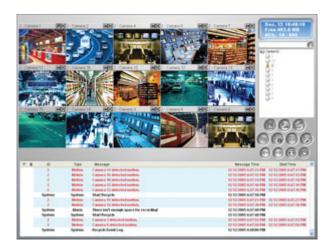


GV-Center V2 Pro



INTRODUCTION

The GV-Center V2 Pro is a professional version of Central Monitoring Station (CMS) software that can be installed in a CMS server. It brings multiple GeoVision GV-System / GV-VMS together into an integrated interface, allowing the operator to manage several systems from one point of control. The GV-Center V2 Pro can manage 500 GV-System / GV-VMS and receive video images from maximal 800 channels to its monitoring screen. On an alert condition, the GV-Center V2 Pro receives live images or event messages with attached video clips to correlate evidence of activity and instantly brings operator's attention.

BENEFITS OF USING GV-CENTER V2 PRO

▶ Cost-effective

- -Uses GV-Center V2 Pro software on current GV-System / GV-VMS
- -Saves cost compared to traditional matrix systems or alarm monitoring services

▶ Time-effective

- -Flexible control and management to 500 GV-System / GV-VMS
- -Helps security operator verify the nature of the alarm on the spot
- -Fast to handle alert notifications

▶ Relatively small manpower requirements

- -Raises the effectiveness of security personnel by bringing potential threats to their attention
- -Effectively reduces false alarms

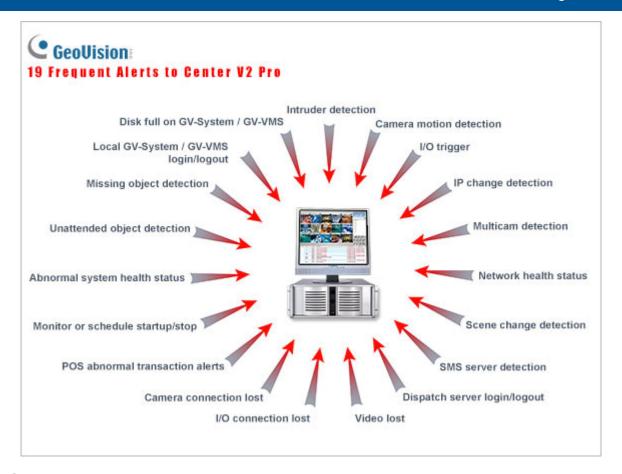
▶ Prescription for business security

-Panic-button support offers effective crime prevention for convenience store, gas station, and restaurant security

▶ Strong Authentication with enhanced network security

-Utilized RSA encryption to protect the data security

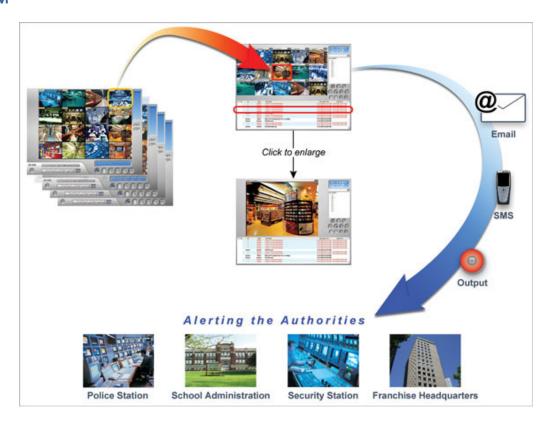




FUNCTIONS

Most of the alerts can be verified in video evidence before the security guards are dispatched to the site. We have concluded 19 most frequent alert conditions in a security event. As soon as any of the alert conditions occurs, the GV-Center V2 Pro can automatically activate alarms to notify the operators or the designated authorities, such as security station. The security personnel can thus verify the nature of alarms on the spot and take proper actions. Meanwhile an SMS or e-mail message of alerts will be sent to the local GV-System / GV-VMS subscriber or other authorities, such as school administrators. This mechanism of GV-Center V2 Pro and its security network can successfully reduce the probability of false alarms.

CASE DIAGRAM



-2-



CENTRAL MONITORING FEATURES

- ▶ View live images from 800 channels of 500 GV-System / GV-VMS
- ▶ Receive live images on motion detection, alarm, I/O trigger, panic button activation
- ▶ View GV-System / GV-VMS server information
- ▶Two-way audio communication
- ▶ Real-time I/O monitoring
- ▶ Receive incident notifications
- ▶ Quick search by key-word in backup ViewLog
- ▶ Remote PTZ control
- ▶ Remote I/O device control
- ▶ Create, edit groups of GV-Center V2 Pro servers and subscribers
- ▶ Keep track of GV-System / GV-VMS's location ID, alarm status, and online status
- ▶ Respond to alerts of video lost, motion detection, I/O module lost, I/O triggered, connection lost, subscriber login/logout, surveillance system abnormality, intruder, missing object, unattended object, POS loss prevention, and disk full
- ▶ Send notification via alarms, SMS, and e-mails
- ▶ Logon to SMS server at startup
- ▶ Avoid connection failure
- ▶1024x768 or 1280x1024 resolution
- Live or attached videos at 320x240 / 640x240 / 640x480
- ▶ Single monitor screen divisions: 6/15/24x, 6/12/24x
- ▶ Dual monitors screen divisions: 9/25/36x; 9/20/42x
- ▶ Dual monitor support: one for live videos display, the other for event lists

EVENT LIST FEATURES

- Display 7 types of event messages: alarm, video attachment, connection status, motion detection, subscriber login/logout history, system status, and module trigger
- ▶ Video attachable files by event
- ▶ Full event lists for quick search
- ▶ Backup in Access format for later retrievals
- ▶ Flag bookmarks for the highlight of important events
- ▶ Event Log Filter as a search engine

RECORDING FEATURES

- ▶ Auto record video events
- ▶ Pre-alarm and post-alarm recording on attachment mode
- ▶ Attachment mode record by motion and I/O trigger
- ▶ Receive video attachment on each event
- ▶ Recycle feature: Delete old file for non-stop recording

-3-



GV-Center V2 Pro Specifications

Features	GV-Center V2 Pro
Maximum # of Channels	800
Maximum # of Subscribers	500
Maximum # of Sensors / Alarms	72,000 / 72,000
Real-Time Audio Monitoring	Yes
Remote PTZ Control	Yes
Remote I/O Control	Yes
Auto Recording	Yes
Event List Viewer	Yes
Event List Filter	Yes
Dual Monitor Support	Yes
Network Load Support	No
Automatic Connection Recovery	Yes
Supported Language	Arabic, Bulgarian, Czech, Danish, Dutch, English, Finnish, French, German, Greek, Hebrew, Hungarian, Indonesian, Italian, Japanese, Lithuanian, Norwegian, Persian, Polish, Portuguese, Romanian, Russian, Serbian, Simplified Chinese, Slovakian, Slovenian, Spanish, Swedish, Thai, Traditional Chinese, Turkish

Minimum System Requirements

OS	64-bit	Windows 7 / 8 / 8.1 / 10 / Server 2008 / Server 2012 R2
CPU		Core i7 2600, 3.4 GHz
Memory		8 GB Dual Channels
Hard Disk		1 GB
Graphic Card		PCI-Express, 1024 x 768, 32-bit color
Direct X		9.0c
Hardware		Internal or External GV-USB Dongle
Software		.Net Framework 3.5 SP1 and Chart Control

Note:

- 1. We do not recommend installing GV-Center V2 (Pro) and GV-Control Center modules on the same PC. Running GV-Center V2 (Pro) and GV-Control Center on the same PC may result in CPU overload error or system failure.
- 2. If you want to perform GPU decoding, refer to the GPU Decoding Specifications.

-4-

May 8, 2017



GPU Decoding Specifications

A higher total frame rate can be achieved if your CPU or external VGA supports GPU decoding.

On-board VGA: GPU decoding is only supported when using the following Intel chipsets:

For H.264 Video Compression

- 2nd Generation Intel Core i3 / i5 / i7 Desktop Processors (Sandy Bridge) only support 1 MP to 2 MP videos
- 3rd Generation Intel Core i3 / i5 / i7 Desktop Processors (Ivy Bridge)
- 4th Generation Intel Core i3 / i5 / i7 Desktop Processors (Haswell / Haswell Refresh)
- 6th Generation Intel Core i3 / i5 / i7 Desktop Processors (Skylake)

For H.265 Video Compression

• 6th Generation Intel Core i3 / i5 / i7 Desktop Processors (Skylake)

External VGA: GPU decoding is only supported when using NVIDIA graphics cards with compute capability 3.0 or above and memory 2 G or above. To look up the commute capability of the NVIDIA graphics cards, refer to: https://developer.nvidia.com/cuda-gpus.

Note: NVIDIA graphic cards do not support H.265 GPU decoding.

On-board VGA + external VGA: To have both the on-board VGA and external VGA perform GPU decoding, the VGAs must follow their respective specifications listed above.

Note:

- 1. If you have both on-board VGA and external VGA installed, the on-board VGA must be connected to a monitor for H.264 / H.265 GPU decoding.
- 2. You can install multiple external graphics cards if needed.

Software License

Free License	N/A
Maximum License	500 subscribers, 800 channels
Increment for Each License	N/A
Optional Combinations	1. Center V2 Pro
	2. Center V2 Pro+ Vital Sign Monitor
Dongle Type	Internal or external

Note: It is recommended to use the internal GV-USB Dongle to have the Hardware Watchdog function which restarts the PC when Windows crashes or freezes.

Options

Optional Devices	Description
Internal USB Dongle	The USB dongle can provide the Hardware Watchdog function to the GV-Center V2 Pro by restarting the computer when Windows crashes. You need to connect the dongle internally on the motherboard.
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 Ports provides 8 inputs and 8 relay outputs, and supports both DC and AC output voltages. You can connect the unit to the PC either by using its USB port or through network by using its Ethernet module.
GV-IO Box (16 Ports)	GV-IO Box 16 Ports provides 16 inputs and 16 relay outputs, and supports both DC and AC output voltages. You can connect the unit to the PC either by using its USB port or through network by using its Ethernet module.

GV-Center V2 Pro