GeoVision inc
The Vision of Security

Quick Start Guide

GV-IP Thermal Camera

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

TMEB-QG-D

Every effort has been made to ensure that the information in this manual is accurate. GeoVision, Inc. makes no expressed or implied warranty of any kind and assumes no responsibility for errors or omissions. No liability is assumed for incidental or consequential damages arising from the use of the information or products contained herein. Features and specifications are subject to change without notice.

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

[Warranty]

[Technical Support Policy]

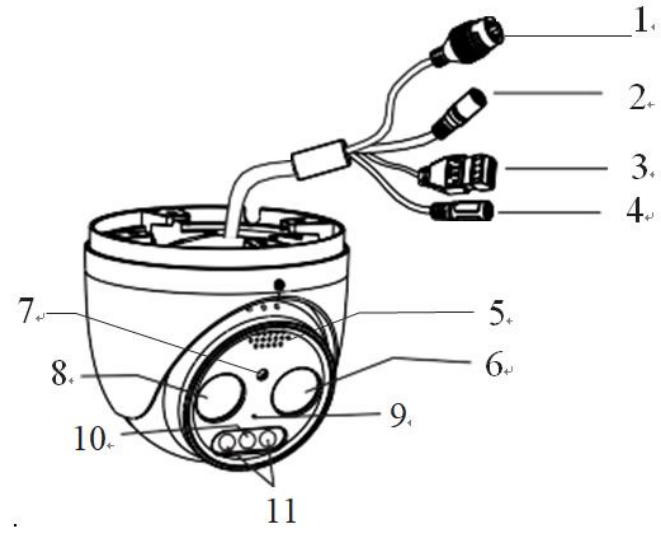
Warning and Caution

- Please read this instruction carefully before operating the unit and keep it for further reference.
- All the examples and pictures used here are for reference only.
- The contents of this manual are subject to change without notice.
- If the product does not work properly, please contact your dealer or the nearest service center. Never attempt to disassemble the camera yourself. (We shall not be responsible for any problems caused by unauthorized repair or maintenance.)
- Do not allow water or liquid intrusion into the camera.
- In the use of the product, you must be strict compliance with the electrical safety regulations of the nation and region. When the product is mounted on wall or ceiling, the device shall be firmly fixed.
- Do not use camera beyond specified voltage range.
- Do not drop the camera or subject it to physical shock.
- The product must be grounded to reduce the risk of electric shock.
- Avoid touching the camera lens.
- If cleaning is necessary, please use clean cloth to wipe it gently.
- Do not aim the camera at the sun or extra bright place.
- Do not place the camera in extremely hot, cold (the operating temperature shall be -30°C ~ 60 °C (-22 °F ~ 140 °F), dusty or damp locations, and do not expose it to high electromagnetic radiation.
- To avoid heat accumulation, good ventilation is required for operating environment.

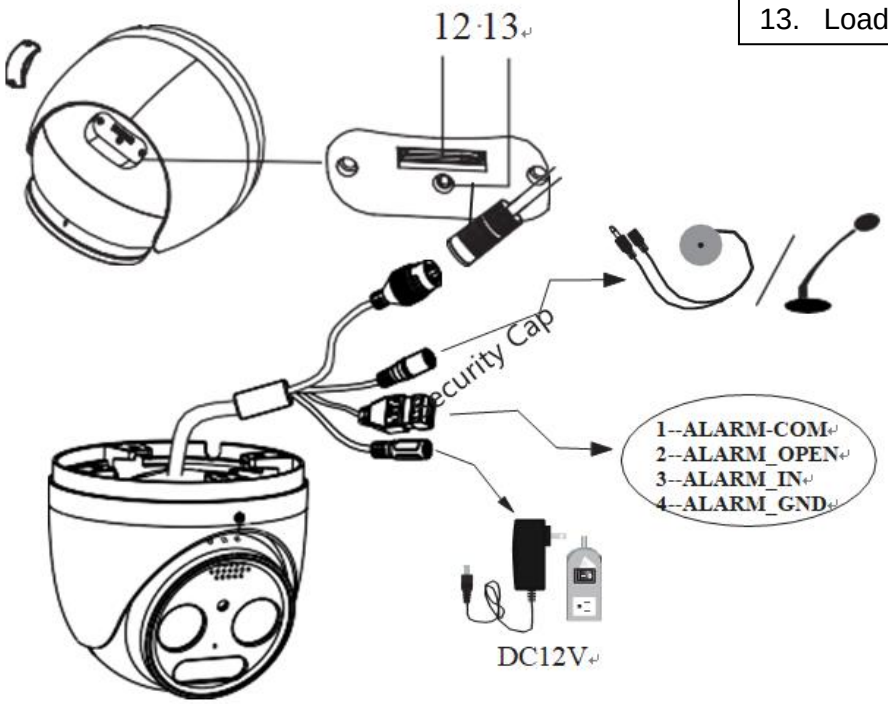
Contents

Chapter 1 Overview

1.1 Product Overview



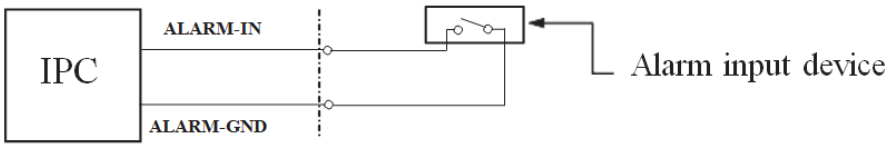
1. Ethernet connector
2. Audio input connector (3.5mm)
3. Alarm input/output
4. Power connector
5. Speaker
6. Thermal lens
7. Light sensor
8. Optical lens
9. Microphone
10. Flashing light
11. IR LED
12. microSD card slot
13. Load Default



Note: The camera can be powered by DC 12V / PoE power supply. If the PoE switch is used to power the camera, DC12V power supply is not required.

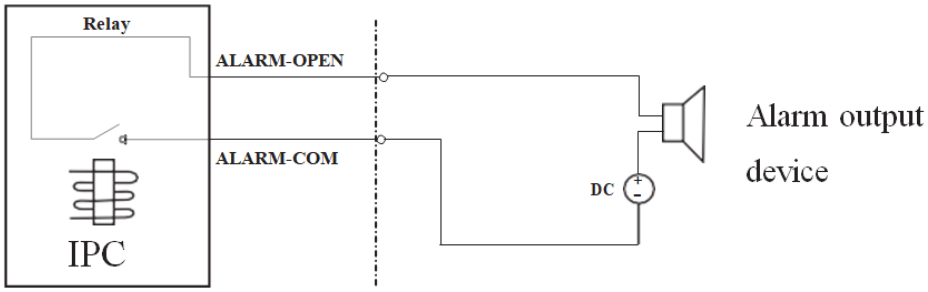
1.2 Connecting I/O Devices

Connecting alarm input



Connecting alarm output

Max. load of the alarm output: 30VDC, 1A

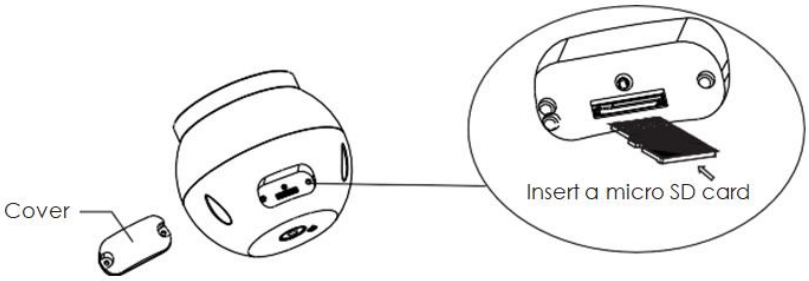


Chapter 2 Installation

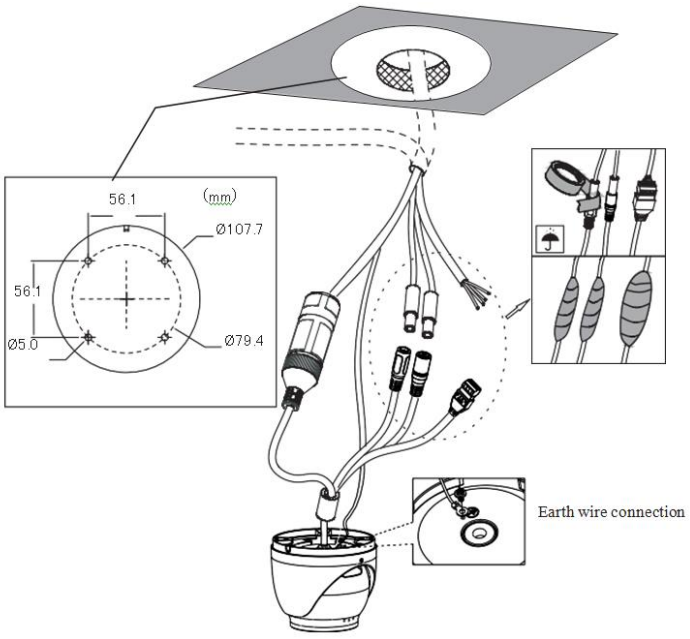
Please make sure that the wall or ceiling is strong enough to withstand 3 times the weight of the camera. And install and use the camera in the dry environment.

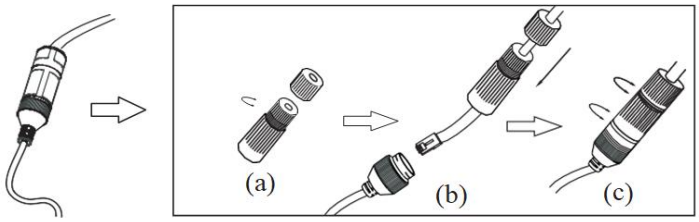
1. Loosen the fixed screw to disassemble the camera.

2. Unscrew the cover of the dome and then insert a micro SD card. After that, install back the cover and make sure the cover is installed firmly.



3. Drill the screw holes and the cable hole on the ceiling according to the drill template. Then route and connect the cables.



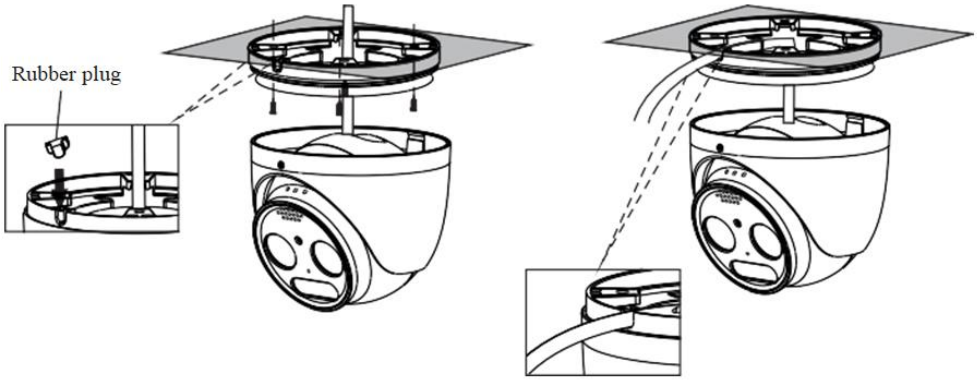


A. Loosen the nut from the main element.

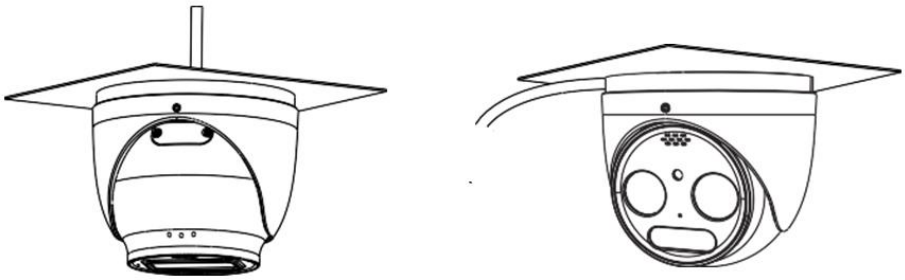
B. Run the network cable (without RJ 45 connector) through the both elements. Then crimp the cable with RJ 45 connector.

C. Connect the cable to the hermetic connector. Then tighten the nut and the main cover.

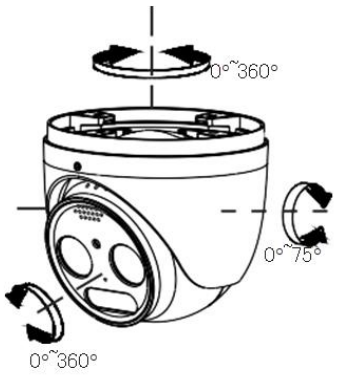
4. Secure the mounting base to the ceiling or wall with the screws provided.



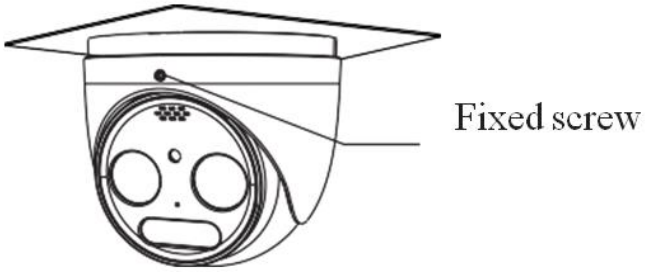
5. Install the dome and enclosure to the mounting base.



6. Adjust the dome to obtain an optimum view angle.



7. Fix the camera with the fixed screw.



Chapter 3 Accessing the Network Camera

3.1 Looking Up the Dynamic IP Address

By default, when the camera is connected to a LAN with the DHCP server, it is automatically assigned with a dynamic IP address. Follow the steps below to look up its IP address.

Note:

1. By default, the Administrator's username is **admin** and cannot be modified.
2. This function is only applicable on GV-IP Device Utility V8.9.8 or later.

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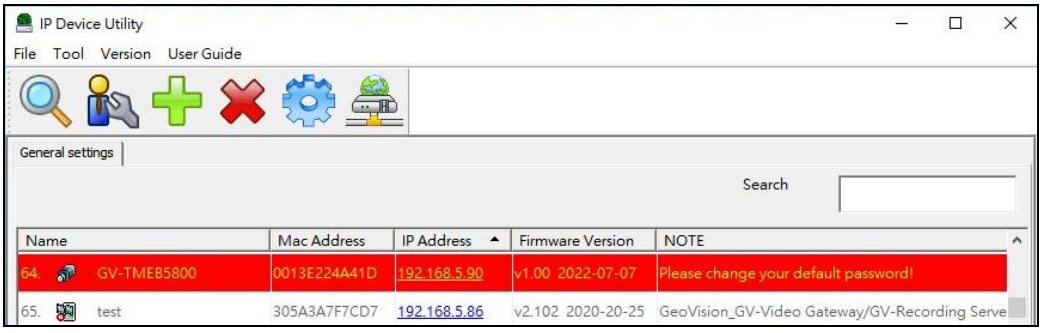
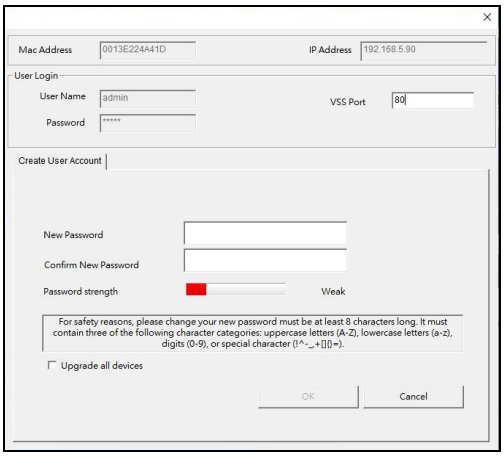
1. Make sure the PC used to configure the IP address is under the same LAN as the camera. Download and install **GV-IP Device Utility** from the company website.
2. On the GV-IP Utility window, click the button to search for the IP devices connected in the same LAN. Click the **Name** or **Mac Address** column to sort.
3. Find the camera with its Mac Address, and click on its IP address.



4. For the first-time users, you are requested to set up a password.



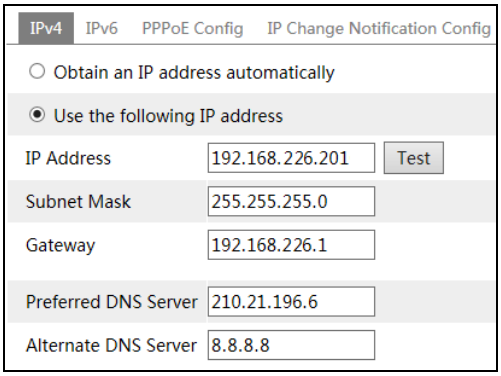
5. Type a new password and click **OK**.
6. Click on its IP address again and select **Webpage** to open its Web interface.
7. Type the set password on the login page and click **Login**.

Note: To change the password using GV-IP Device Utility, click on the camera's IP address, and select Configure > Change Password. Or you can optionally change the password on the camera's Web interface by clicking Config > Security > User; see "Modified User" in *5.6.1 User Configuration* in the user manual.

3.2 Configuring the IP Address

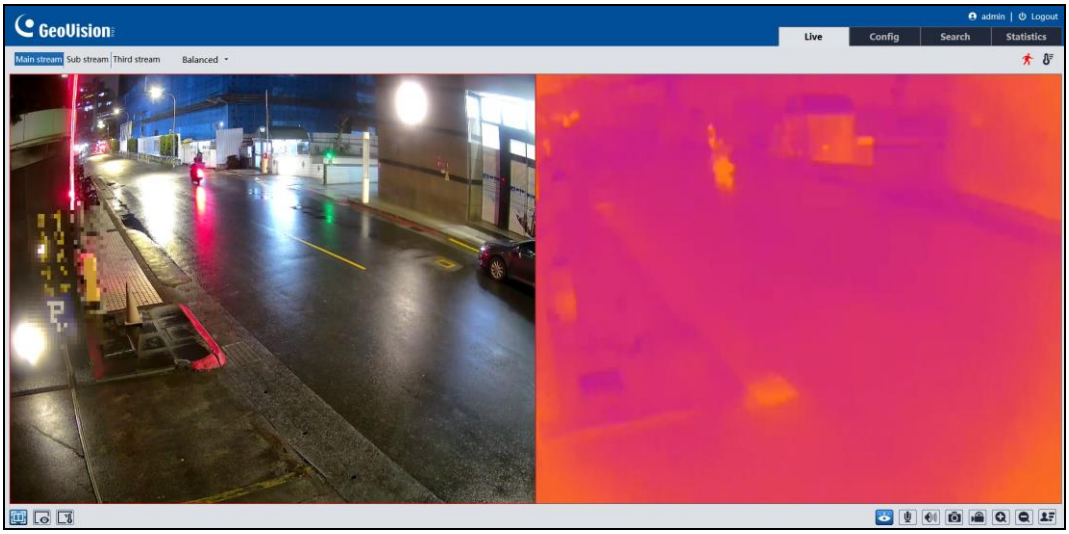
If the camera is connected to a LAN without the DHCP server, the default IP address will be **192.168.0.10**. Follow the steps below to modify the IP address to avoid IP conflict with other GV-IP devices on the same LAN.

1. Open your Web browser, and type the default IP address **192.168.0.10**.
2. Type the default username **admin** and a password. Click **Login**.
3. Go to **Config** > **Network** > **TCP/IP** to set the IP address.
4. Select **Use the following IP address** and then enter the static IP address and other parameters.



Chapter 4 The Web Interface

Once you log in the Web interface, you will see the live view as shown below.



Icon	Description	Icon	Description
	Visible light image and thermal image display		Temperature indicator
	Visible light image display		SD card recording indicator
	Thermal image display		Motion alarm indicator
	Adapt (fill the window) **Note:** Select Visible light image display or Thermal image display to display.		Alarm output indicator
	Proper Size (correct scale) **Note:** Select Visible light image display or Thermal image display to display.		Light alarm indicator
	Start/stop live view		Audio alarm indicator
	Enable/disable alarm output		Color abnormal indicator
	Enable/disable light alarm		Abnormal clarity indicator

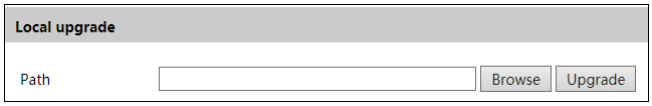
Icon	Description	Icon	Description
	Enable or disable audio alarm		Scene change indicator
	Start/stop two-way audio		Line crossing indicator
	Enable/disable audio		Intrusion indicator
	Snapshot		Region entrance indicator
	Start/stop local recording		Region exiting indicator
	Zoom in		Loitering detection indicator
	Zoom out		Illegal parking detection indicator
	Rule information display		Alarm input indicator
	Face Detection		Target counting (by line) indicator
	Audio exception indicator		Face detection indicator
	Fire detection indicator		

For detailed information, see the user's manual.

Chapter 5 Upgrading System Firmware

GeoVision periodically releases updated firmware on the company website. To load the new firmware into the camera, follow the instructions below.

1. On the Web interface, click **Config** > **Maintenance** > **Upgrade.**



2. Click the **Browse** button to locate the firmware file saved at your local computer.
3. Click the **Upgrade** button to start upgrading the firmware.
4. After upgrading, the camera will restart automatically.

Note: Do not close the browser or disconnect the camera from the network during the upgrade.

Chapter 6 Restoring to Factory Default

If for any reason the camera is not responding correctly, you can restore the camera back to its factory default settings using the Web interface or the Load Default Button.

On the Camera

1. Find the **Load Default** button on the camera (see No. 13, *1. Overview* in the Quick Start Guide).
2. Press and hold the button for more than 10 seconds to restore to the factory default setting.

On the Web Interface

1. On the Web interface, click **Config** >**Maintenance** > **Backup & Restore**.
2. Click the **Load Default** button to restore all system settings to factory default, except the image settings (see *5.2 Image Configuration* in the User's Manual for details) you want to keep.

Chapter 7 Connecting to GV-VMS

When GV-TMEB5800 is integrated with GV-VMS V17.4.5 / V18.3.1 with patch files or later, thermal imaging and temperature readings are available in both live and recorded views.

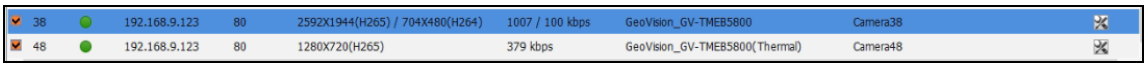
Only GV-VMS V18.3.1 with patch files or later supports AI events, including temperature detection events such as Temperature Exception Alarms, which trigger when the detected temperature exceeds the defined threshold.

Note:

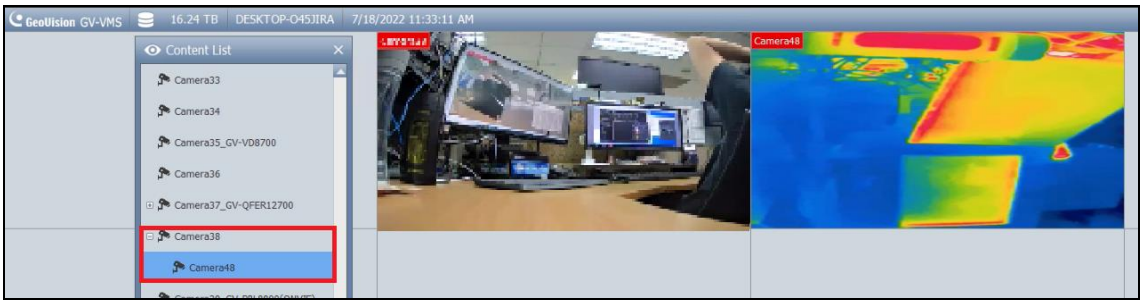
1. GV-TMEB5800 is supported only by GV-VMS V17.4.5 / V18.3.1 with patch files or later versions.
2. GV-VMS V17.4.5 with patch files or later supports only motion events and live view; AI events, including temperature detection events, are not supported.
3. The Fire Detection AI event is not supported by GV-VMS.
4. Make sure to use the camera's ONVIF password to connect to GV-VMS.
5. The camera allows for a maximum of 10 simultaneous connections, including the Web, ONVIF and RTSP. And the maximum throughput is 100 Mbps.

7.1 Connecting to GV-VMS

1. Add GV-TMEB5800 to GV-VMS (**Home** > **Toolbar** > **Configure** > **Camera Install**).
2. Once it is added, two camera entries are listed in the IP Device Setup window, one is the GV-TMEB5800 and the other is GV-TMEB5800 (Thermal).



3. Open the **Content List** (**Home** > **Toolbar** > **Content List**).
4. Find the camera GV-TMEB5800, and click the Expand button to see the thermal camea listed.
5. Drag the two cameras to the live view window.

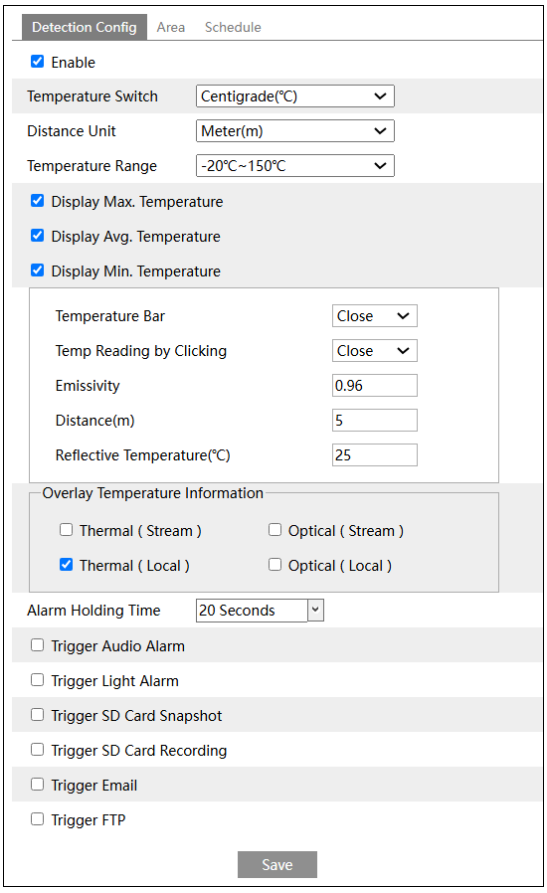


7.2 Displaying Temperature Readings

To display the temperature on GV-VMS, first set up the thermography rules on the camera.

On the Camera:

1. To trigger alarms or system actions when the temperature detected exceeds the threshold value, enable **Detection Config** (**Config** > **Fire Detection** > **Temperature Measurement**), and select desired settings.



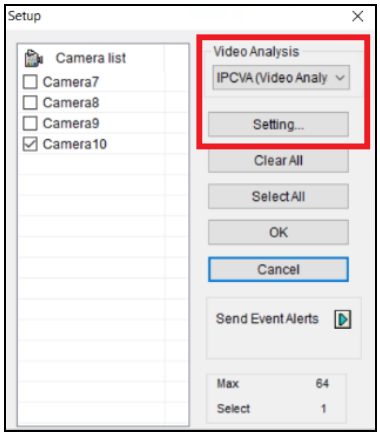
2. To set a thermography rule, select **Area**. This dialog box appears.

3. Configure one of the three thermography rules (Point, Line or Area), draw an area on the image and enable the settings. For details, see *4.2 Temperature Measurement* in the user's manual.

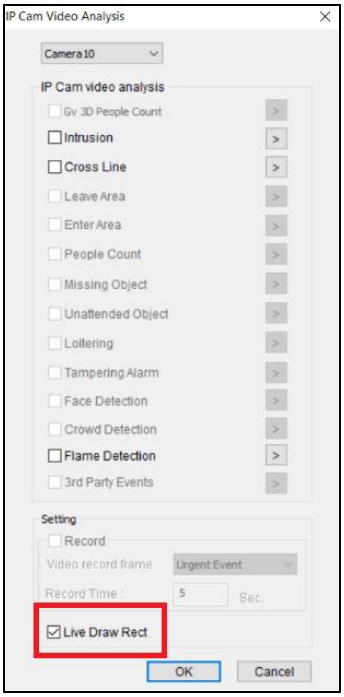
On GV-VMS

4. Select **Home** > **Toolbar** > **Configure** > **Video Process**. The Setup dialog box appears.

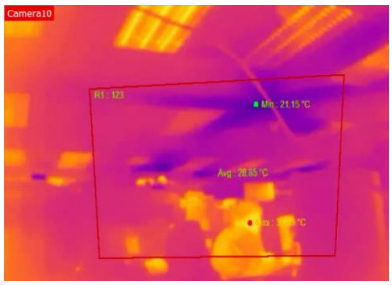
5. Select **IPCVA** under Video Analysis, select the thermal camera, and click **Setting**.



6. Select **Live Draw Rect**. Click **OK** and return to the main screen.



7. Start monitoring. The thermal channel now displays the detection area and temperature readings.

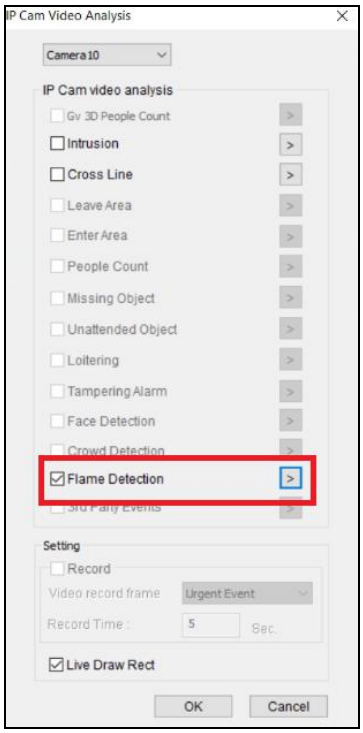


8. To view temperature readings on any region of the image, click the **Tools** icon on the channel, select **Measure Temperature**, and then click anywhere on the image. Note that the **Temp Reading by Click** function (see Step 1) on the camera must be enabled first.

7.3 Enabling Temperature Detection

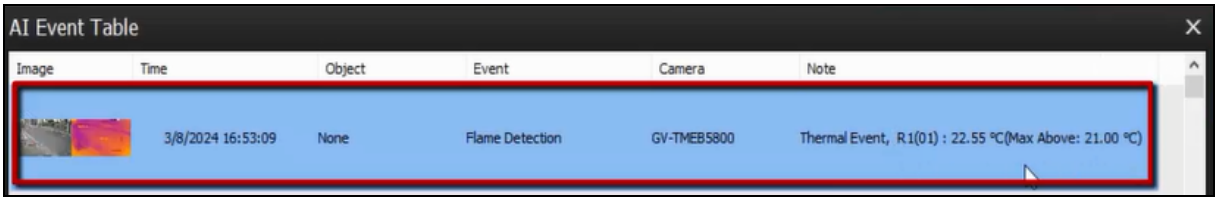
When the detected temperature exceeds the defined threshold for temperature detection events, such as Fire Detection and Temperature Measurement, GV-VMS V18.3.1 with patch files or later can activate the output alarm, computer alarm, e-mail alerts, or camera popup view. To enable temperature detection on GV-VMS V18.3.1 with patch files or later, you must first configure both camera functions.

1. Select **Home** > **Toolbar** > **Configure** > **Video Process**. The Setup dialog box appears.
2. Select **IPCVA** under Video Analysis, select the thermal camera, and click **Setting**.
3. Select **Flame Detection** and click the arrow button beside to configure alarm types.



4. Start monitoring.

To see triggered Flame Detection events, access **System Log** > **AI Event Table, as shown below**.



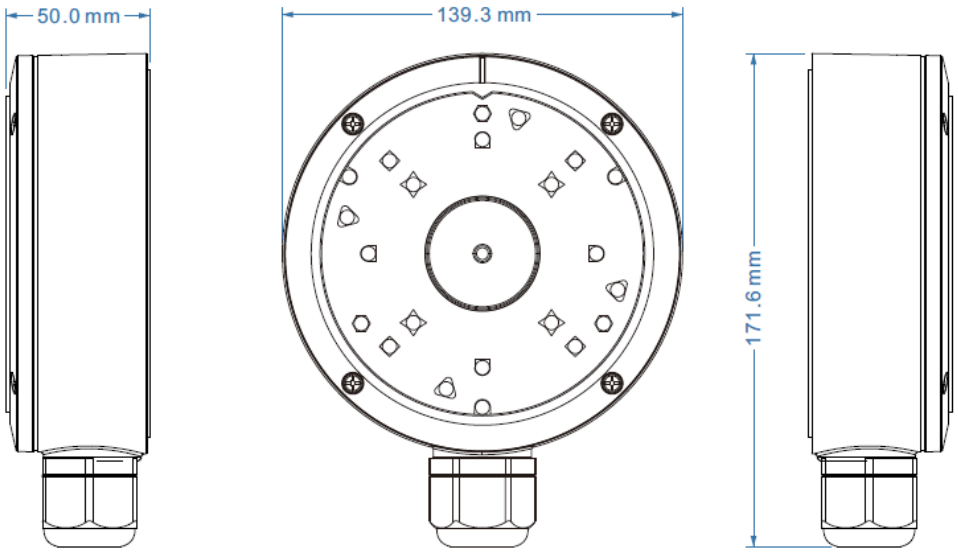
Chapter 8 Optional Installation

8.1 Junction Box GV-Mount506

Packing List

1. GV-Mount506	2. Plastic case (7 x 42 mm) x 4
3. Short screw (4 x 10 mm) x 4	4. Long screw (6.5 x 38 mm) x 4
5. Waterproof ring x 4	6. Drill Template Paster

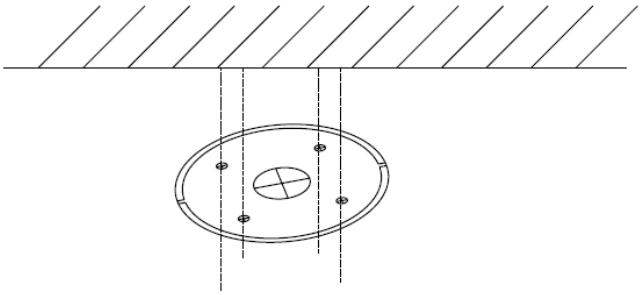
Dimension



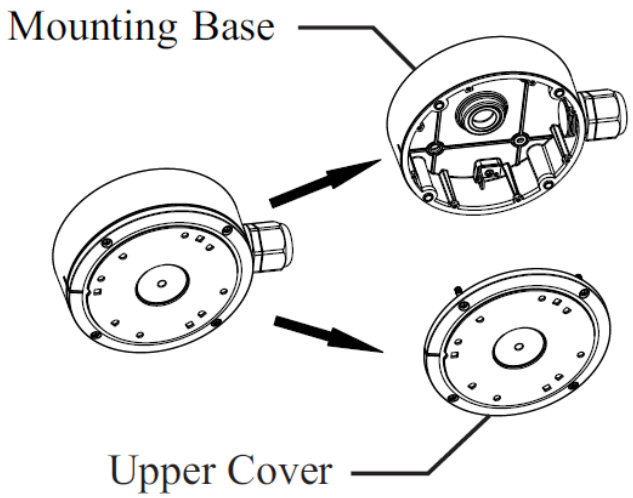
GV-Mount506 Installation

Before installation, make sure that the wall is strong enough to withstand 3 times the weight of the junction box and the camera.

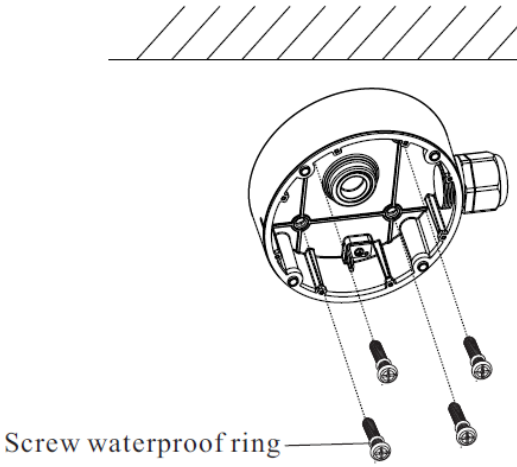
1. Drill the screw holes on the wall according to the drill template.



2. Open the mounting base and the upper cover of GV-Mount506.

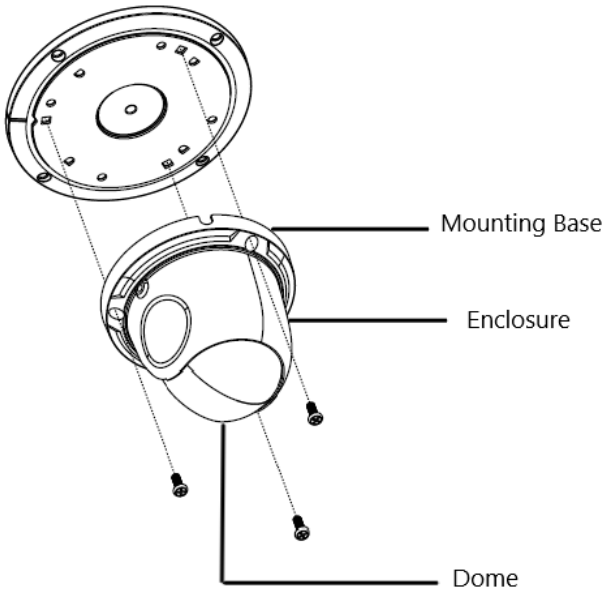


3. Secure the mounting base of GV-Mount506 to the wall.

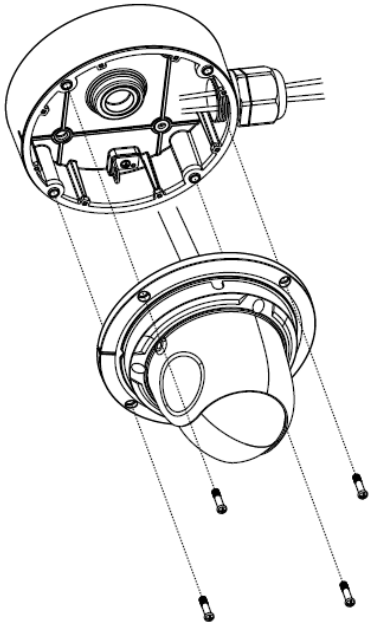


4. Loosen the set screw and detach the mounting base of the camera.

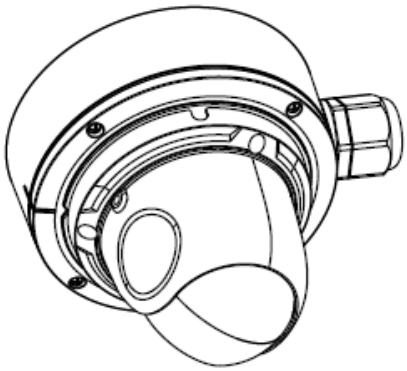
5. Secure the camera's mounting base to the upper cover of GV-Mount506 first, and install the dome and enclosure to the camera's mounting base.



6. Route the cables through the cable hole (take side conduit cabling for example) and connect the cables. Then reinstall the upper cover to GV-Mount506.



7. Adjust the view angle of the camera.

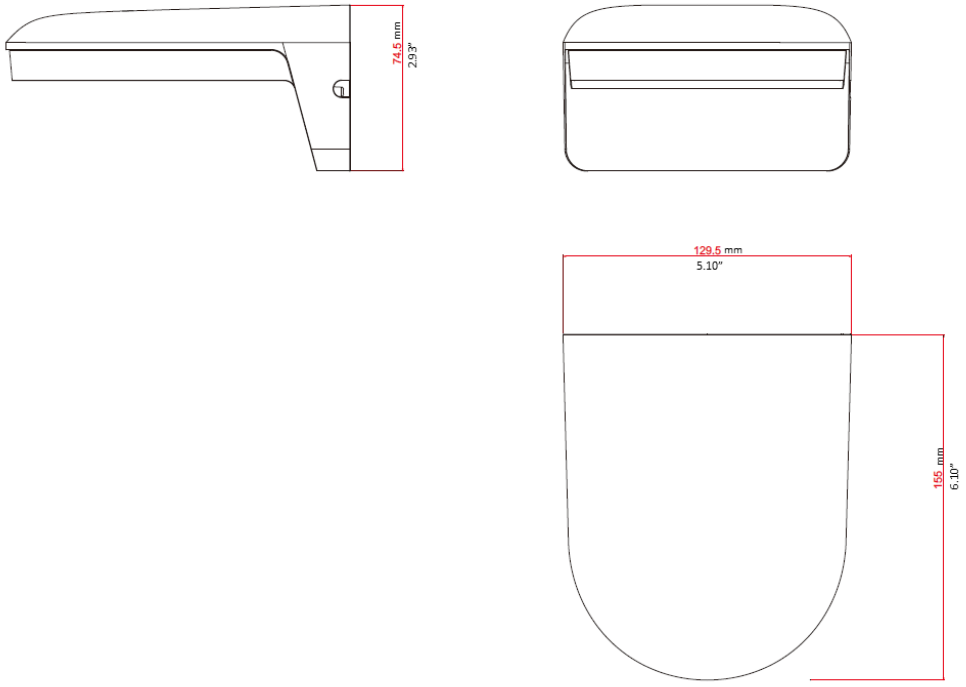


8.2 Wall Mount Bracket GV-Mount211-4

Packing List

1. GV-Mount211-4	2. Short screw (4 x10 mm) x 4
3. Long screw (4 x 25 mm) x 4	4. Colloidal particle x 4
5. Hex Key	6. Drill Template Paster

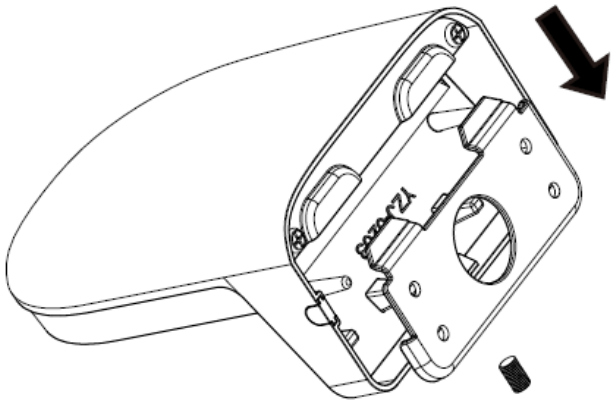
Dimension



GV-Mount211-4 Installation

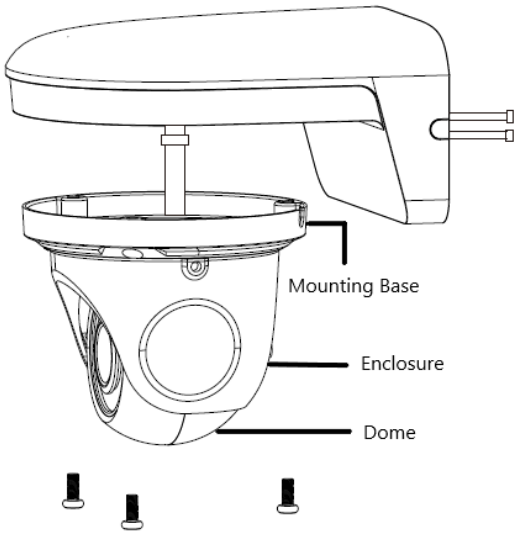
Before installation, make sure that the wall is strong enough to withstand 3 times the weight of the brackets and the camera. The followings take straight cable outlet from the wall for example.

1. Unscrew and remove the mounting base of GV-Mount211-4.

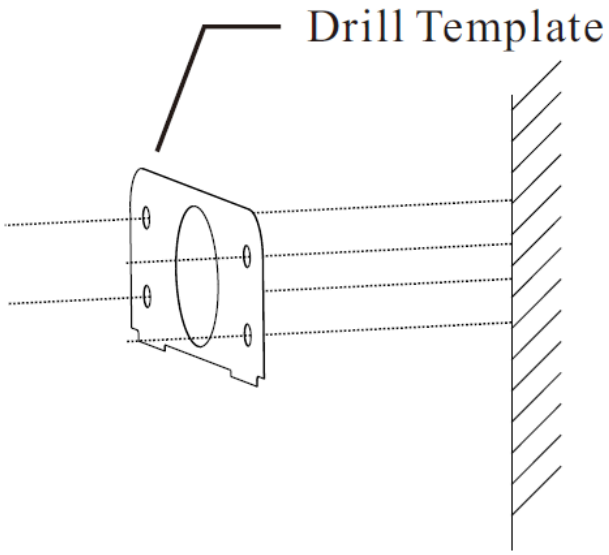


2. Loosen the screw and detach the mounting base of the camera.

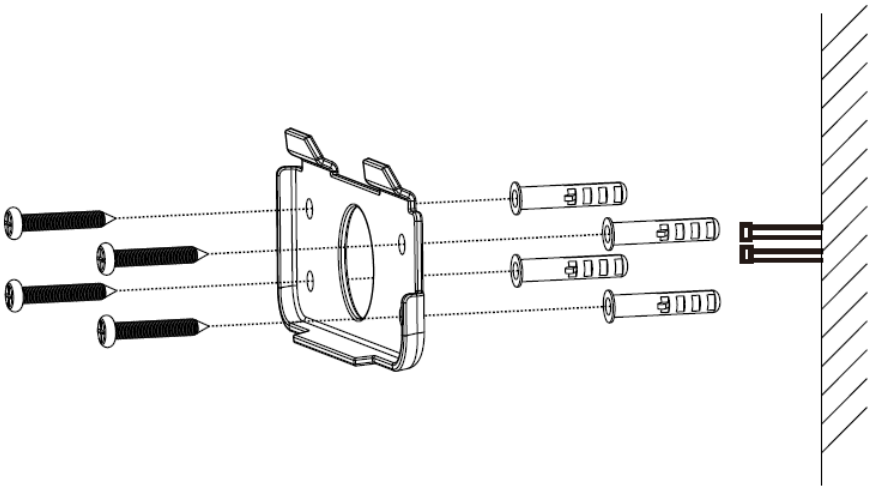
3. Secure the camera's mounting base to GV-Mount211-4 first, and install the dome and enclosure to the camera's mounting base.



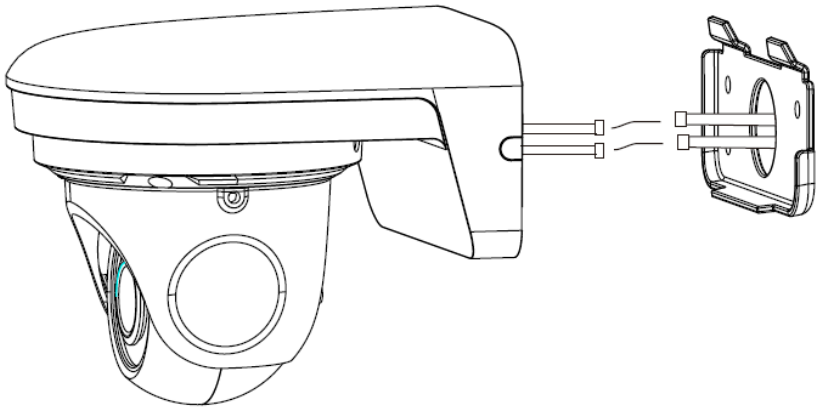
4. Drill the screw holes on the wall according to the drill template.



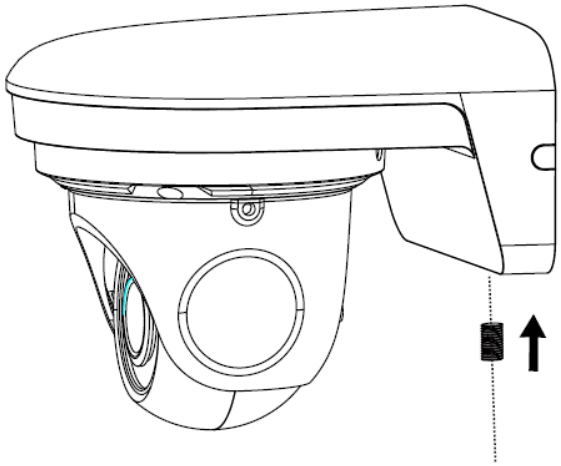
5. Secure the mounting base of GV-Mount211-4 to the wall.



6. Route the cables through the cable hole and connect the cables.



7. Fix GV-Mount211-4 to the mounting base on the wall.



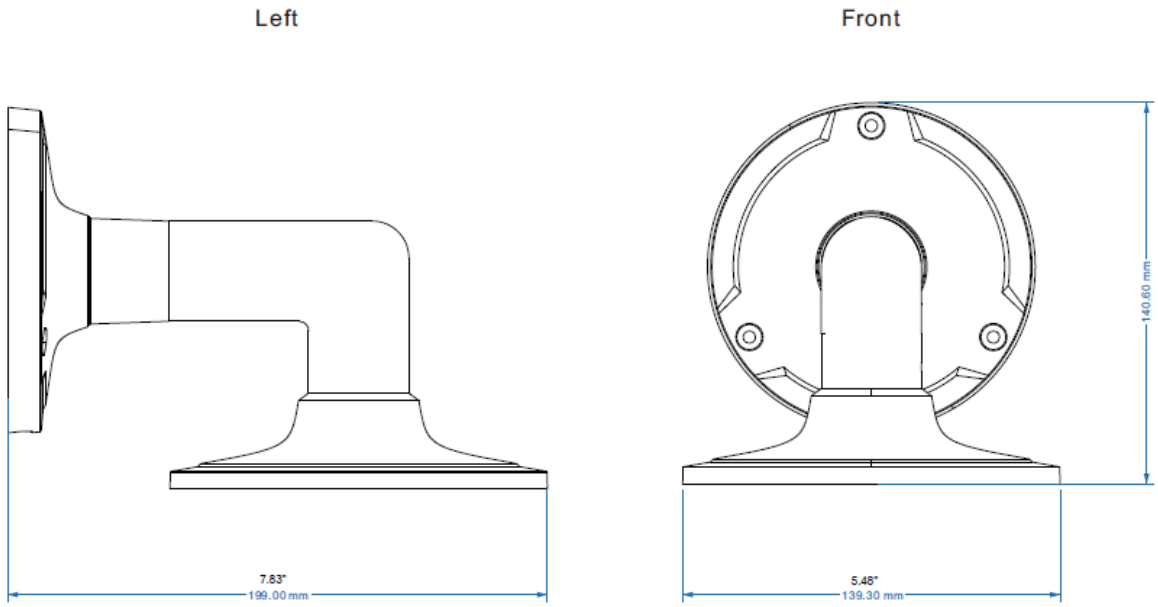
8.3 Wall Mount Bracket GV-Mount211-6

Packing List

1. GV-Mount211-6	2. Screw (3 x6 mm) x 2
3. Screw (6 x 12 mm) x 4	4. Screw (4 x 25 mm) x 3
5. Waterproof ring x 4	6. Plastic case (6 x 29) x 3
7. Drill Template Paster	

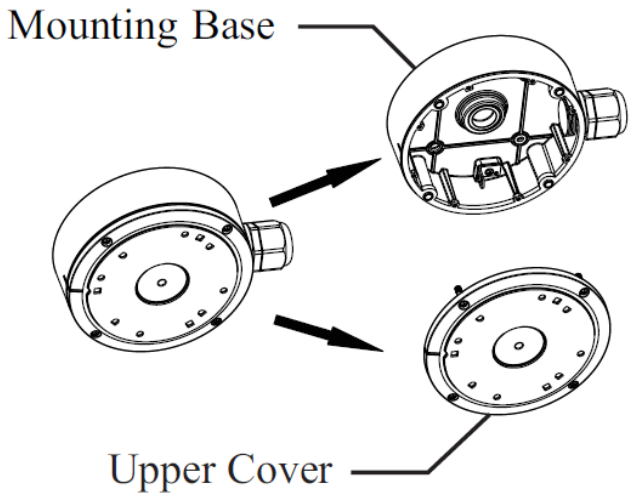
Note: GV-Mount211-6 must be used with GV-Mount506.

Dimension



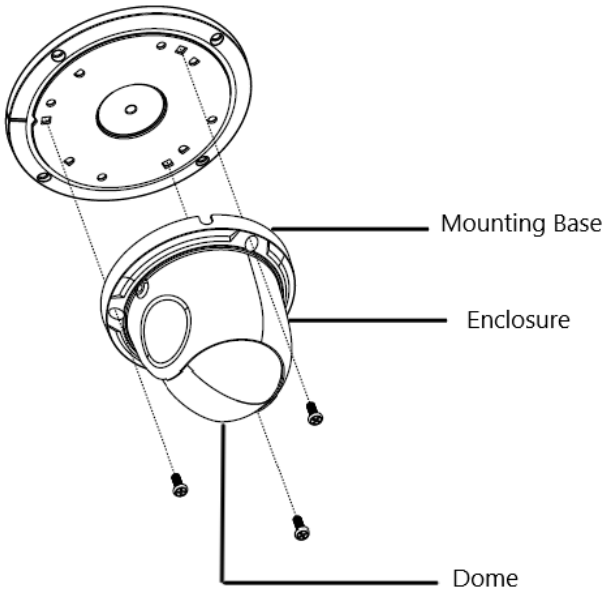
GV-Mount211-6 Installation

1. Open the mounting base and the upper cover of GV-Mount506.

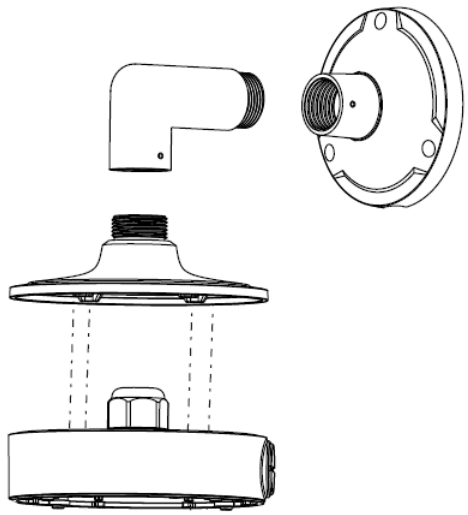


2. Loosen the screw and detach the mounting base of the camera.

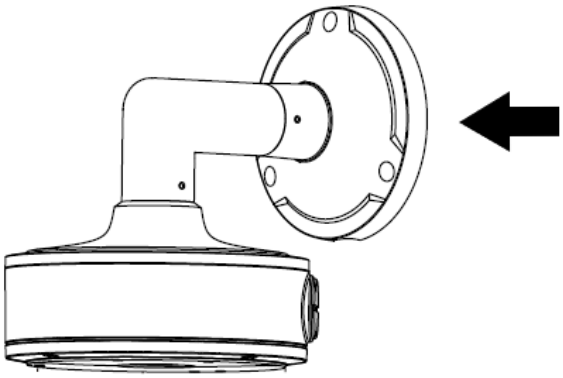
3. Secure the camera's mounting base to the upper cover of GV-Mount506 first, and install the dome and enclosure to the camera's mounting base.



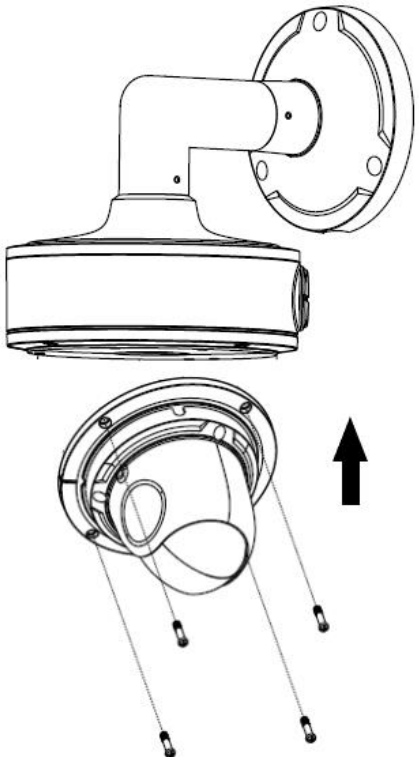
4. Assemble GV-Mount211-6, and fix the mounting base of GV-Mount506 to GV-Mount211-6.



5. Route the cables through the cable hole of GV-Mount211-6 and connect the cables.



6. Secure the camera mounted with the upper cover of GV-Mount506 to GV-Mount211-6.



7. Secure GV-Mount211-6 to the wall.