GeoVision inc
The Vision of Security

GV-IS1320

User's Manual

Before attempting to connect or operate this product, please read these instructions carefully and save this manual for future use.

IS1320V10-A

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May 2026

Scan the following QR codes for product warranty and technical support policy:

[Warranty]

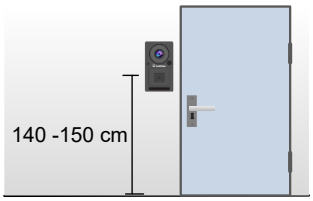
[Technical Support Policy]

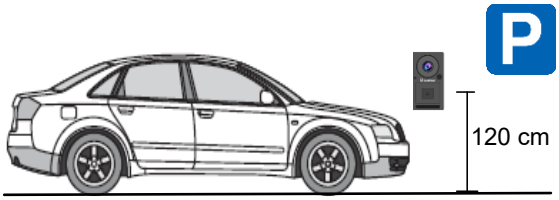
Contents

Installation Considerations

Installation Height:

- For a building gate, GV-IS1320 should be installed about 1.4-1.5 meters above the ground.
- For a parking lot gate, GV-IS1320 should be installed about 1.2 meters above the ground to match the height of vehicles.





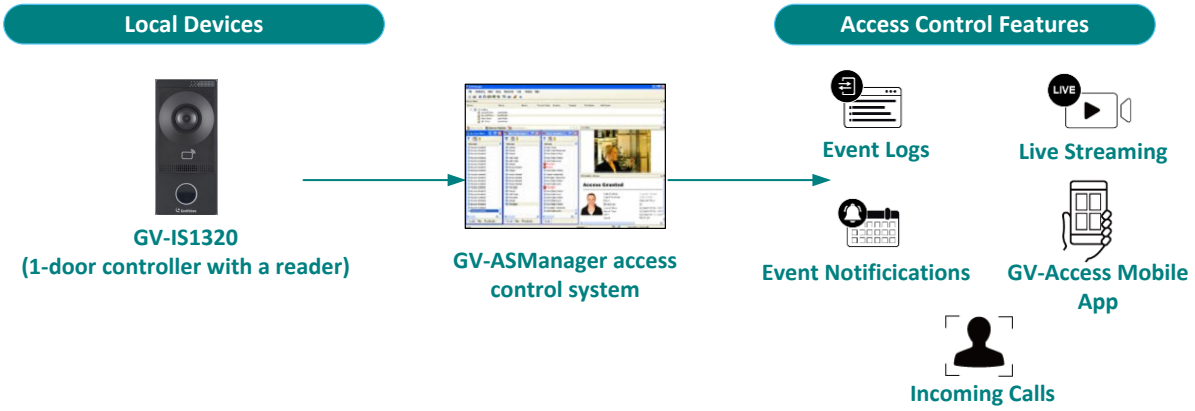
Lighting Conditions

- Avoid placing GV-IS1320 where the light source is directly behind the subject.
- Prevent light from directly falling onto GV-IS1320's camera lens.

Chapter 1 Introduction

The GV-IS1320 Intercom Controller combines advanced access control with real-time video communication. Featuring a built-in 2 MP camera and 13.56 MHz reader, it integrates effortlessly with the GV-ASManager system to manage up to 100,000 access cards — ideal for enterprises, campuses, and multi-site facilities.

During access events, the GV-IS1320 delivers live video streaming and snapshots, giving operators instant visibility at every entry or exit point. And with a simple press of the call button, visitors connect directly to the GV-ASManager operator, who can see, speak, and grant access — all from one intuitive interface.



1.1 Packing List

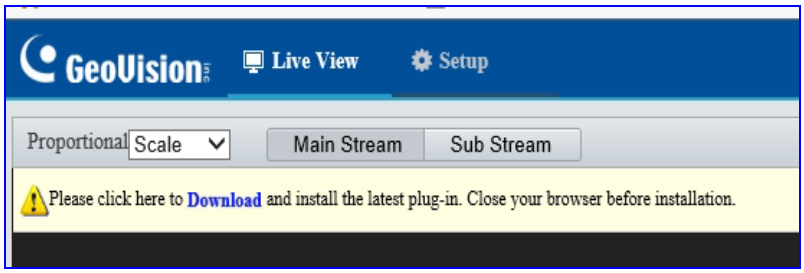
1	GV-IS1320 Intercom Controller	6	Micro SD Card (32 GB, formatted and inserted)
2	Screw Kit	7	Drill Template Paster
3	Screw Driver	8	Download Guide
4	Wall Mount Bracket 	9	Embedded Bracket 
5	Function Cable 		

1.2 System Requirements

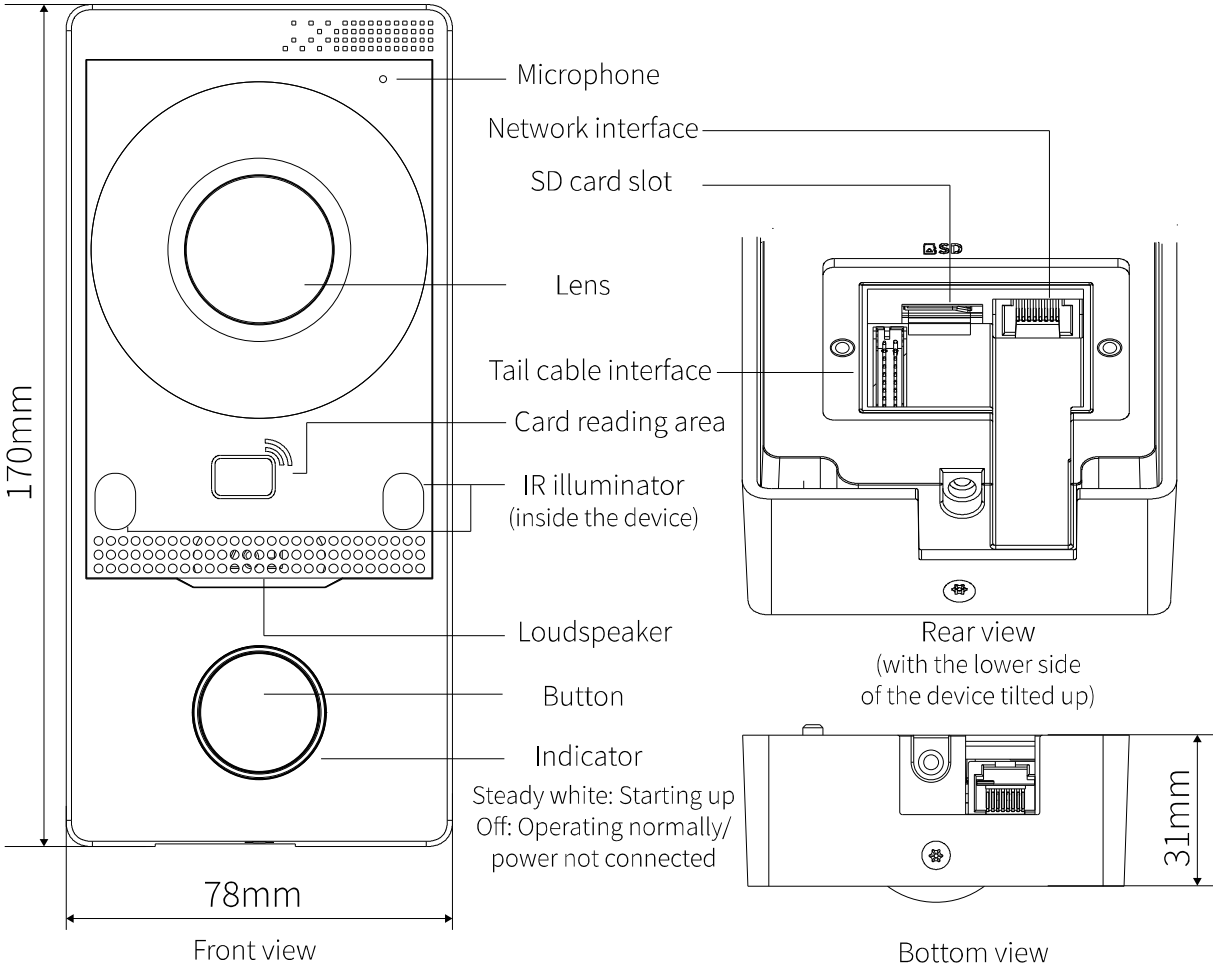
To access the functions and settings of GV-IS1320 on the Web interface, ensure your PC has a good network connection and use one of the following Web browsers:

- Internet Explorer 9 x or later
- Microsoft Edge
- Google Chrome
- Firefox

Note: To use complete live view features, users of non-IE browsers should download the plugin from the GV-IS1320 Web interface.



1.3 Physical Description



The cable specifications are as follows:

Cable	Color	Description
RS485_A	Orange	Connect RS-485 interface
RS485_B	Yellow	
GND	Black	
ALM_IN1 (Door Sensor)	Purple	Connect Alarm input interface
ALM_IN2 (Door Button)	White/Purple	
ALM_IN3 (Fire Sensor)	Light Green	
ALM_IN4 (Tamper Sensor)	Yellow/Black	
GND	Black	Connect Power interface
VDD12V	Red	
LOCK1_NC (Door Lock)	Pink	Connect Door lock interface
LOCK1_COM (Door Lock)	White/Yellow	
LOCK1_NO (Door Lock)	White/Green	
LOCK2_NC (Alarm)	Gray	
LOCK2_COM (Alarm)	White/Orange	
LOCK2_NO (Alarm)	White/Blue	
GND	Black	

*

1.4 Installation

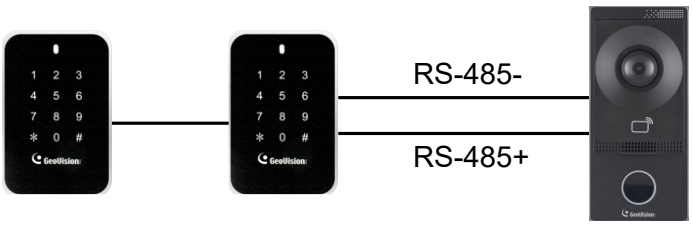
For standard installations, see the *Installation Guide* for mounting GV-IS1320 to a wall or a recess surface.

For optional installation with **GV-Mount929**, see *Appendix* in the user's manual.

1.5 Connecting to the Controller

1.5.1 Connecting RS485 / OSDP Readers

GV-IS1320 supports connection for up to two RS-485 or OSDP readers. To connect, wire the RS-485 terminals on GV-IS1320 to the readers, and ensure that a separate power source is provided for each reader.



Up to 2 GV-Readers

Controller

The table below shows the cable assignments for the RS-485 connection.

Cable	Color
RS-485 A (+)	Orange
RS-485 B (-)	Yellow

Note: For the RS-485 connection, connect only one of the following reader types to GV-IS1320: either GeoVision RS-485 readers or OSDP-compliant readers. Mixing both types is not supported.

1.5.2 Connecting Input Devices

GV-IS1320 supports four types of input connections:

1. Door Sensor, e.g. door status sensors
2. Door Button, e.g. door openers and exit buttons
3. Fire Sensor
4. Tamper Sensor

All inputs are **dry contact** and configurable as Normally Open (NO) or Normally Closed (NC) through the GV-IS1320's Web interface. The default value is **NO**. To change input status, see *4.7.3 Ports & Devices.*

The table below shows cable assignments for input connections on GV-IS1320.

Cable	Color
ALM_IN1 (Door Sensor)	Purple
ALM_IN2 (Door Button)	White/Purple
ALM_IN3 (Fire Sensor)	Light Green
ALM_IN4 (Tamper Sensor)	Yellow/Black

1.5.3 Connecting Output Devices

GV-IS1320 supports two types of output connections:

1. Door Lock, e.g. electronic locks
2. Alarm, e.g. door held open alarm, door forced open alarm, fire alarm, and tamper alarm

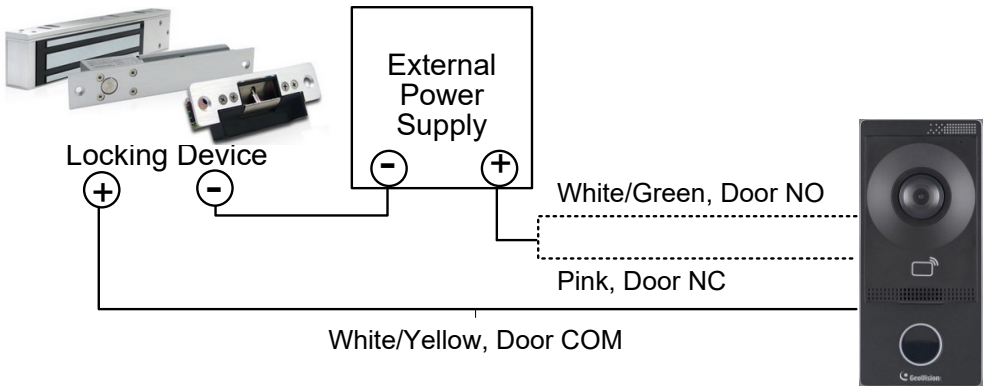
The table below shows cable assignments for output connections on GV-IS1320.

Cable for Door Lock	Color	Cable for Alarm	Color
LOCK1_NC (Door Lock)	Pink	LOCK2_NC (Alarm)	Gray
LOCK1_COM (Door Lock)	White/Yellow	LOCK2_COM (Alarm)	White/Orange
LOCK1_NO (Door Lock)	White/Green	LOCK2_NO (Alarm)	White/Blue

Connecting an Output Device

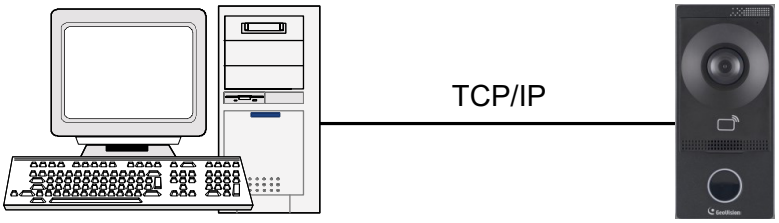
To connect a locking device to **GV-IS1320**, follow the steps below:

1. Connect the **(+) terminal** of the locking device to the **Door COM** wire on GV-IS1320.
2. Connect the **(-) terminal** of the locking device and the **(-) terminal** of the external power supply **together**.
3. Connect the **(+) terminal** of the external power supply to either the **Door NO** or **Door NC** wire on GV-IS1320, depending on the desired operating state of the locking device.



1.5.4 Connecting to PC

Connecting GV-IS1320 to a computer allows access to its **Web interface** for configuration and device management. It also enables integration with the **GV-ASManager** access control system for monitoring and managing access control activities.



1.5.5 Connecting to Power

You can choose to supply power using a power adapter or using a Power over Ethernet (PoE) adapter.

- To use a Power adaptor, connect the controller's 12V and GND wires to a 12V, 1A power adapter before connecting it to a power source.

The table below shows the wire assignments for the power connection on GV-IS1320.

Cable	Color
GND	Black
VDD12V	Red

- To use a PoE adapter, power is provided to the device through the Ethernet cable.

1.6 LED Status and Beeper

The following table outlines the LED ring indicators and beeper responses under various operating conditions of the device, including startup, day mode, and night mode.

Condition	LED Ring	Beeper
Startup	White light for 30 sec	Short beep *4
Day Mode		
Standby	No LED	N/A
Access Granted	Flash white momentarily	Sound: “Door opened successfully”
Access Denied	Flash white momentarily	Sound: “Card verification failed”
Call Button Activated	No LED	Dialing sound for 30 sec
Talk Mode Enabled	No LED	N/A
Night Mode		
Standby	Constant white	N/A
Access Granted	Flash white momentarily	Sound: “Door opened successfully”
Access Denied	Flash white momentarily	Sound: “Card verification failed”
Call Button Activated	Constant white	Dialing sound for 30 sec
Talk Mode Enabled	Constant white	N/A

Chapter 2 Getting Started

This chapter contains basic information on how to connect GV-IS1320 to the network.

[Network Connection]

To connect GV-IS1320 to the network, follow the steps outlined below:

1. Connect the controller to the network using a regular network cable.
2. Connect power using one of these methods:
   - Use a power adapter. See *1.5.5 Connecting to Power*.
   - Use Power over Ethernet (PoE). The power will be provided over the network cable.
3. Access the GV-IS1320 Web interface.
   - If GV-IS1320 is installed in a LAN as a DHCP server, use GV-IP Device Utility to look up its dynamic IP address. See *2.2 Looking Up the Dynamic IP Address*.
   - If GV-IS1320 is installed in a LAN without a DHCP server, it will use the default IP address of **192.168.0.10**. You can also assign a different static IP. See *2.3 Assigning an IP Address*.

[Controller Settings]

Once GV-IS1320 is properly installed, refer to the following sections to configure the door lock, alarms, outputs, readers and the GV-ASManager system connection.

- **To connect to GV-ASManager and receive call notifications**, see *Chapter 3 GV-ASManager Integration*.
- **To adjust doorbell volume**, see *4.7.2 Ports & Devices*.
- **To configure the door lock, alarms, outputs, extra readers**, see *4.7.2 Ports & Devices*.

2.1 Creating Login Credentials

When purchasing a new GV-IS1320 or after loading the default, you need to set up a login password for it.

Note: By default, the Administrator's username is **admin** and cannot be modified.

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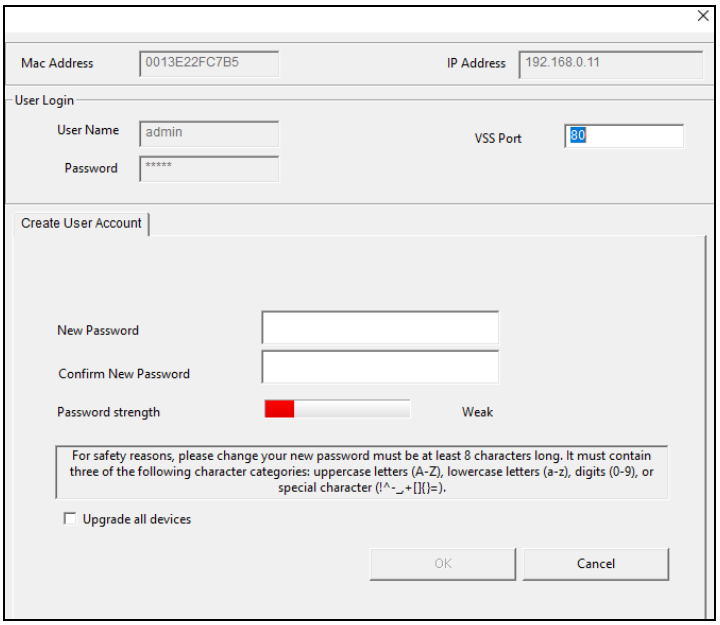
1. Download and install GV-IP Device Utility from the GeoVision website. The PC running the utility must be on the same LAN as the GV-IS1320.
2. On the GV-IP Utility window, click the button to search for IP devices connected to the same LAN. Click the **Name** or **Mac Address** column to sort.
3. Identify your GV-IS1320 by its MAC address, click on its IP address and select **Create User Account**. This dialog box appears.



4. Type a password. The new password must meet the password strength requirements.
5. Click **OK.**

2.2 Looking Up the Dynamic IP Address

When the controller is connected to LAN with a DHCP server, it is automatically allocated a dynamic IP address. To obtain the IP address and access the GV-IS1320 Web interface, follow the steps below.

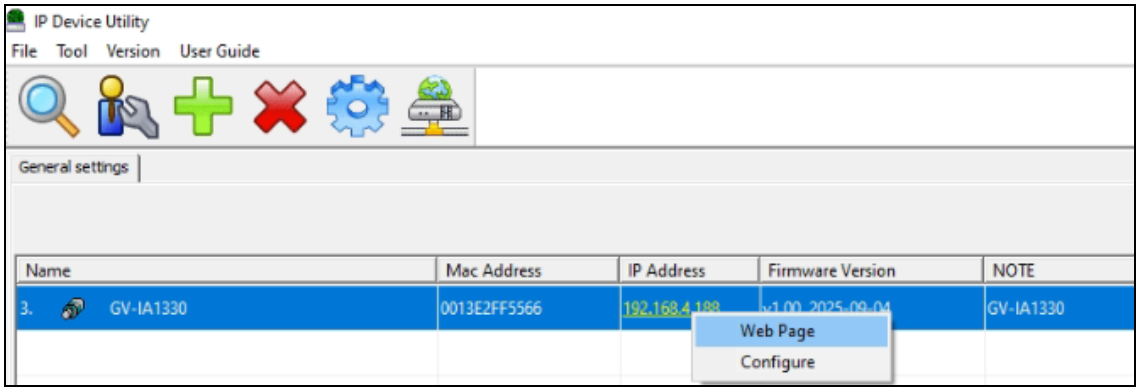
Note: By default, the Administrator's username is **admin** and cannot be modified.

---

1. Download and install GV-IP Device Utility from the GeoVision website. The PC running the utility must be on the same LAN as the GV-IS1320.

1. On the GV-IP Utility window, click the button to search for IP devices connected to the same LAN. Click the **Name** or **Mac Address** column to sort.

2. Identify your GV-IS1320 by its MAC address, click on its IP address and select **Web Page**.



3. On the login page, enter the username (admin) and password to access the live view.

2.3 Assigning an IP Address

When the controller is connected to LAN without a DHCP server, it will use the default IP address **192.168.0.10**. Follow the steps below to assign a new IP address to avoid IP conflict with other GeoVision devices.

Note: GV-IS1320 has the default IP address 192.168.0.10. The PC used to set the IP address must be on the same network as the controller.

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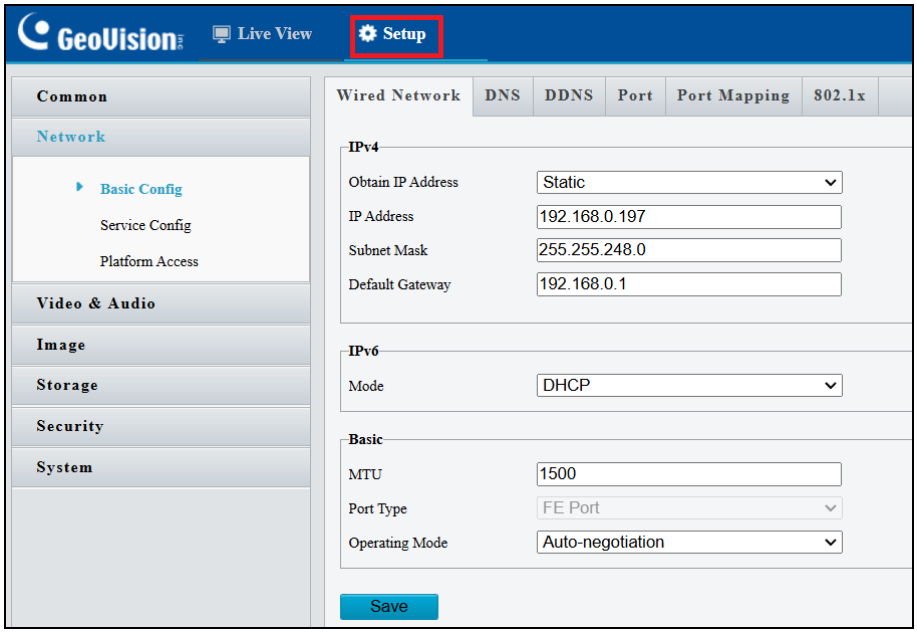
1. Open the Web browser, and type the default IP address http://192.168.0.10
2. Type the username (admin) and password and click **Apply**.
3. Click **Setup**, and select **Common** in the left menu > **Network** > **Basic Config**.
4. Select **Static** from Obtain IP Address.



5. Type the IP Address, Subnet Mask and Default Gateway.
6. Click **Apply**. The GV-IS1320 is now accessible by entering the assigned IP address into a Web browser.

Note: If PPPoE is enabled, verify the IP address GV-IS1320 will get from the ISP for login. If your GV-IS1320 connects to a public dynamic IP address via PPPoE, first use the Dynamic DNS service to obtain a domain name that corresponds to the unit's changing IP address. For details on Dynamic DNS Server settings, see *4.2.3 DDNS*.

Chapter 3 GV-ASManager Integration

This chapter guides you through the configurations for adding the GV-IS1320 controller to the GV-ASManager access control system, viewing incoming call notifications, and enabling the intercom function.

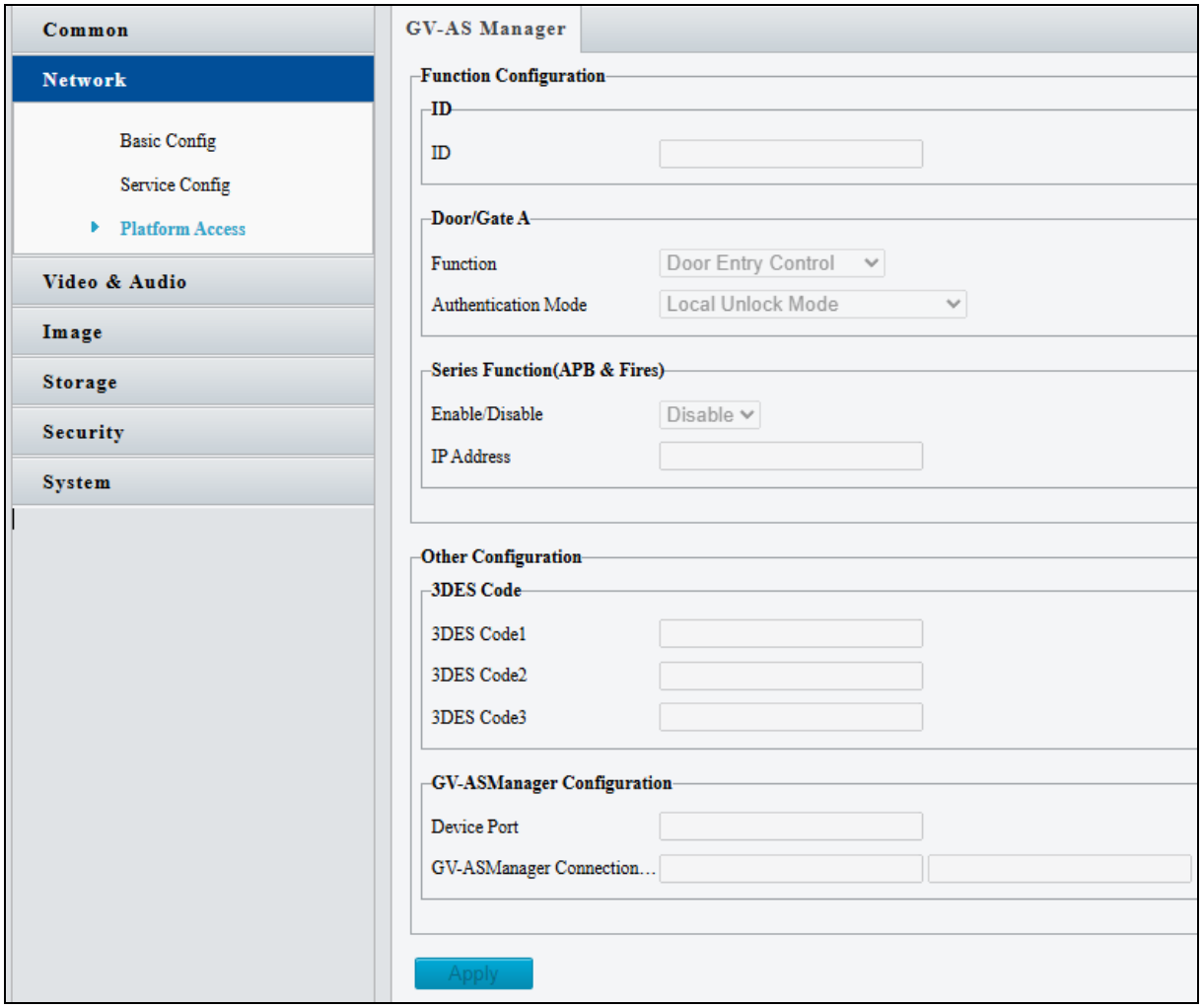
3.1 Connecting the Controller to GV-ASManager

To connect the controller to the GV-ASManager access control system, follow the steps below.

There are two sections of instructions below: **On the Controller** (Steps 1 ~ 4) and **On the GV-ASManager** (Steps 5 ~ 10).

On the Controller

1. On the controller's Web interface, click **Setup**
2. In the left menu, click **Network** > **Platform Access**.
3. Configure the following settings:



[ID] Enter the ID number for the controller. This ID is used by GV-ASManager to differentiate among multiple door controllers. The ID number must be between 1 and 1,000. By default, the ID is set to 1.

[Door/Gate A]

- **Function:** Define the controller function based on whether it is installed for entrance or exit control. The available options are: *Door Entry Control*, *Parking Entry Control*, *Door Exit Control*, *Parking Exit Control*, and *Elevator Control*.
- **Authentication Mode:** Select the desired access rules.
  - **Local Unlock Mode:** Opens the door or gate. The held-open state cannot be cleared through GV-ASManager.
  - **Local Lock Mode:** Locks the door or gate. The locked state cannot be cleared through GV-ASManager.
  - **Fixed Card Mode:** Grants access after the card is presented or the passcode is entered. This mode ignores the authentication schedule set in GV-ASManager.

- ⊙ **Fixed Card + PIN Mode:** Grants access after the user presents the card and then enters the card's PIN code. This mode ignores the authentication schedule set in GV-ASManager.
- ⊙ **Fixed Card/Common mode:** Grants access after the user presents the card or enters the door's password. This mode ignores the authentication schedule set in GVASManager.
- ⊙ **Authentication Schedule Mode:** Follows the authentication schedule set in GVASManager.
- ⊙ **Local Lock Down:** Locks down the door. This mode overrides the Authentication Schedule and the door can only be opened by presenting the assigned access card.

[Series Function (APB & Fire)] This option allows you to set the Anti-Passback and fire sensor functions across multiple door controllers. The Anti-Passback ensures that a card used on an entry door cannot be used on the same entry door unless it has first been used on the corresponding exit door.

- **Enable/Disable:** Enables or disables the Anti-Passback function and fire sensor function.
- **Info IP:** Enter the IP address of the next corresponding controller.

[Other Configuration]

- **3DES Code 1-3:** Refers to Triple DES (Data Encryption Standard). You can enter up to three different keys for data encryption. The default value for 3DES Code 1 is **12345678**.

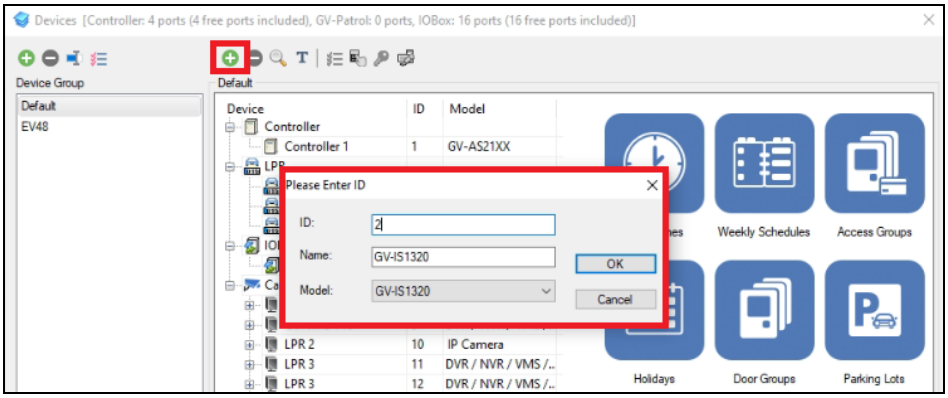
[GV-ASManager Configuration]

- **Device Port:** Retain the default value **4000**, or modify it to match the port number configured in GV-ASManager.
- **GV-ASManager Connection:** Once the controller is successfully connected to the GV-ASManager system, the GV-ASManager's IP address and connection status will be displayed here.

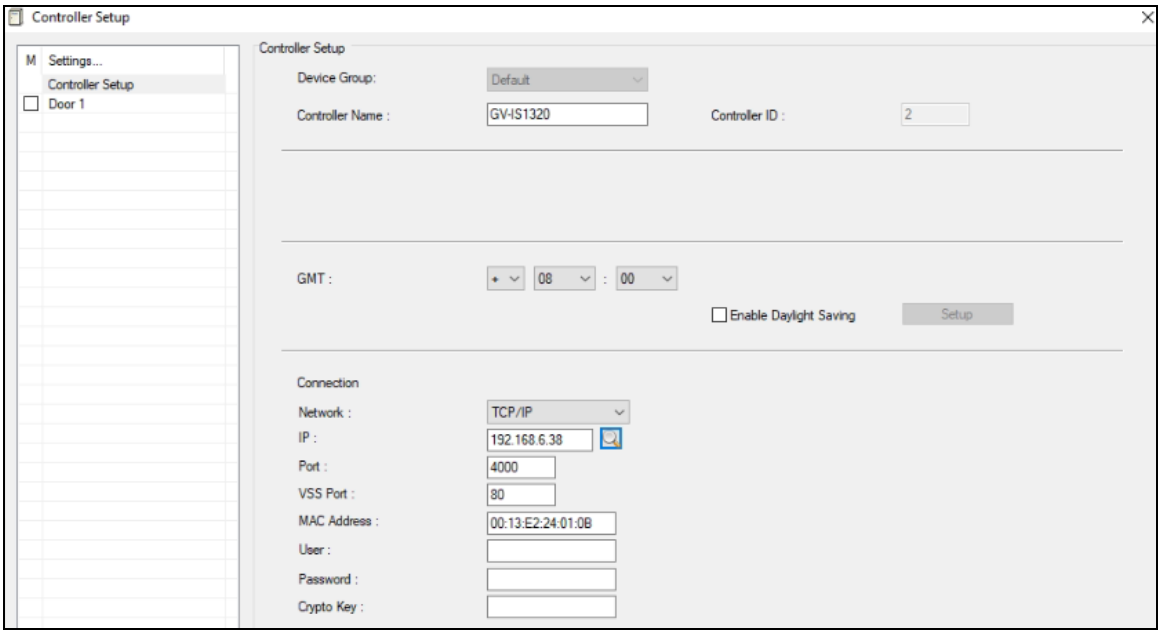
4. Click **Apply**.

On GV-ASManager

5. Select **Setup** > **Devices**. The Devices window appears.
6. Click **Add** > **Controller**.
7. Enter the **ID** that matches the controller's ID (see Step 3), assign a name to the controller, and select **GV-IS1320** as the Model.



8. On the Controller Setup dialog box, configure the following:

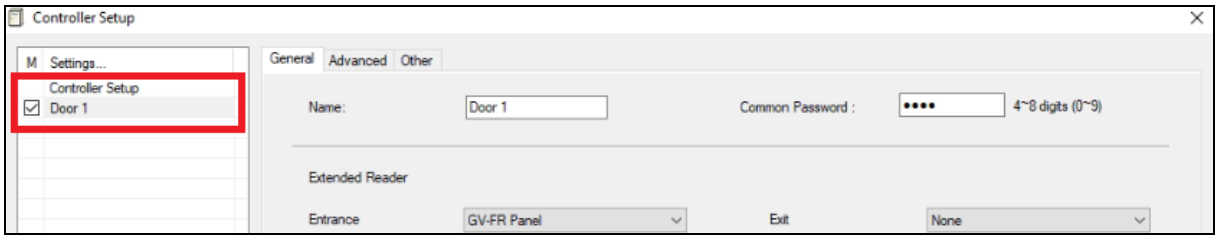


A. Click the **Search** icon to find the GV-IS1320 within the LAN. Once selected, its IP address and MAC Address will be automatically filled in.

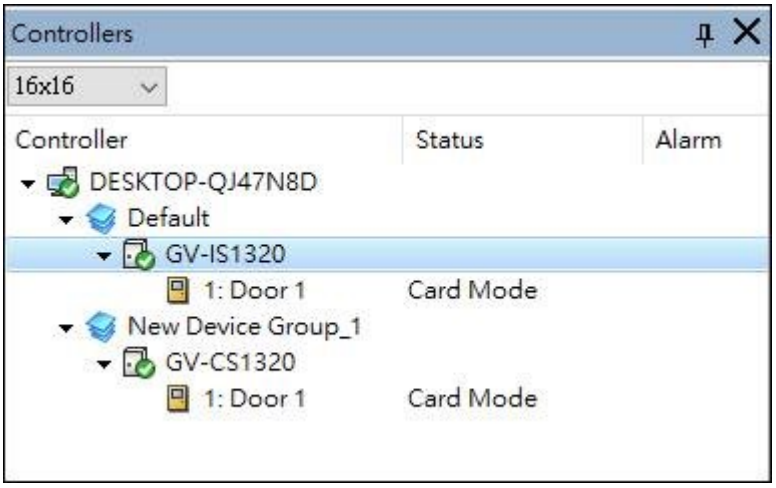
B. Enter the GV-IS1320's **Port** (default is 4000), **User** (username), **Password**, and **Crypto Key** (3DES Code; default is **12345678**).

Note: If you have modified the controller's default **Port** (Device Port) or **Crypto Key** (3DES Code), ensure to enter the right values in the dialog box. To examine the controller's settings, see Step 3.

9. To optionally configure the reader connected to the GV-IS1320, select **Door 1.**



10. Click **OK**. Once connected, the GV-IS1320 should appear in the Controllers list with a green checkmark. If not, make sure that the controller's Port and Crypto Key are correctly entered in Step 7.



For advanced settings in GV-ASMangaer, see *4.2 Adding Controller* in *GV-ASManager User's Manual*.

Note: The GV-IS1320 controller only supports GeoVision RS-485 readers or OSDP-compliant readers. It does not support the network readers.

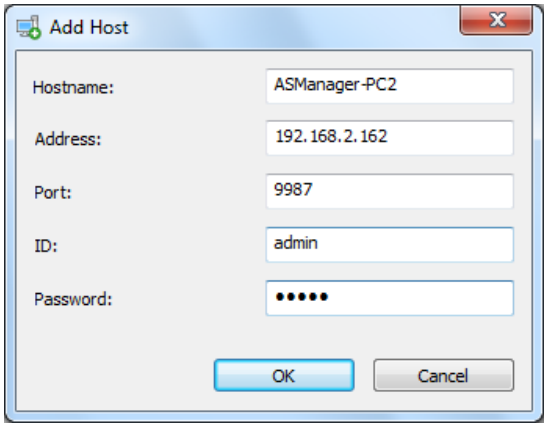
3.2 Receiving Call Notifications

When a guest presses the call button on the **GV-IS1320** controller, a conversation is initiated with the **GV-ASManager** operator. To enable and use the Intercom feature within the GV-ASManager system, follow the steps below.

Installing GV-ASNotify

The GV-ASNotify program is required for intercom feature within the GV-ASManager system.

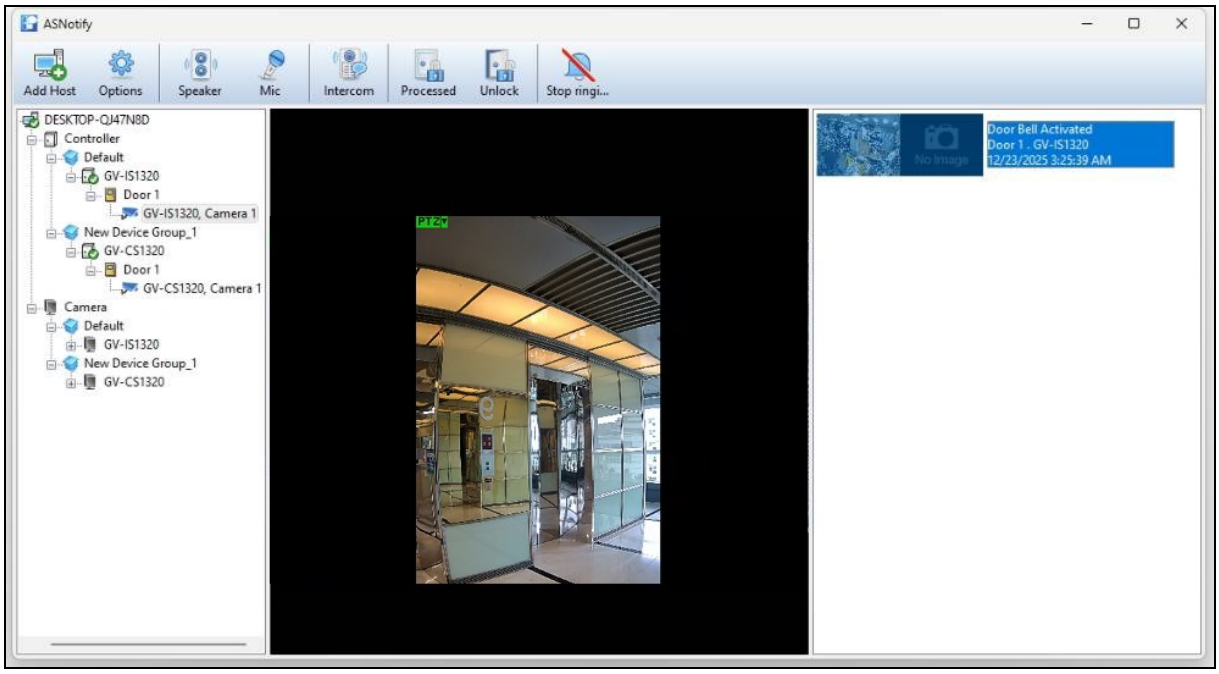
1. Download and install GV-ASNotify to the GV-ASManager system from GeoVision's Download Page.
2. On the menu bar of GV-ASManager, click **Tools** > **Servers** > **Remote Monitor Server**. When the server is started, the icon appears at the bottom-right of the main screen.
3. Run **GV-ASNotify.exe**.
4. To connect to GV-ASManager, click the **Add Host** button.
5. Type the connection information for the GV-ASManager, such as IP and login credentials.

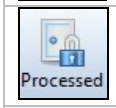
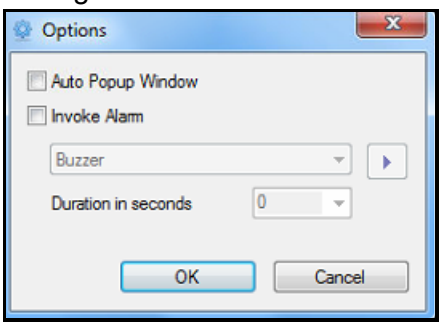


6. Click **OK**. The GV-ASManager is added to the host list.

Enabling the Talk

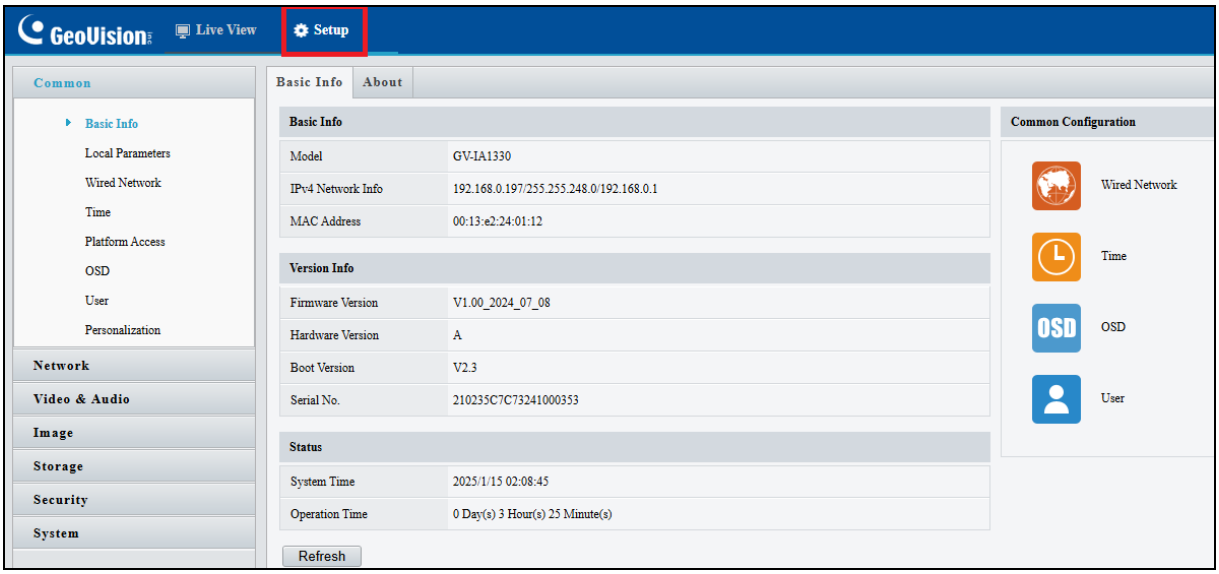
When the call button is activated on the GV-IS1320 controller, snapshots and event messages will appear on the GV-ASNotify window.



Button	Function
	Communicate with guests with the **Intercom** button.
	Allow entry with the **Unlock** button.
	After handling an event, mark the notification as “Processed” by selecting it and clicking the **Processed** button. Events labeled as Processed are grayed out.
	To enable computer alarms or popup messages for alerts when GV-ASNotify is minimized in the Windows taskbar, click the **Options** button to enable the related settings. 

Chapter 4 Administrator Mode

The Administrator can access and configure the controller through the network. Click **Setup** at the top of the Web interface to access the following configuration tabs: **Common**, **Network**, **Video & Audio**, **Image**, **storage**, **Security** and **System**.



List of Options

See the table below for the settings available on the Web interface. Find the topic of interest by referring to the section number prefixed to each option.

4.1 Common	4.1.1 Basic Info 4.1.2 Local Parameters 4.1.3 Platform Access 4.1.4 Personalization
4.2 Network	• Basic Config 4.2.1 Wired Network 4.2.2 DNS 4.2.3 DDNS 4.2.4 Port 4.2.5 Port Mapping 4.2.6 802.1x • Service Config 4.2.7 E-Mail 4.2.8 QoS 4.2.9 ONVIF • Platform Access 4.2.10 Platform Access
4.3 Video & Audio	4.3.1 Video 4.3.2 Audio
4.4 Image	4.4.1 Image 4.4.2 OSD 4.4.3 Privacy Mask
4.5 Storage	Storage
4.6 Security	4.6.1 User 4.6.2 Network Security
4.7 System	4.7.1 Time 4.7.2 Ports and Devices 4.7.3 Maintenance 4.7.4 Log

4.1 Common

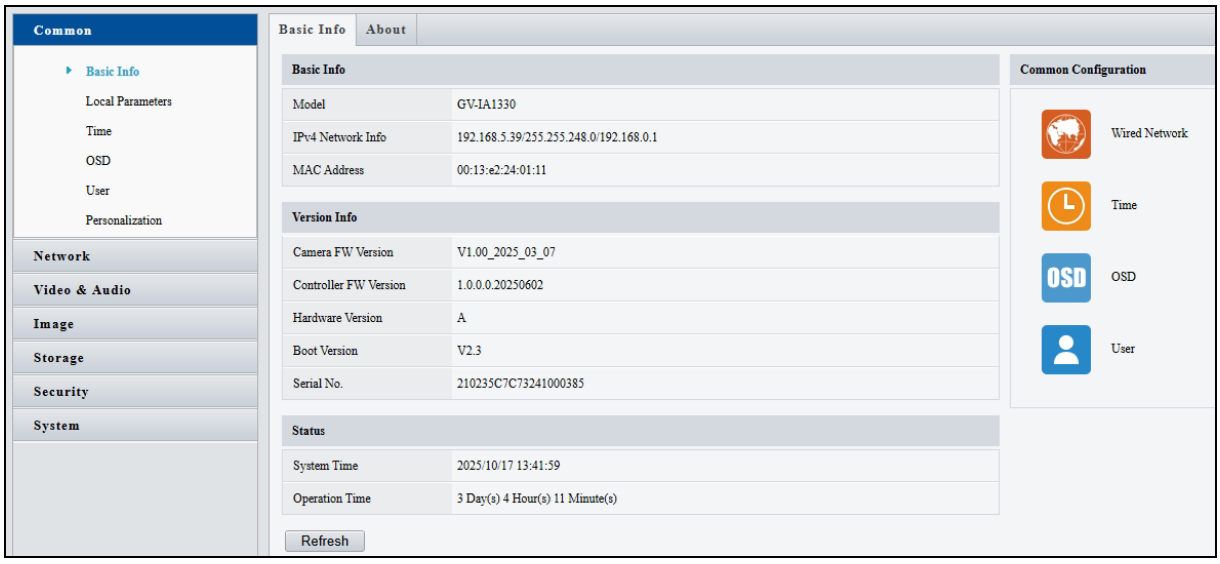
Under the **Common**, you can find the controller's general settings.

For the following functions under the Common, see the related sections as indicated.

- **Local Parameter**: See *4.1.2 Local Parameter* for details.
- **Wired Network:** See *4.2 Network* for details.
- **Time:** See *4.7.1 Time* for details.
- **OSD:** See *4.4.2 OSD* for details.
- **User:** See *4.6.1 User* for details.
- **Personalization:** See *4.1.3 Personalization* for details.

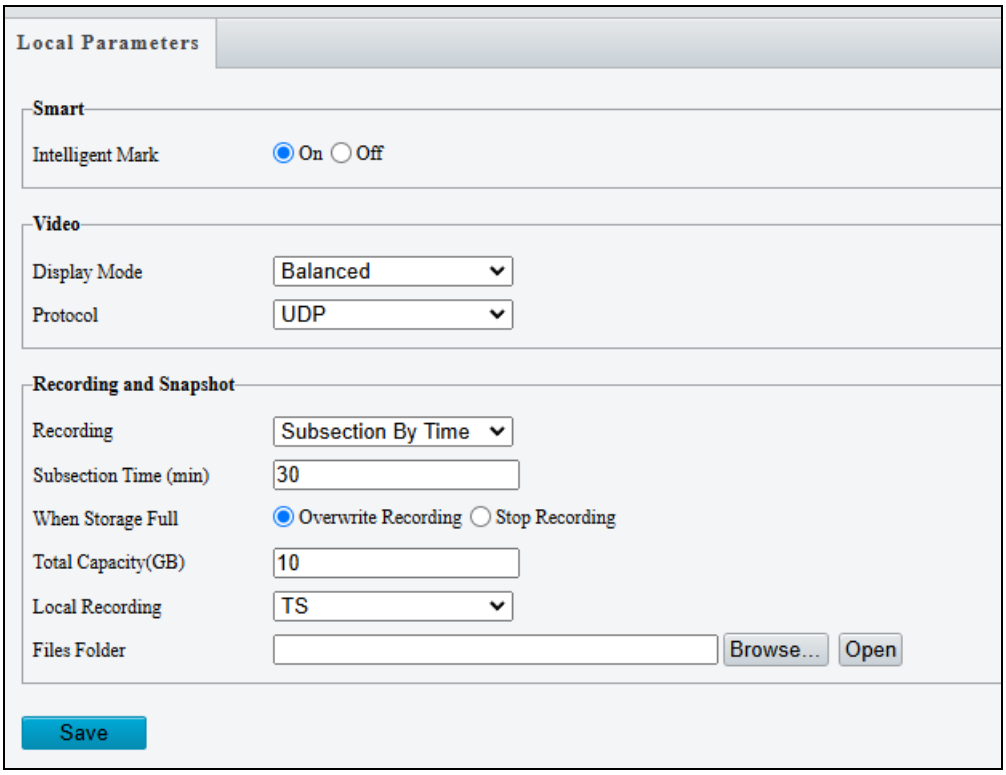
4.1.1 Basic Info

You can view the controller's current status. Click **Refresh** for the latest status information. Under **Common Configuration** on the right, you can click on the icons to quickly access the corresponding configuration pages.



4.1.2 Local Parameters

You can set the local parameters to save recordings and snapshots directly to your computer.



[Intelligent Mark]

****The Intelligent Mark function is not supported by GV-IS1320.****

- **Intelligent Mark:** When enabled, the detection line or area as defined by **Smart Settings** will be displayed. See details in *3.6.1 Smart Settings*.

[Video]

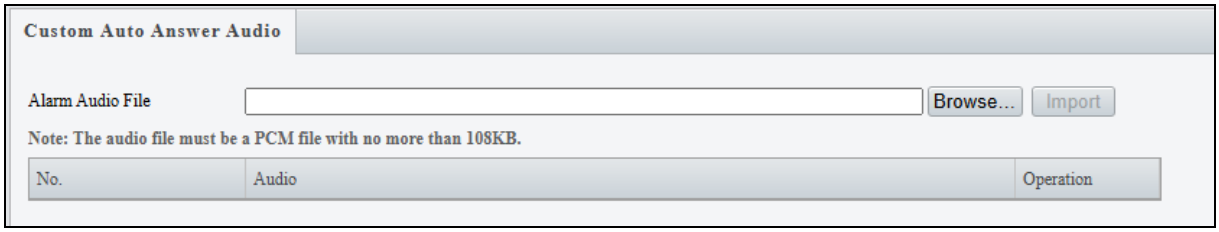
- **Display Mode:** Set the display mode according to the network status, including **Min. Delay**, **Balanced Delay**, and **Fluent Delay** for low to high delay. Or customize the display mode parameters by selecting **Custom**.
- **Protocol:** Select the protocol used to transmit media streams to be decoded by the PC.

[Recording and Snapshot]

- **Recording**
  - ⊙ **Subsection by Time (1~60):** Set a maximum time length of each recording file. If you specify 5 minutes, a 30-minute event will be chopped into six 5-minute event files.
  - ⊙ **Subsection by Size:** Set a maximum size limit of each recording file.
- **When Storage Full**
  - ⊙ **Overwrite Recording**: When the memory card is full, the controller deletes the old recordings to make room for new ones.
  - ⊙ **Stop Recording**: Recording stops automatically when the memory card is full.
- **Total Capacity (1~1024):** Set a capacity limit to the memory card.
- **Local Recording:** Set the file format for saving local recordings, including TS and MP4.
- **Files Folder**: Click **Browse** to set a folder to store the recorded videos and captured snapshots at your local computer.

4.1.3 Personalization

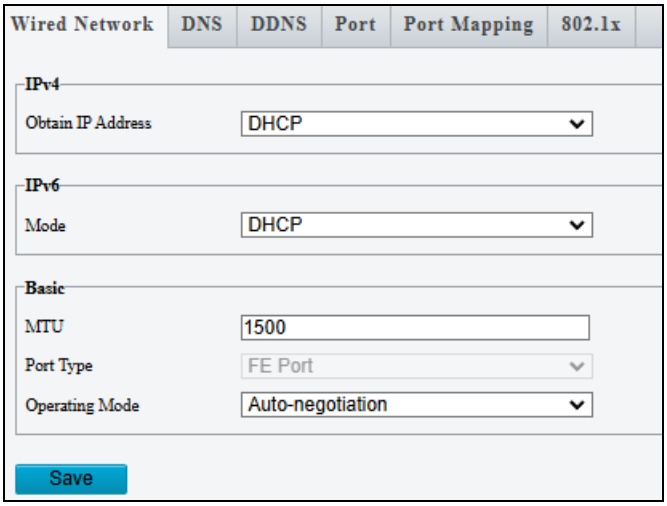
****The Personalization function is not supported by GV-IS1320.****



4.2 Network

Under the **Network**, you can configure the network settings, the e-mail server for notifications, and the connection information for the GV-ASManager access control system.

4.2.1 Wired Network



- **Obtain IP Address:** Select **Static IP**, **DHCP**, or **PPPoE** according to your network environment.

  ⊙ **Static IP address:** Assign a static IP or fixed IP to the controller. Type the controller's IP address, subnet mask and default gateway.

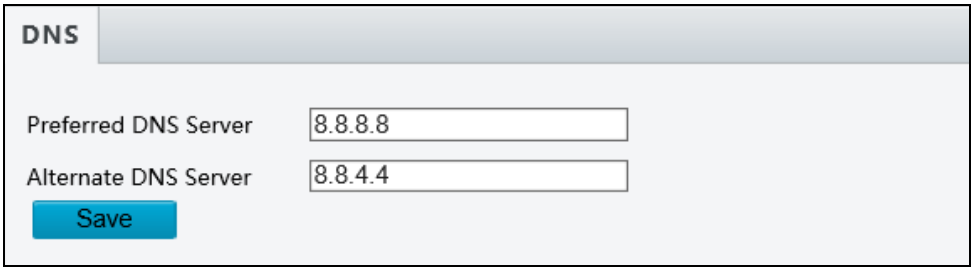
Parameters	Default
IP address	192.168.0.10
Subnet Mask	255.255.255.0
Default Gateway	192.168.0.1

- ⊙ **PPPoE:** The network environment is xDSL connection. Type the Username and Password provided by ISP to establish the connection. If you use the xDSL connection with dynamic IP addresses, first use the DDNS function to obtain a domain name linking to the controller's changing IP address.
- ⊙ **DHCP:** The network environment has a DHCP server which will automatically assign a dynamic IP address to the controller. You can look up the current IP address using GV-IP Device Utility.

- **IPv6:** Type the controller's **IPv6 Address** and **Default Gateway**. Optionally change the **Prefix Length** according to your network settings.
- **MTU:** Type the Maximum Transfer Unit (MTU). The default value is **1500.**
- **Operating Mode:** Select a mode to control the bandwidth.

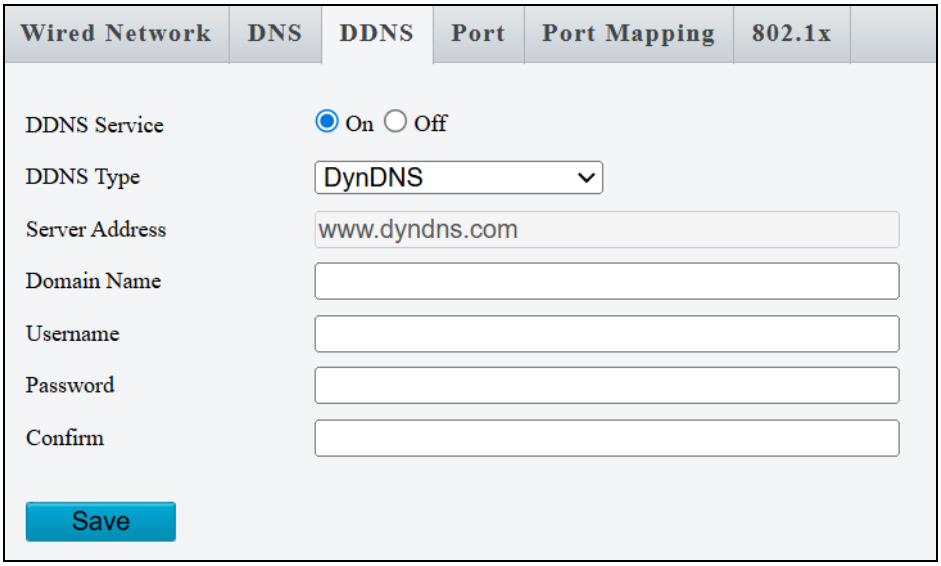
4.2.2 DNS

Specify the controller's **Preferred DNS Server** and **Alternate DNS Server**.



4.2.3 DDNS

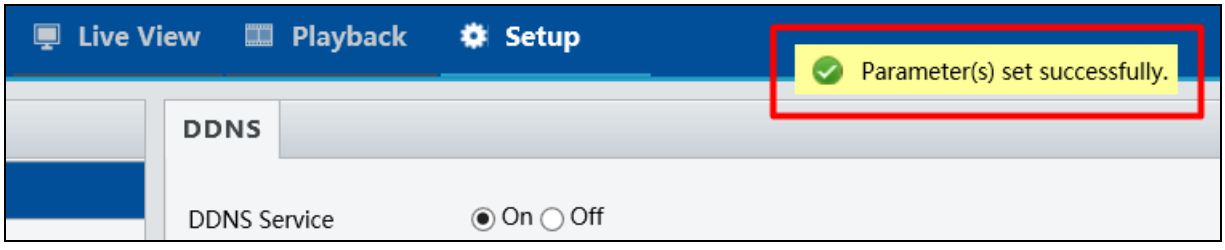
DDNS (Dynamic Domain Name System) provides a convenient way for accessing the controller when operating under a dynamic IP environment. It assigns a **domain name** to the controller, allowing users to connect without manually checking whether the IP address — assigned by a DHCP server or ISP (in xDSL connection) — has changed.



To enable and configure DDNS on the controller:

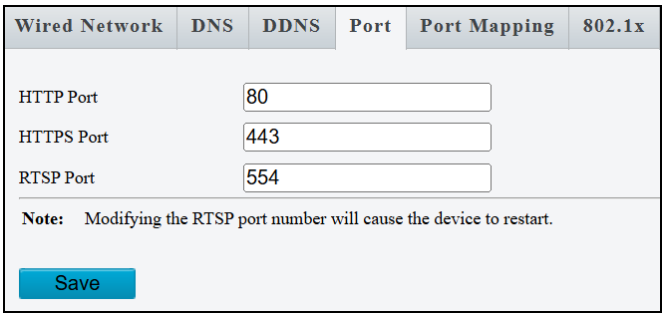
1. Click **On** to enable the DDNS service.
2. Select a DDNS service provider you have registered with.
3. Type the registered **Domain Name**, **Username**, or **Password,** based on the DDNS service requirements.
4. Confirm the password.
5. Click **Save**.

Once DDNS is successfully configured, a notification bar will appear. For future logins, access the controller using the assigned domain name, e.g., yourhostname.dyndns.org.



4.2.4 Port

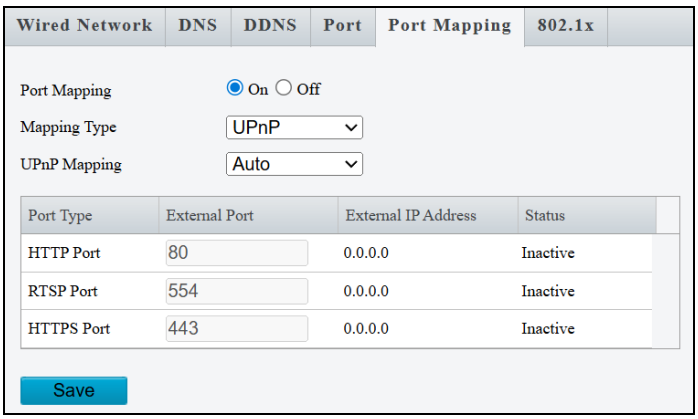
You can modify the default **HTTP**, **HTTPS** and **RTSP** ports as needed.



4.2.5 Port Mapping

The Port Mapping function enables the controller to automatically forward and open specific ports on your router. This allows remote access to the controller from the Internet, streamlining connectivity without manual port configuration.

1. Enable **Port Mapping**
2. Select **UPnP** or **Manual** for Mapping Type.
   - If your router supports **UPnP**, select **Auto** or **Manual** to configure external ports automatically or manually.



   - If your router does not support UPnP, select **Manual** and configure external ports. If the configured port is occupied, the **Status** will show inactive.
3. Click **Save**.

Note: For this function to work, your router needs to support **port forwarding**.

4.2.6 802.1x

IEEE 802.1x is an IEEE standard for port-based network access control. It provides an authentication mechanism for devices attempting to connect to a LAN or WLAN.

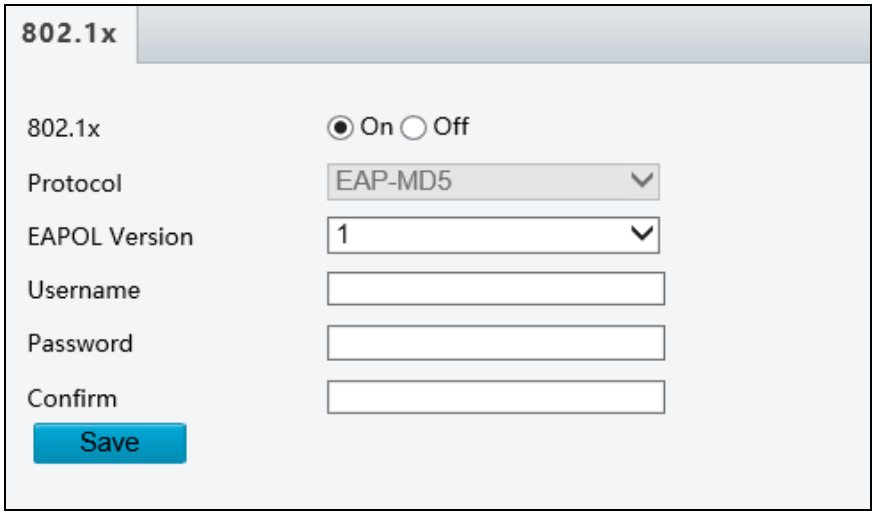


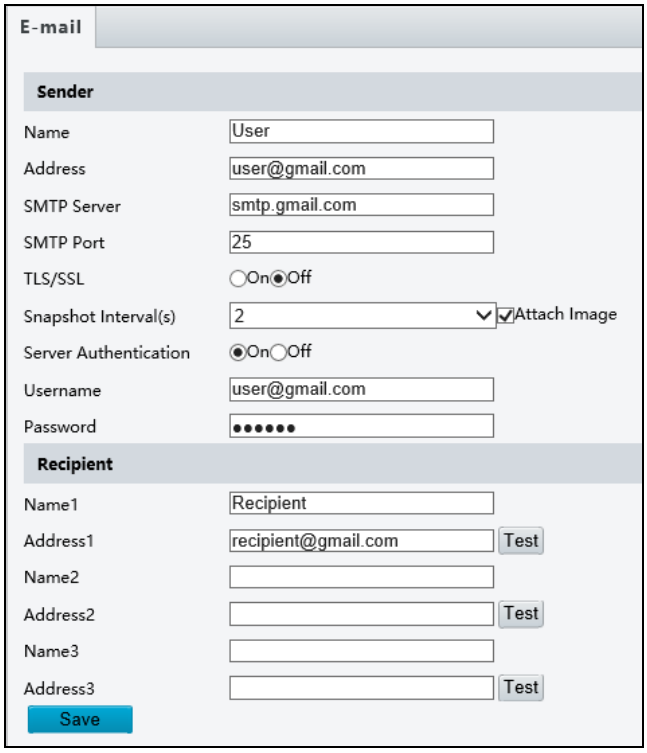
Figure 3-13

1. Enable **IEEE 802.1x**.
2. Type the **Username** and **Password**. Type the password again for confirmation.
3. Click **Save**.

Note: To use this function, your network environment needs to support **802.1x**.

4.2.7 E-mail

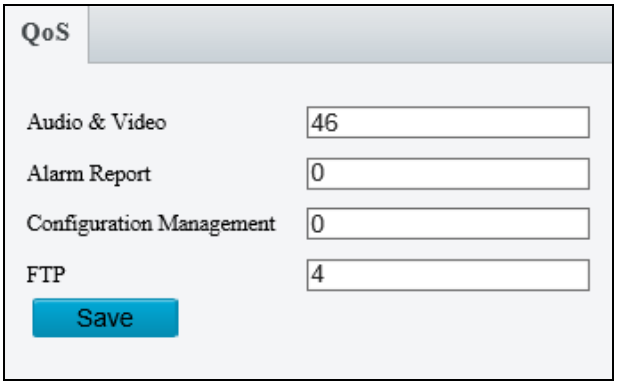
After configuring E-mail settings, you will be able to send messages to specified E-mail addresses when access events occur.



1. Type the **Name** and **Address** of the sender.
2. Type the **SMTP Server**.
3. Type the **SMTP Port** number. Default value is 25.
4. To send the e-mail through TLS / SSL encryption, enable **TLS/SSL**.
5. Enable **Attach Image** to include 2 instant snapshots as attachment in the e-mail according to the **Snapshot Interval** specified.
6. If the SMTP Server needs authentication, enable **Server Authentication** and type a valid username and password to log in the SMTP server.
7. Type the name(s) and e-mail address(s) of the **Recipient**(s).
8. Click **Save**.

4.2.8 QoS

QoS is the prioritization of network traffic used to ensure resource reservation under abundant data flow.



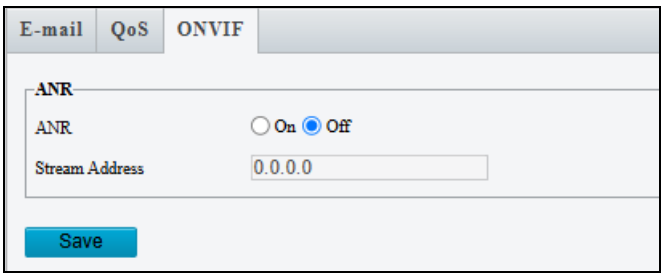
- **Audio & Video**: Optionally modify the priority of value of Audio & Video. The higher the value, the higher the priority.
- **Alarm Report**: Optionally modify the priority of value for Alarm Report. The higher the value, the higher the priority.
- **Configuration Management**: Optionally modify the priority for Configuration Manager. The higher the value, the higher the priority.
- **FTP**: Optionally modify the priority of value for FTP. The higher the value, the higher the priority.

Click **Save** the apply the QoS settings configured.

4.2.9 ONVIF

****The ONVIF function is not supported by GV-IS1320.****

If the network connection between the camera and the peer (stream receiving address) is disconnected, the camera can store videos according to the configured recording schedule; and after the network connection is restored, the camera can retransfer the video stored during the interruption period to the stream receiving address on the request of the peer.



4.2.10 Platform Access

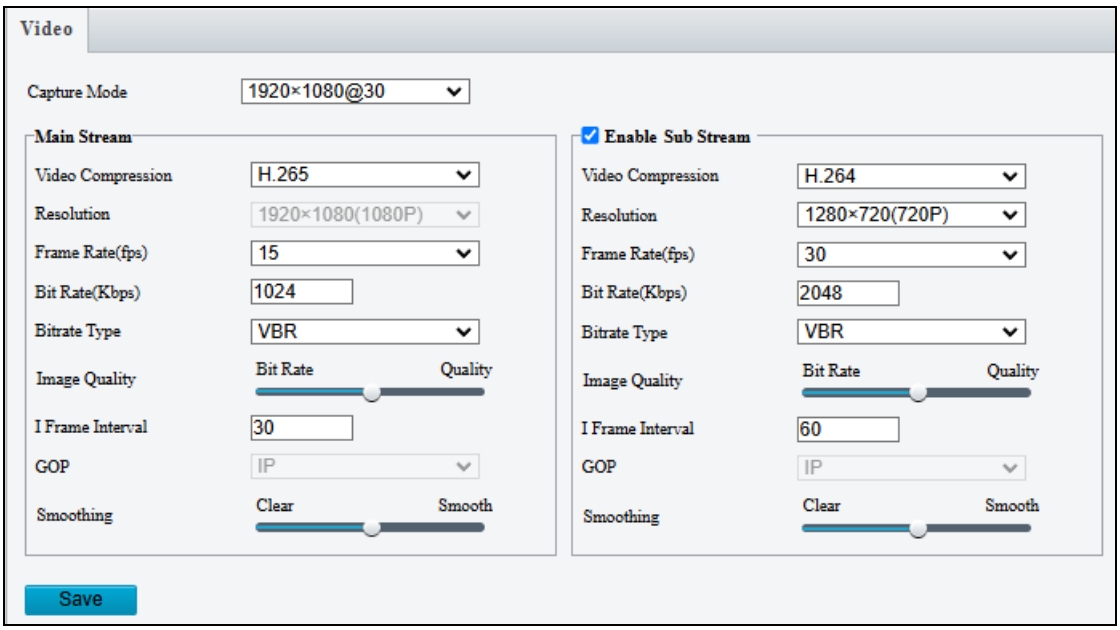
For the Platform Access settings, see *Chapter 3 GV-ASManager Integration*.

4.3 Video & Audio

Under the **Video & Audio**, you can configure video streams and the audio input.

4.3.1 Video

You can set video parameters for the controller's camera. You may also enable/disable the sub-stream as needed.



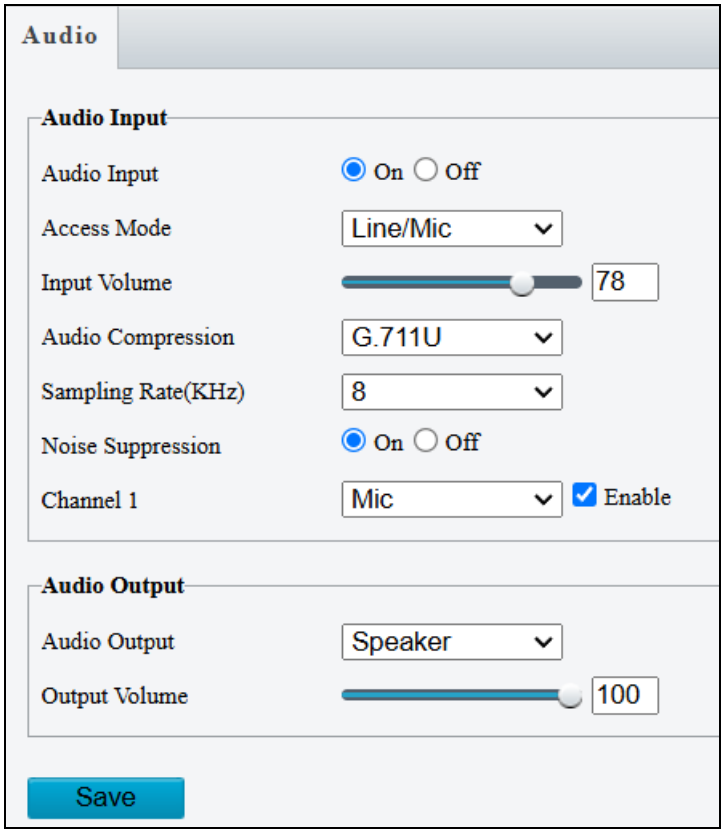
- **Capture Mode:** Set the resolution of Main Stream and the maximum frame rate allowed.

The following options are available for the main and sub streams.

- **Video Compression:** Set the codec type to **H.265, H.264** or **MJPEG**.
- **Resolution**: Set the resolution for sub stream.
- **Frame Rate**: Select a frame rate for encoding images. The unit is frame per second.
- **Bit Rate**: Set the value between **128~16384**.
- **Bitrate Type**:
  - ⊙ **CBR**: The camera transmits data at a constant data rate by varying the quality of the video stream.
  - ⊙ **VBR**: The quality of the video stream is kept as constant as possible at the cost of a varying bitrate.
- **Image Quality**: When VBR is selected for the encoding mode, you can move the slider to adjust the desired quality level the for images. Moving the slider toward **Bit Rate** decreases the bit rate and may affect image quality. Moving the slider toward **Quality** increases the bit rate and improves image quality.
- **I Frame Interval:** Set the number of frames, from 5 to 250, between each I frame (key frame). This option is only available when H.265 or H.264 is selected as the codec.
- **GOP:** The GOP is IP by default.
- **Smoothing**: Set the extent of smoothing. Choosing **Clear** means disabling **Smoothing**. Moving the slider toward **Smooth** increases the level of smoothing but will affect image quality.

4.3.2 Audio

You can configure the audio settings for the controller's camera.



- **Audio Input**: Select **On** to enable audio input.
- **Input Volume**: Set the audio signal amplification for sampling. The greater the volume, the greater amplification.
- **Audio Compression:** Select an audio codec.
- **Noise Suppression**: Select **On** to reduce audio noise.
- **Channel 1**: Click **Enable** to enable audio in through the camera's built-in microphone.
- **Audio Output:** Select the source of audio output.
- **Output Volume:** Set the volume for audio output.

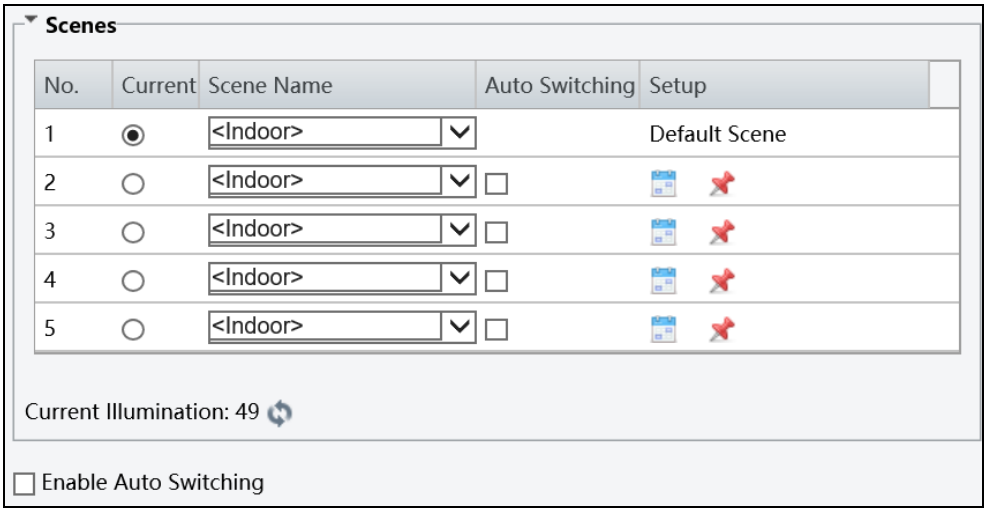
4.4 Image

Under the **Image**, you can configure image settings, on-screen display and privacy mask.

4.4.1 Image

This page allows you to adjust image settings such as brightness, exposure, IR illumination, white balance, and focus.

[Scene]

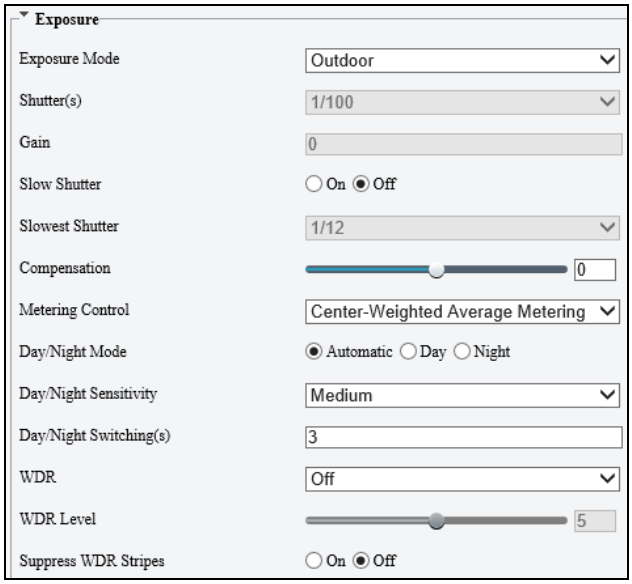


- **Current**: Indicate the scene that is being used.
- **Scene Name**: When you select a scene, the corresponding image parameters are displayed. You can adjust the image settings according to actual needs.
- **Auto Switching**: Indicates whether to add a scene to the auto-switching list.
- **Setup**:
  - **Click** to set a schedule for illumination.
  - **Click** to set a scene as the default scene.
- **Enable Auto Switching**: Allow the camera to switch to the scene automatically when the condition for switching to a non-default scene is met.

[Image Enhancement]

- **Brightness:** Adjust the degree of brightness of the image.
- **Saturation:** Adjust the amount of hue contained in a color.
- **Contrast:** Set the degree of difference between the blackest pixel and the whitest pixel.
- **Sharpness:** Adjust the sharpness of the image.
- **2D / 3D Noise Reduction**: Reduce the noise of the image.
- **Image Rotation**: Change the rotation of the image by selecting **Normal**, **Flip Vertical**, **Flip Horizontal**, **180°**, **90° Clockwise**, or **90° Anti-clockwise**.

[Exposure]



- **Exposure Mode:** Select the correct exposure mode to achieve the desired exposure effect. The default setting is Outdoor.
  - **Low Motion Blur:** Improve image quality by reducing motion blur in low light conditions.

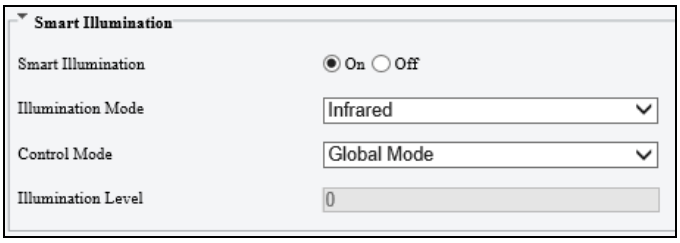
- **Shutter(s):** The length of time that allows light to enter into the lens. You can set a shutter speed when **Exposure Mode** is set to **Manual** / **Custom**.

Note: If **Slow Shutter** is set to **Off**, the reciprocal of the shutter speed must be greater than the frame rate.

- **Gain:** Control image signals so that the camera outputs standard video signals according to the light condition. You can set this parameter only when **Exposure Mode** is set to **Manual** / **Custom**.
- **Slow Shutter:** Improve image brightness in low light conditions.
- **Slowest Shutter:** Set the slowest shutter speed that the camera can use during exposure.
- **Compensation:** Adjust the compensation value as required to achieve the desired effects. You can set this parameter only when **Exposure Mode** is not set to **Manual** / **Custom**.
- **Linear Stripe Suppression:** For indoor use only. Reduce stripes by limiting shutter frequency. You can only enable either Line Strip Suppression or WDR, but not both at the same time.
- **Metering Control**: Set the way the camera measures the intensity of light. You can only set this parameter when **Exposure Mode** is not set to **Manual** /**Custom**.
  - **Center-Weighted Average Metering:** Measure light mainly in the central part of the images.
  - **Evaluative Metering (BLC):** Measure light in the customized area of the images.
  - **Face Metering**: Measure light where facial recognition is established.
  - **Spot Metering**: Measure light spot(s) in the specified area of the images.
- **Day/Night Mode:** Select **Automatic** for automatic switch between day mode and night mode depending on the amount of light detected. Select **Night** to produce high-quality black and white images using the existing light. Select **Day** to produce high-quality color images using the existing light. Select **Input Boolean** to trigger an output device and switch on night mode upon common alarm / AI event alarm (only applicable to GV-EBFC5800 / GV-TDR8802).
- **Day/Night Sensitivity:** Set the light threshold for switching between day mode and night mode. The higher the sensitivity, the more easily the camera is to switch from day mode to night mode and vice versa.

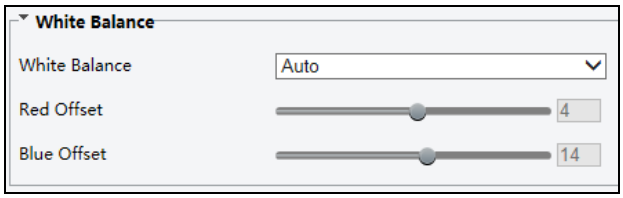
- **Day/Night Switching(s):** Set the length of time before the camera switches between day mode and night mode after the conditions for switching are met.
- **WDR:** Enable WDR to distinguish the bright and dark areas in the same image.
- **WDR Level:** After enabling the WDR function, you can improve the image by adjusting the WDR level.
- **Suppress WDR Stripes**: Enable Suppress WDR Stripes to automatically adjust shutter frequency based on the frequency of light measured.

[Smart Illumination]



- **Smart Illumination:** Select **On** to adjust the IR illumination settings.
- **Illumination Mode:** Set to **Infrared** by default.
- **Control Mode:**
  - ⊙ **Global Mode**: Adjust IR illumination and exposure to achieve balanced image effects. Some areas might be overexposed if you select this option. This option is recommended if monitored range and image brightness are your first priority.
  - ⊙ **Overexposure Restrain**: Adjust IR illumination and exposure to avoid regional overexposure. Some areas might be dark if you select this option. This option is recommended if clarity of the central part of the image and overexposure control are your first priority.
  - ⊙ **Manual / Custom Level:** Allow you to manually control the intensity of IR illumination.
- **Illumination Level:** When **Control Model** is set to **Manual** / **Custom Level,** you can set the intensity level of the IR light. The greater the value, the higher the intensity. 0 means that the IR light is turned off.

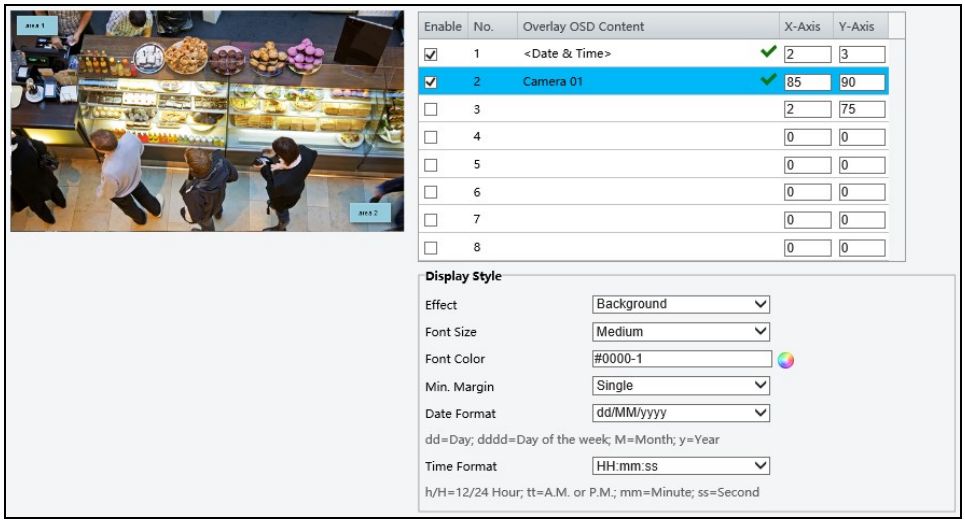
[White Balance]



- **White Balance**: Adjust the red or blue offset of the image.
  - **Auto / Auto 2:** Adjust the red and blue offset automatically according to the light condition (the color tends to be blue). Select **Auto 2** if the images remain unnaturally red or blue.
  - **Outdoor:** It is recommended for outdoor scenes with a wide range of color temperature variation.
  - **Fine Tune:** Allow you to adjust the red and blue offset manually.
  - **Sodium Lamp:** Adjust the red and blue offset automatically according to the light condition (the color tends to be red).
  - **Locked:** Lock the current color temperature settings without adjustment.

4.4.2 OSD

The On Screen Display (OSD) is the text displayed on the screen of video images and may include the date and time and other customized contents.

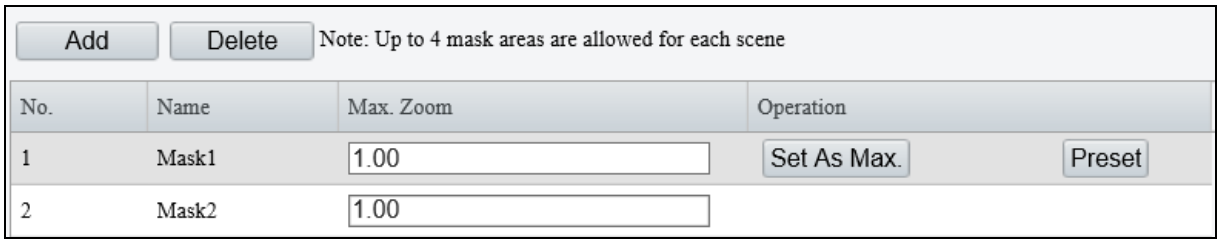


1. To show content on the screen, enable an area number and click the **Overlay OSD Content** field.
2. Drag the Area # box to adjust the position on the live view or specify the coordinates in the **X-Axis** / **Y-Axis** column.
3. Under **Display Style**, customize the text style, date/time format, and use **Min. Margin** to adjust the minimum margin between the OSD and the image's border.

After you have set the position and OSD content, the ✔ symbol appears in the **Status** column, which means that the OSD is set successfully.

4.4.3 Privacy Mask

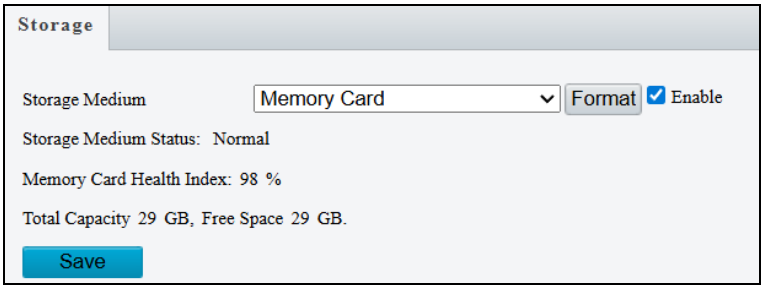
On certain occasions, you may need to set a mask area to block out parts of the camera image to protect privacy. Up to 4 privacy masks are supported.



1. Click Add to place a privacy mask on the live view.
2. Drag the **Mask** box to the intended position and adjust the size of the box. Alternatively, you can also use the mouse to draw a box on the area you want to mask.
3. Repeat steps 1 and 2 to add more masks.
4. To delete a mask, select the desired mask and click Delete.

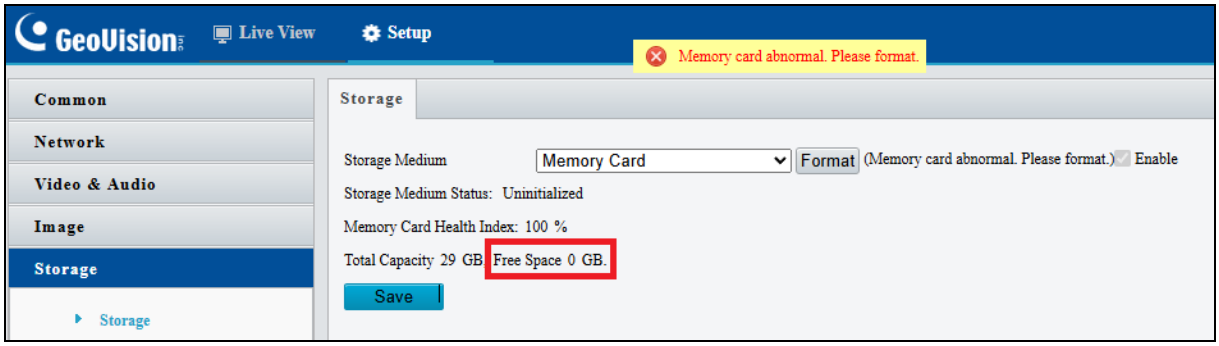
4.5 Storage

The Storage feature allows you to format the memory card and view its status. The memory card is used to store up to 100,000 card records, along with access logs and snapshots when the controller is disconnected from the GV-ASManager access control system.



- **Storage Medium**: Click **Format** to format the memory card and select **Enable** to activate the memory card.

Note: The microSD card is pre-formatted and inserted before shipping. For first-time users, ensure that the memory card is functioning properly. Check whether Free Space displays a valid volume (in GB). If **Free Space shows 0 GB**, format the card before use.



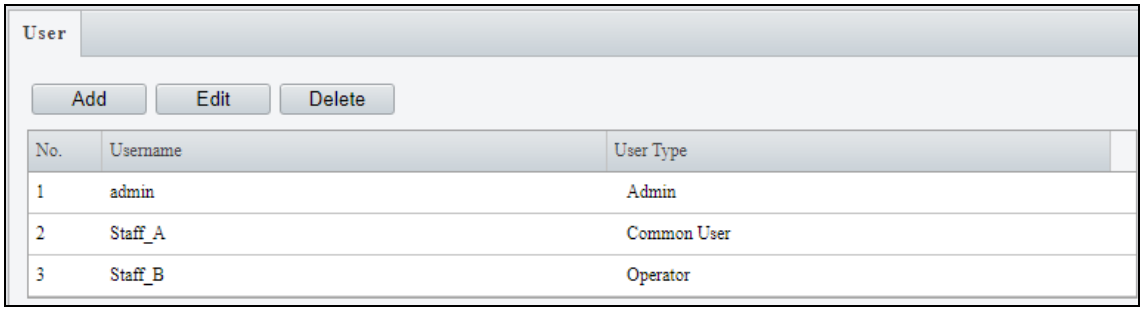
4.6 Security

Under the **Security**, you can create user accounts and configure network security settings.

4.6.1 User

There are three types of accounts: **Administrator**, **Common User**, and **Operator**.

- **Administrator:** Admin has full access to all settings. There is only one administrator account.
- **Common User:** Common User can only play live and recorded videos. Up to 31 common users are allowed in the system.
- **Operator:** Operator has access to the following features: live view, snapshots, two-way audio, logs. Additionally, the operator is granted configuration permissions under Parameter Configuration, Event, Subscription, Maintenance, and Upgrade.



Note:

1. The administrator account's username is fixed and cannot be changed.
2. If a user's username or password is modified while they are logged in, the system will force a logout. The user must then log in again using the updated credentials.
3. The playback function is not supported by GV-IS1320.

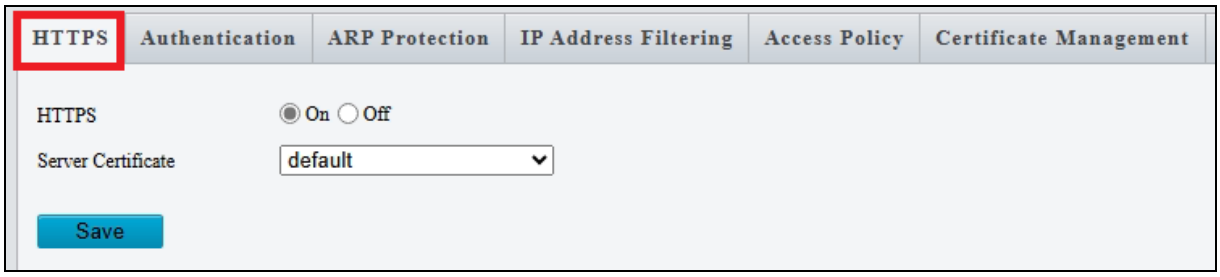
4.6.2 Network Security

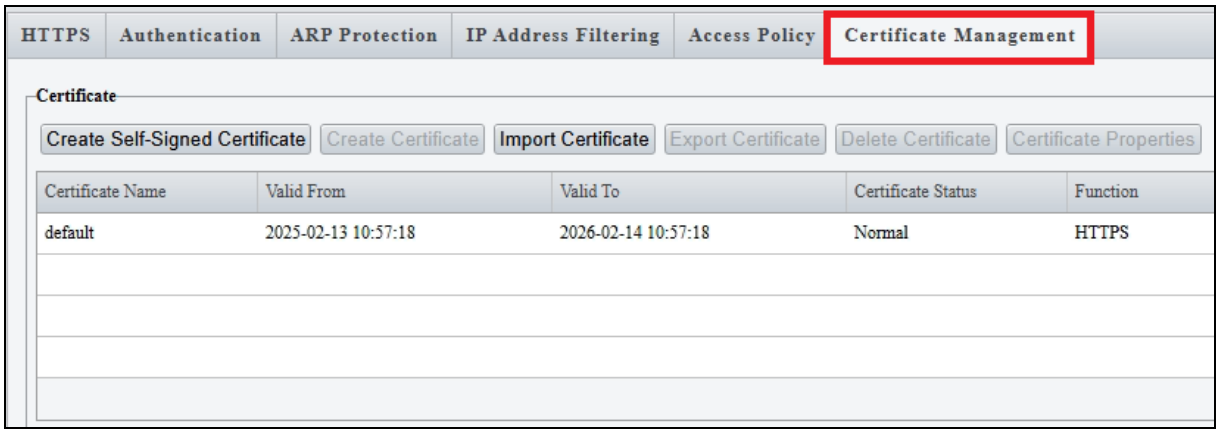
There are six types of network security settings: **HTTPS**, **Authentication**, **ARP Protection, IP Address Filtering**, **Access Policy**, and **Certification Management**.

HTTPS

You can enable **HTTPS (Hypertext Transfer Protocol Secure)** to access the camera through a secure connection.

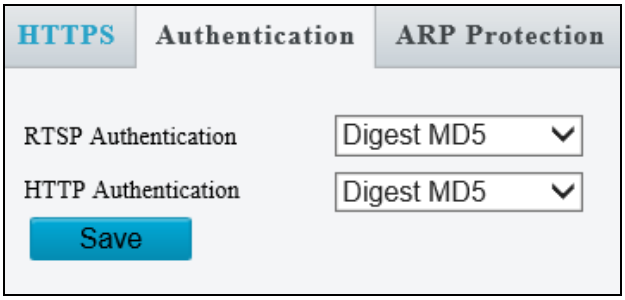
Click **On** to use the default certificate, or go to **Certification Management** to import or create your own certificate for upload.





Authentication

RTSP (Real Time Streaming Protocol) and HTTP (Hypertext Transfer Protocol) are different application layer protocols for transmitting video. Set the **Authentication** mode for RTSP streaming or HTTP streaming.



[RTSP Command]

rtsp://<ID>:<Password>@<IP>/<media#>/<video#>

<IP> specifies the IP address of GV-IS1320.

<media#> specifies the channel number.

<video#> specifies the main stream (1) or sub stream (2).

For example, to view the channel No. 2 and main stream of GV-IS1320, the command is as follows: rtsp://admin:admin@192.168.3.111/media1/video1

[HTTP Command]

http://<IP of GV-IS1320>/images/snapshot.jpg

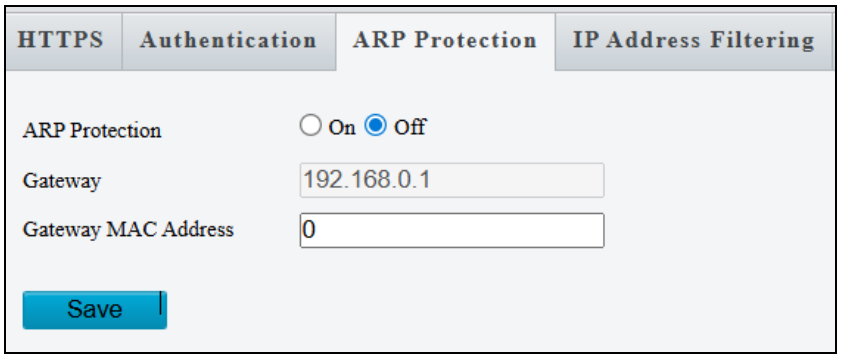
For example, http://192.168.0.10/images/snapshot.jpg

When the Windows Security dialog box appears, type the GV-IS1320's **user name** and **password** to receive the captured snapshot.

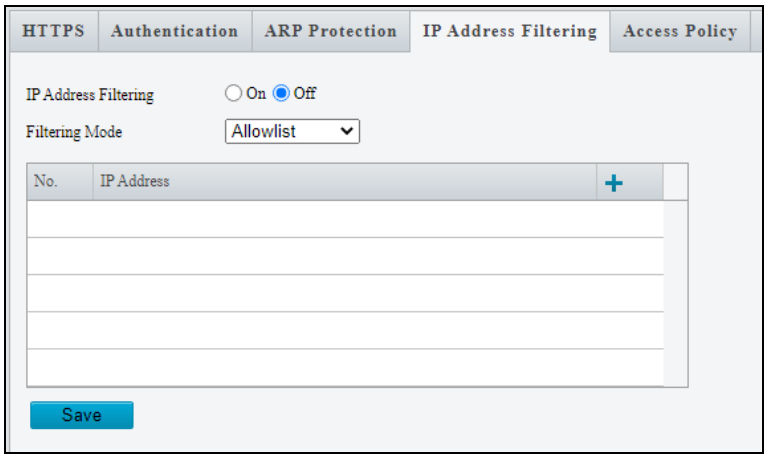
Note: Only VLC and QuickTime players are supported for video streaming via RTSP protocol.

ARP Protection

This function can protect the controller from ARP attacks. When the controller visits an IP address of another network segment via a gateway, it can only communicate with the MAC address binding to the gateway address in the same segment.



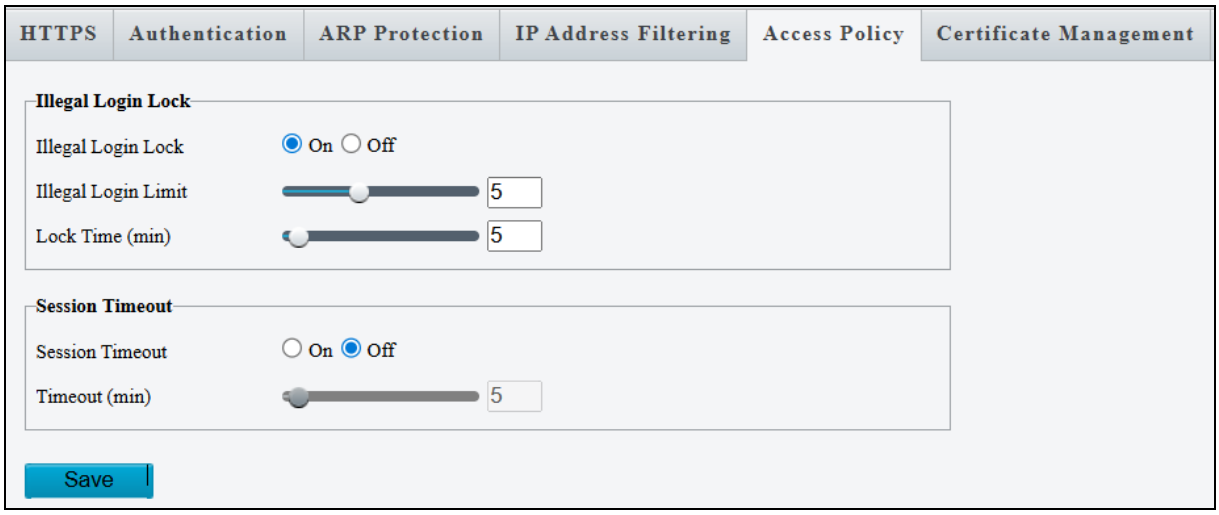
IP Address Filtering



1. Select **On** to enable the IP address filtering.
2. Choose a Filtering Mode: **Allowlist** or **Deny Access**.
3. Click + to add an IP address.
4. Click 🗑 to delete an IP address.
5. Click **Save**.

Access Policy

Access Policy evaluates strength of account passwords during login to enhance system security.



[Illegal Login Lock]

1. Select **On** to enable account lockout after repeated login fails.
2. Specify **Illegal Login Limit** and **Lock Time** to activate the lockout when reaching the number of failed login attempts and for the lockout duration.

[Session Timeout]

1. Select **On** to enable automatic logout.
2. Specify the **Timeout** duration for user inactivity before the controller logs out the session automatically.

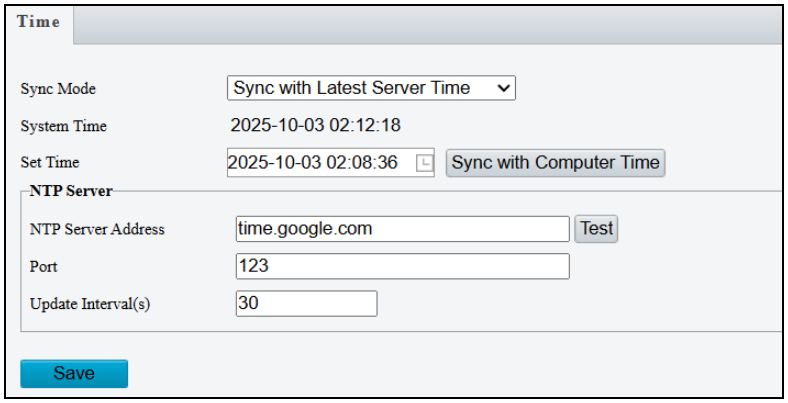
4.7 System

Under the **System**, you can:

- Configure the controller's date and time
- Set parameters for door locks, alarms, and output devices
- Manage extra reader connections
- Perform firmware updates
- View and export the system log

4.7.1 Time

You can use the following methods to adjust the controller's system time.



[Sync Mode]

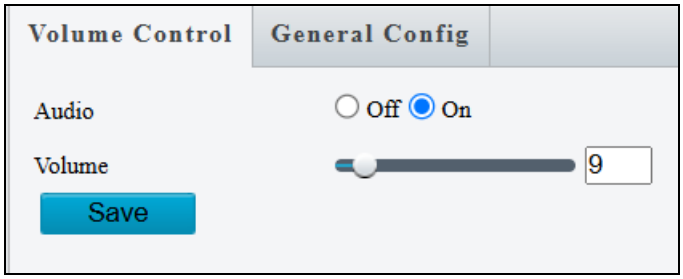
- **Sync with System Configuration**: Manually set up a time and date.
- **Sync with NTP Server**: Synchronize with a Network Time Protocol (NTP) server. Enter the server's IP address or domain name, and specify the update interval. **For GV-IS1320 users, it is recommended to synchronize time and date settings using a NTP server.**
- **Sync with ONVIF Access Time**: Synchronize with the Management Server using the ONVIF protocol.
- **Sync with Latest Server Time**: Synchronize with the latest updated time, either via ONVIF or the Web interface.

In the Sync with System Configuration and Sync with Latest Server Time modes, the **Sync with Computer Time** button becomes available. Clicking this button will immediately synchronize the controller's time with your local computer time.

4.7.2 Ports & Devices

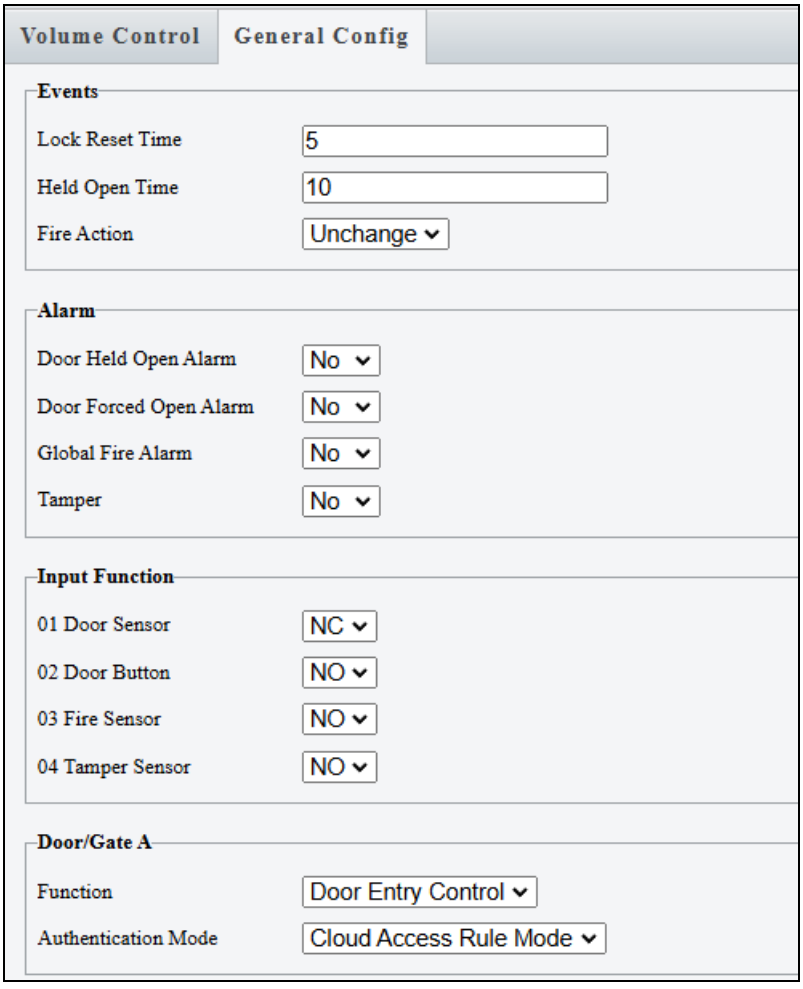
Volume Control

This page allows you to adjust the volume of the controller doorbell.



General Config

This page allows you to configure the door lock, alarms, input devices and connected readers.



[Events]

- **Lock Reset Time:** Sets the duration (1 to 600 sec.) that a door remains open after which it will automatically be re-locked.
- **Held Open Time:** Sets the maximum time (5 to 9999 sec.) that a door can be held open before an alarm is generated.
- **Fire Action:** Sets the door behavior during a fire condition: **Lock**, **Unlock**, or **Unchanged** (remains the door's current state).

[Alarm]

Select **Yes** to activate or **No** to disable the following alarm functions:

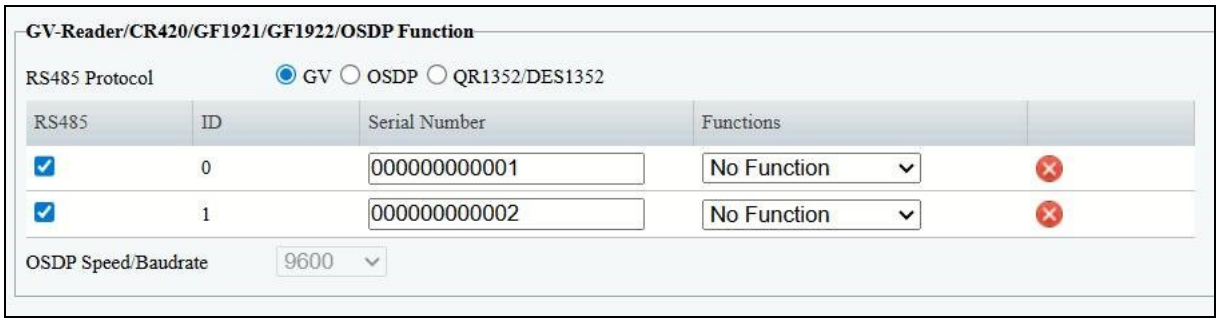
- **Door Held Open Alarm:** The alarm activates whenever the door is held open beyond the configured time threshold.
- **Door Forced Open Alarm:** The alarm activates whenever the door is opened by force, bypassing normal access control.
- **Global Fire Alarm:** The alarm activates whenever fire is detected.
- **Tamper:** The alarm activates whenever the temper sensor is triggered. The tamper sensor must be installed separately and the triggering conditions depend on the type of sensor used, such as the controller's cabinet being opened.

[Input Functions]

The controller supports 4 types of input devices including Door Sensor, Door Button, Fire Sensor and Tamper Sensor. Set the input status to either NO (Normally Open) or NC (Normally Close).

[GV-Reader/OSDP Function]

GV-IS1320 supports up to two readers via RS-485 or OSDP protocols. Supported models include GeoVision RS-485 readers, OSDP-compliant readers, and the GV-QR1352 / DES1352. Note that mixing different types of readers is not supported.

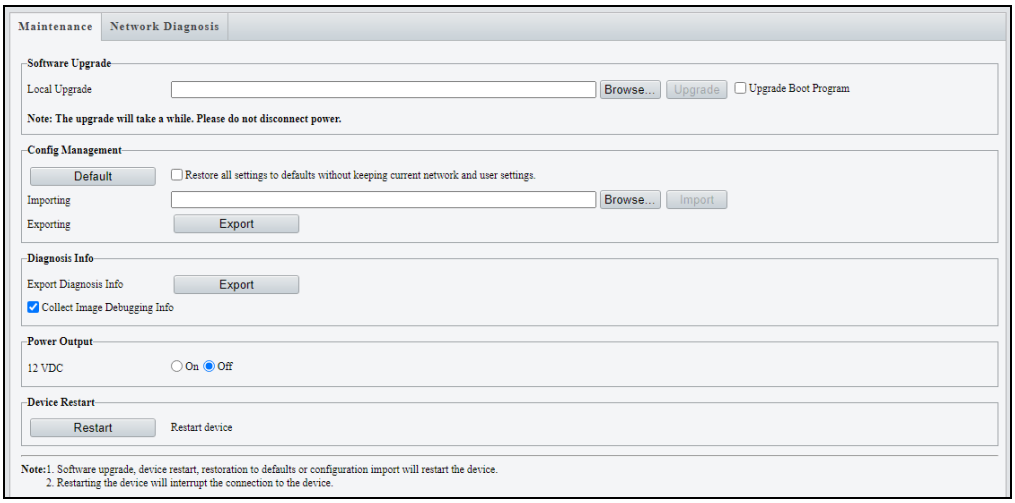


To connect a reader:

1. Select **GV**, **OSDP**, or **QR1352/DES1352.**
2. Ensure the **RS485** checkbox is selected.
3. Under Functions, define whether the reader is installed for exit or entry.

4.7.3 Maintenance

This page allows you to upgrade firmware, restart the controller, and backup/import controller configurations.



[Software Upgrade]

For details on firmware upgrade, see *Chapter 5 Firmware Upgrade.*

[Config Management]

Export the controller's current configurations and save them to a PC or an external storage device. You can also quickly restore configurations by importing backup configurations from your PC or external storage device back to the controller.

Note:

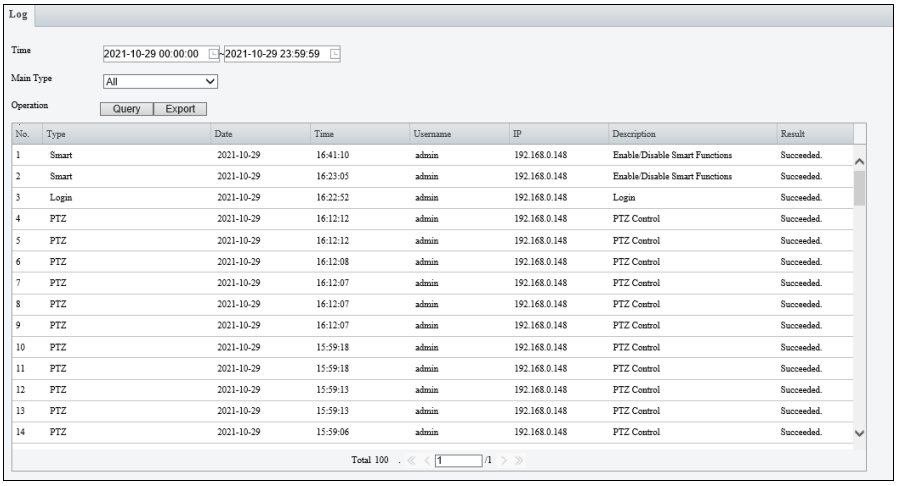
1. When exporting the configuration file, you will be prompted to set a password, which will be later requested for importing the file.
2. To ensure a successful configuration import, avoid using the exported file from a different firmware version and model.

[Diagnosis Info] Includes logs and system configurations. Click **Browse** to select a destination folder on your PC and then click **Export** to save diagnostic information.

[Device Restart] Click **Restart** to restart the controller after you confirm this operation. You can also set up a day and time for automatic restart.

4.7.4 Log

Log allows you to inquire configurations made on the controller and export the information to the local PC.

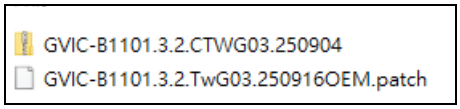


Chapter 5 Firmware Upgrade

GeoVision updates the GV-IS1320 firmware and publishes the latest version on the official website. Firmware can be loaded into the controller using its **Web interface** or **GV-IP Device Utility**.

After unzipping the downloaded firmware file, you will find the two sub-files, as illustrated below.

- A. **zip** file for the camera firmware
- A .**patch** file for the controller firmware



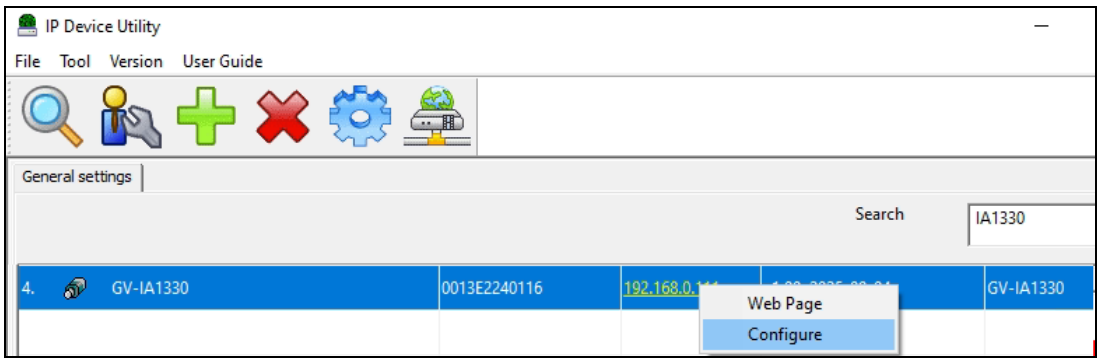
Through the Web interface:

1. On the controller's Web interface, select **System** > **Maintenance**.
2. To upgrade the camera firmware, click **Browse** and select the **.zip** file.
3. After upgrade is complete, the device will automatically restart. Re-log in the controller's Web interface to continue.
4. To upgrade the controller's firmware, go to the Maintenance page, click **Browser** and select the **.patch** file.

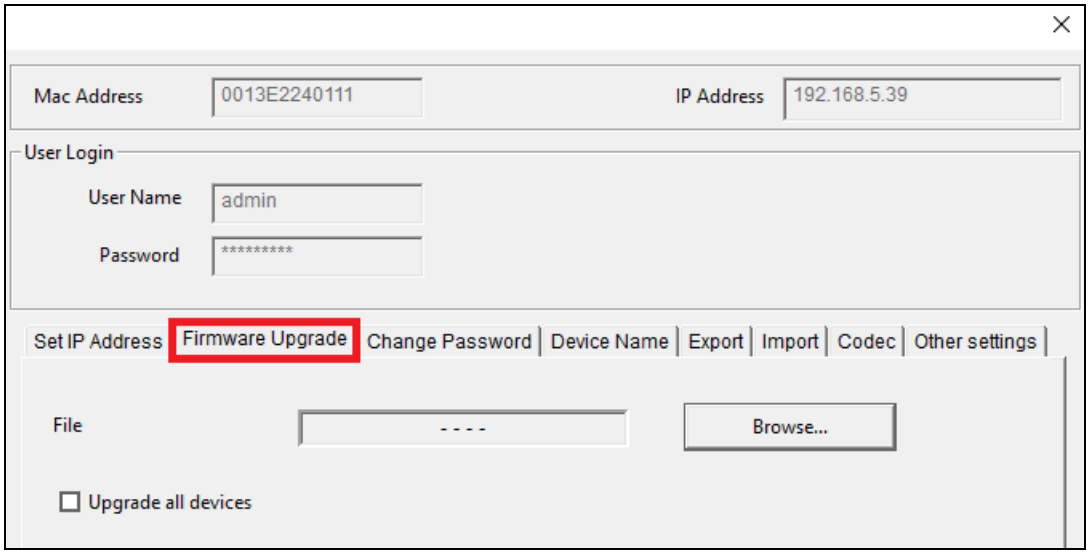
Through GV-IP Device Utility:

The utility can be downloaded from our website.

1. Open the utility. It will automatically detect the devices on the same LAN.
2. Select the GV-IS1320 on the list, and select **Configure**.



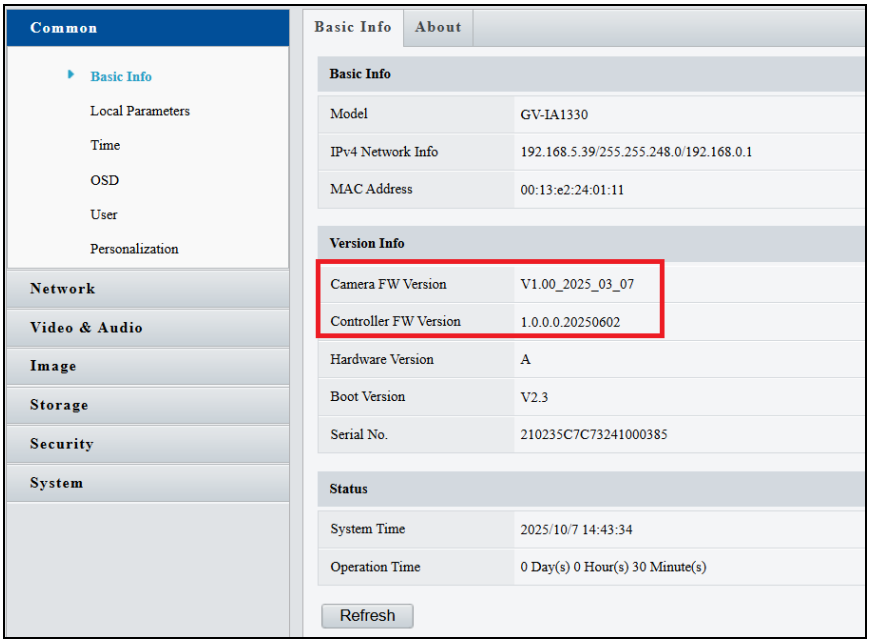
3. Select **Firmware Upgrade**.



4. To upgrade the camera firmware, click **Browse** to locate the .zip file. Click **Upgrade**.
5. After the upgrade is complete, the device will automatically restart. Go to the **Firmware Upgrade** dialog box again.
6. To upgrade the controller firmware, click **Browse** and select the .patch file. Click **Upgrade**.

To verify the firmware upgrade:

Go the controller's Web interface, and select **Common** > **Basic Info**. You can find the current camera firmware version and controller firmware version, as shown below:



Appendix

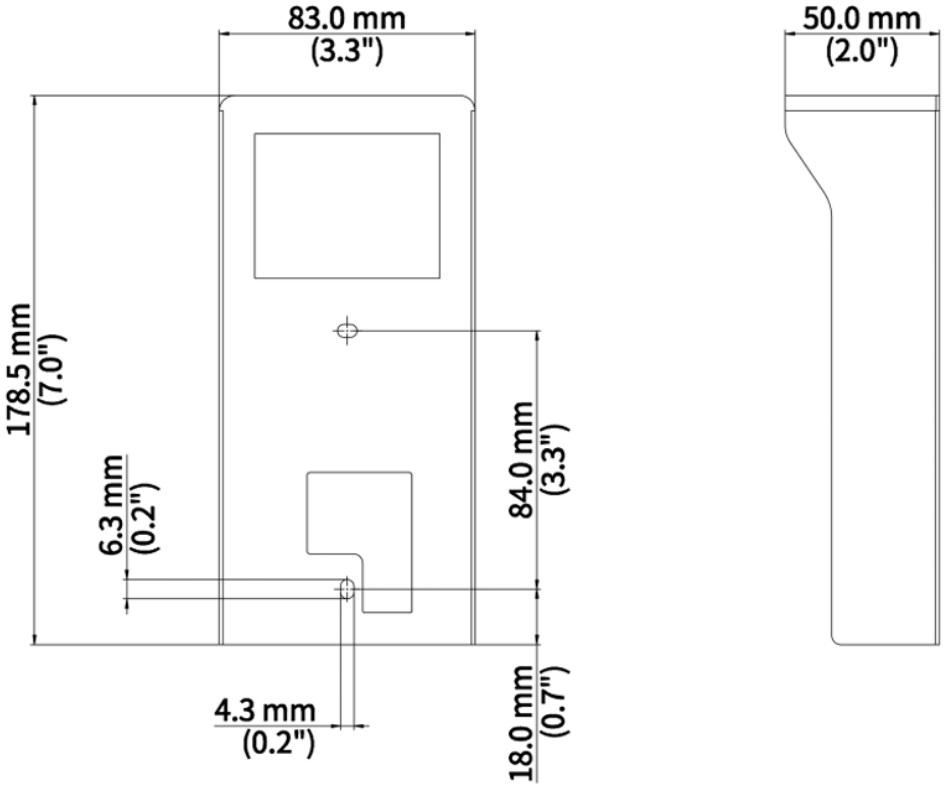
Optional Installation-GV-Mount929

You can optionally purchase the **GV-Mount929 Sunshield Wall Mount** for wall installation.

GV-Mount929 Packing List

1. Sunshield Wall Mount

Dimensions



Installation

To install the **Sunshield Wall Mount**, follow the steps below.

1. Keep the two snaps on the bracket facing upward and the screw hole at the bottom of the bracket facing outward.
2. Tighten the bracket and sunshield.
   - With junction box: Align the screw holes of the bracket and sunshield to those of the junction box, insert two countersunk screws, and tighten them.
   - Without junction box: Insert two M3.5 x 25mm countersunk self-tapping screws into the expansion bolts to fix the bracket and sunshield.