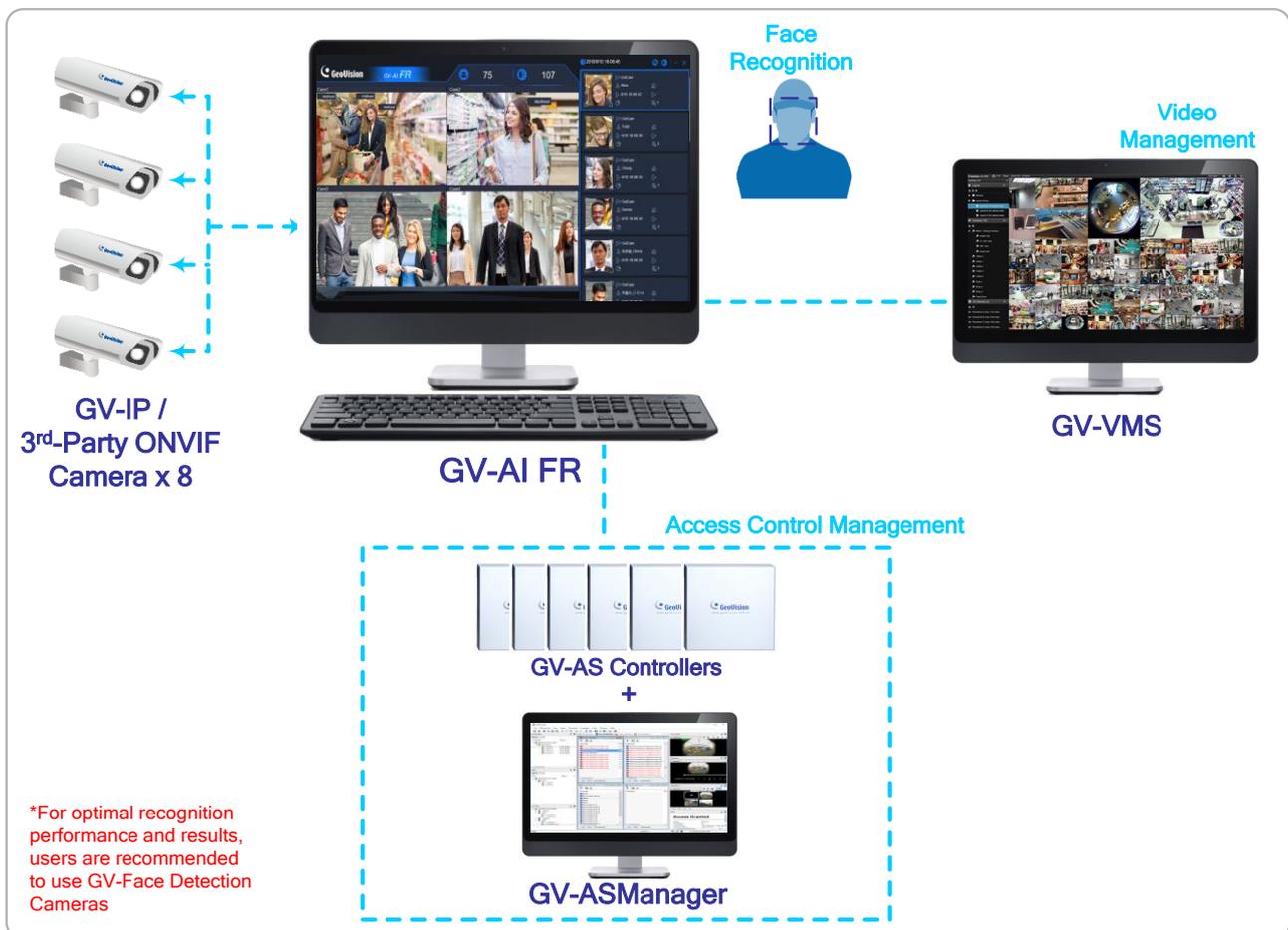# GV-AI FR



## INTRODUCTION

GV-AI FR is video analytics software that can perform Face Recognition (FR) on up to 8 channels of IP cameras. It can be incorporated with the GV-VMS video management software and the GV-ASManager access control system for FR-triggered video recording and access management, respectively.



*For optimal recognition performance and results, users are recommended to use GV-Face Detection Cameras

## KEY FEATURES

- Support for up to 8 channels of IP cameras
- Realtime face recognition and tracking
- Masked face recognition
- Average recognition speed of within 1 second per face when the recognition targets are moving toward the cameras
- Face Database managing up to 100,000 Face Profiles with 3 face images per profile
- Face profiling by age and gender
- Liveness detection for ensuring the persons recognized are not of inanimate objects, such as printed photos, during recognition
- Automatic compilation of statistical graphs for the number and distribution of ages and genders of the faces recognized entering and exiting the premises
- Exportable daily / weekly / monthly / yearly hourly face recognition count
- Query by face recognition events
- Integration of GV-VMS for video recording and playing back face recognition events
- Integration of GV-ASManager for access management by pairing access data to Face Profiles
- Master and Slave feature for interconnecting multiple GV-AI FRs with a centralized Face Database
- Support for connecting to 3rd-party controllers for access management via GV-FWC within the LAN or GV-COM V3 + GV-WTR by physical connection

### Live Monitoring & Welcome

When a person enters the premises, a corresponding face recognition result, along with a predefined personalized image, can be displayed on the connected Welcome screen(s), playing an advertisement, for greeting and/or commercial purposes.

### Dashboard & Average Hourly FR Count

The **Dashboard** and **Hourly FR Count** features of GV-AI FR respectively display the distribution of age and gender of FR events within a day and an average hourly FR count for a selected day, week, month or year.

## License

GV-AI FR is a paid software that requires a GV-Dongle License, which is available in increments of 1 channel, from 1 – 8 channels.

| | |
|---|---|
| Free License | N/A |
| Maximum License | 8 Channels |
| Increment of License | 1 Channel |
| 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.

## Minimum System Requirements

Below are the minimum PC requirements for connecting and performing face recognition with up to 4 and 8 channels of IP cameras.

| | | 1 – 4 Channels | 5 – 8 Channels |
|---|---|---|---|
| OS | 64-bit | Windows 10 / 11 | |
| CPU | | 8th-Generation Intel® Core™ i7 / i9 or above | |
| Memory | | 8 GB (4 GB x 2) DDR4 RAM | 16 GB (8 GB x 2) DDR4 RAM |
| Remote Access | | Microsoft Internet Explorer 11 or later | |

**Note:**
1. For face recognition, 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 FR; other brands of CPU do not work with GV-AI FR.
3. For remote access through a browser, Internet Explorer must be used, as some functions will be nonfunctional through non-IE browsers.
4. GV-AI FR does not support virtual machine installation.

## SPECIFICATIONS

| | | |
|---|---|---|
| Video Input | | Up to 8 channels |
| Video Codec | | H.264, H.265 |
| Video Resolution | | Up to 2 Megapixels per channel |
| IP Camera Supported | | GV-Face Detection Cameras (GV-BX2600-FD / 2700 / 2700-FD / 4700 / 4700-FD / 8700-FD, GV-MD8710-FD), IP cameras via ONVIF or RTSP, USB webcams |
| Networking | | LAN, WAN, Internet |
| Video Analysis | Functions | Face Detection, Face Recognition, Age & Gender Detection, Liveness Detection |
| | Recognition Speed | Within 1 second per face when the recognition targets are moving toward the cameras |
| | No. of Face Profiles | 100,000 |
| | No. of Face Groups | Unlimited |
| | No. of GV-AI FR Interconnectable | 11 (1 Master + 10 Slaves, sharing 1 Face Database managed by the Master) |
| Face Event Trigger | | I/O Box Output, Serial Port Output, LINE Notification, Access Controller Trigger |
| Software Integration | | GV-VMS V18.1 or later (video surveillance), GV-ASManager V5.3.0 or later (access control) |
| Mobile App | | GV-Face for Android/iOS mobile devices (face enrollment, viewing & searching events), GV-Welcome for Android TV boxes / mobile devices (for Welcome screen display) |
| Language | | English |

**Note:** All specifications are subject to change without notice.

## OPTIONS

| Optional Devices | Description |
| --- | --- |
| GV-COM V3 | GV-COM V3 can add 1 RS-485 port to your computer through a USB connector. |
| GV-FWC | GV-FWC can integrate GV-Face Recognition Cameras and/or GV-AI FR into access control systems by sending access data paired with Face IDs to the connected controllers. |
| GV-IO Box (Ethernet) Series | GV-IO Box series (4E / 8E / 16E) provide 4 / 8 / 16 inputs and relay outputs and support Ethernet module, with 4E additionally supporting PoE, TCP/IP and RS-485 connection. |
| GV-WTR | GV-WTR is a converter designed for connecting to and converting Wiegand interface to RS-485 interface, and vice versa. It enables 3rd party readers to be connected to RS-485 GV-Controllers, as well as allow GV-FWC to be connected to 3rd-party controllers. |