Core i3 / i5 / i7 Desktop Processors**

OPTIONS

Optional Devices	Description
GV-COM V3	GV-COM V3 can add 1 RS-485 port to your computer through a USB connector.
GV-Data Capture	GV-Data Capture unit allows the integration of POS systems and the GeoVision surveillance system through cable or network connection.
GV-IO Box Series	GV-IO Box series provides 4 / 8 / 16 inputs and relay outputs, and supports both DC and AC output voltages, with optional support for Ethernet module and 4E additionally supporting PoE connection.
GV-IR Remote Control	GV-IR Remote Control allows you to control the GeoVision surveillance system at the maximum operation distance of 7 m (22.97 ft).
GV-Joystick V2	GV-Joystick V2 facilitates PTZ camera control. It can be either plugged into the GeoVision surveillance system for independent use or connected to GV-Keyboard to empower the operation.
GV-Keyboard V3	GV-Keyboard V3 is designed to program and operate the GeoVision surveillance system with the keyboard and functional keys, and can be connected to PTZ cameras directly for PTZ control.
GV-NET I/O Card V3.2	GV-NET/IO card V3.2 provides 4 inputs and 4 relay outputs. It supports both DC and AC output voltages and provides a USB port as well.