

GV-PoE Switch

GV-APOE081C User's Manual



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

APOE081C-UM-A



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Disclaimers

Preface

Reader object

This document is suitable for the following people

- Network Engineer
- Technical Promotion Personnel
- Network Administrator

Agreement in this book

1. Command line format Convention

The meaning of the command line format is as follows:

Bold: the command line keywords (the parts that must be input as they remain unchanged in the command) are expressed in bold font.

Italics: command line parameters (parts of the command that must be replaced by actual values) are expressed in italics.

[]: indicates the part enclosed by [], which is optional during command configuration.

{ x | y | ... }: Indicates that one of two or more options is selected.

[x | y | ...]: Indicates to select one or none of two or more options.

//: a line starting with a double slash is represented as a comment line.

2. Description

- Some port types illustrated in this manual may be inconsistent with the actual situation. In actual operation, it is necessary to configure according to the port types supported by each product.
- The display information illustrated in this manual may contain the contents of other product series (such as product model, description, etc.), and the specific display information shall be subject to the actual equipment information.

Web Smart Function Configuration

1. Overview

Web Smart refers to the device web management system, that is, the web management system that manages or configures the device, and manages the device by accessing Web Smart using a browser (such as Chrome).

Web management includes two parts: Web server and Web client. The Web server is integrated on the device to receive and process the requests sent by the client and return the processing results to the client. The Web client usually refers to the browser, such as Chrome, IE, Microsoft Edge, and Firefox.

2. Configuration Guide

This section provides an introduction to the web-based configuration utility, and covers the following topics:

- Powering on the device
- Connecting to the network
- Starting the web-based configuration utility

2.1. Power

Connecting to Power



Power down and disconnect the power cord before servicing or wiring a switch.



Do not disconnect modules or cabling unless the power is first switched off. The device only supports the voltage outlined in the type plate. Do not use any other power components except those specifically designated for the switch.



Disconnect the power cord before installation or cable wiring.

Connect the AC power connector on the back panel of the switch to the external power source with the included power cord, and check the power LED is on.

2.2. Connecting to the Network

To connect the switch to the network:

1. Connect an Ethernet cable to the Ethernet port of a computer
2. Connect the other end of the Ethernet cable to one of the numbered Ethernet ports of the switch. The LED of the port lights if the device connected is active.
3. Repeat Step 1 and Step 2 for each device to connect to the switch.



We strongly recommend using CAT-5E or better cable to connect network devices. When connecting network devices, do not exceed the maximum cabling distance of 100 meters (328 feet). It can take up to one minute for attached devices or the LAN to be operational after it is connected. This is normal behavior.

Connect the switch to end nodes using a standard Cat 5/5e Ethernet cable (UTP/STP) to connect the switch to end nodes as shown in the illustration below. Switch ports will automatically adjust to the characteristics (MDI/MDI-X, speed, duplex) of the device to which the switch is connected.

2.3. Starting the Web-based Configuration Utility

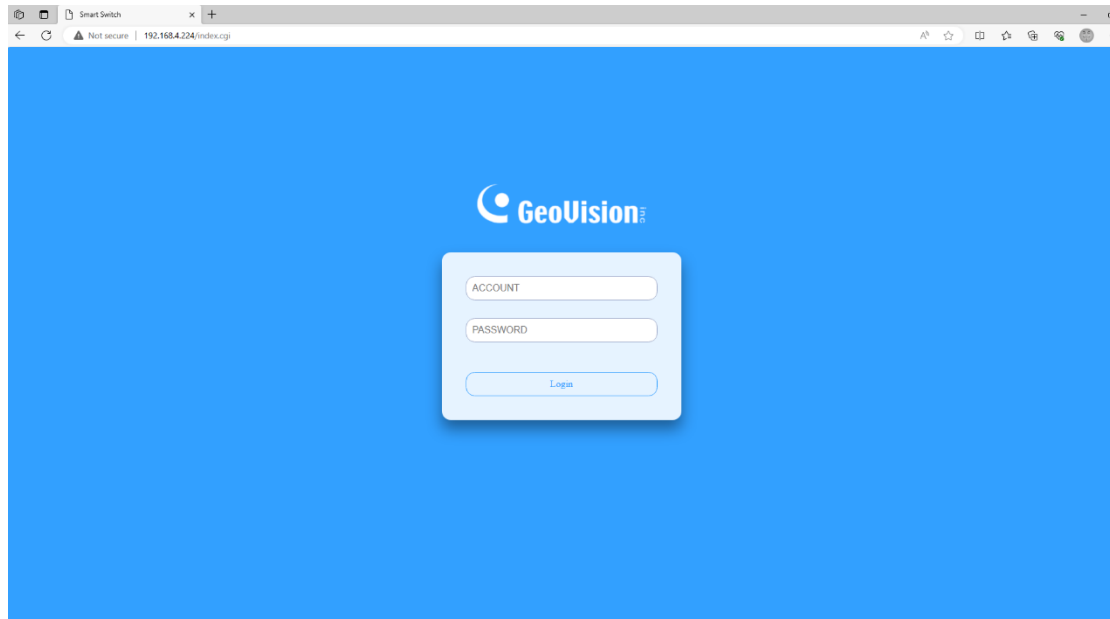
This section describes how to navigate the web-based switch configuration utility. Be sure to disable any pop-up blocker.

Launching the Configuration Utility

To open the web-based configuration utility:

1. Open a Web browser.
2. Enter the IP address of the device you are configuring in the address bar on the browser (**factory default IP address is 192.168.0.250**) and then press Enter.

After a successful connection, the login window displays.



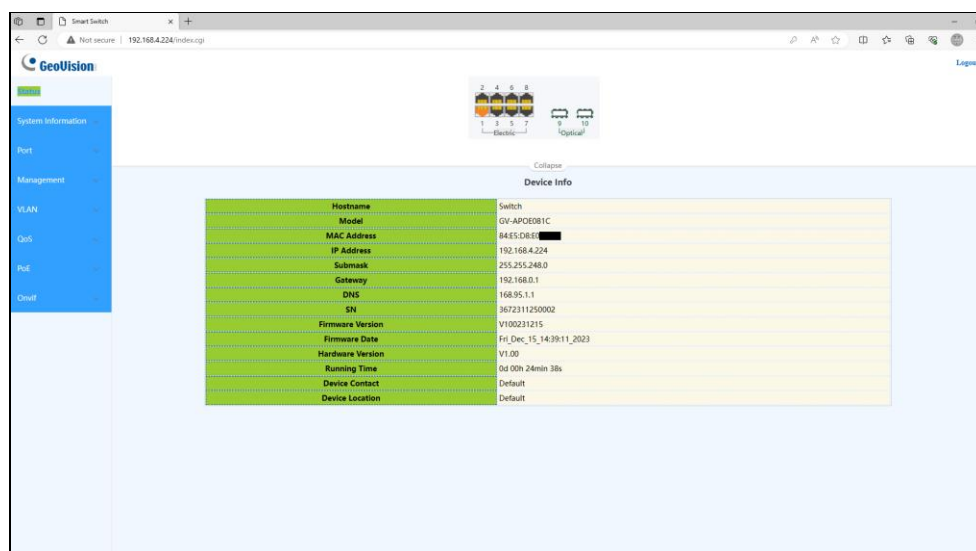
2.4. Logging In

The default username is **admin** and the default password is **admin**.

To log in to the device configuration utility:

1. Enter the default user ID (**admin**) and the default password (**admin**).
2. If this is the first time that you logged on with the default user ID (**admin**) and the default password (**admin**), it is recommended that you change your password immediately.

When the login attempt is successful, the System Information window displays.



If you entered an incorrect username or password, an error message appears and the Login page remains displayed on the window.

By default, the application logs out after five minutes of inactivity.

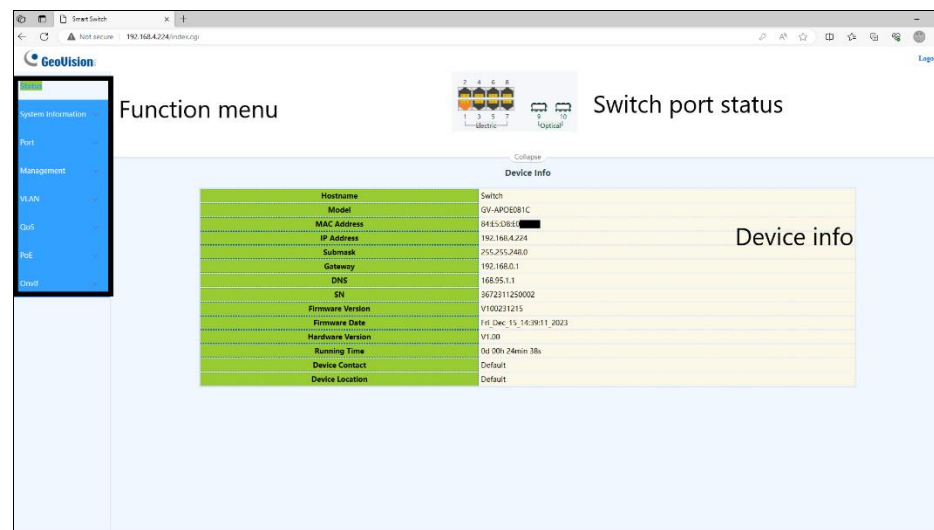
To log out, click **Logout** at the top right corner of any page. The system logs out of the device.

When a timeout occurs or you intentionally log out of the system, a message appears and the Login page appears, with a message indicating the logged-out state. After you log in, the application returns to the initial page.

2.5. Web-based Switch Configuration

The WebSmart switch software provides Easy Web Smart functionality for switches in your networks. This chapter describes how to use the web-based management interface (Web UI) to configure the switch's features.

For the purposes of this manual, the user interface is separated into three sections, as shown in the following figure:



As you can see, the page is divided into two parts:

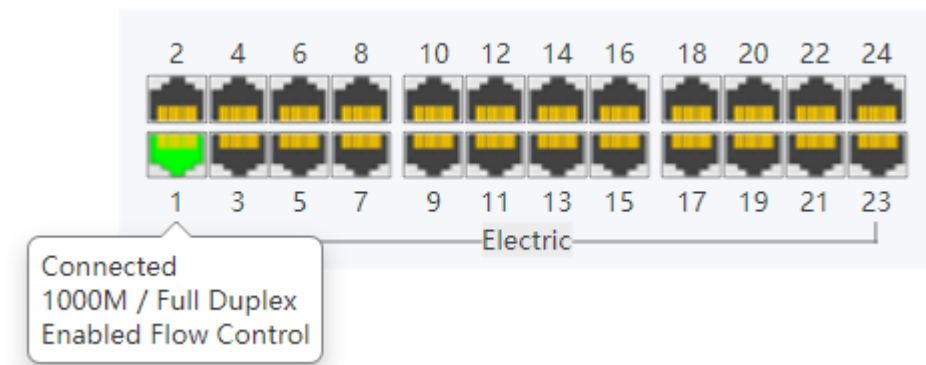
The left part is the menu bar, which displays the links of all configuration functions of the equipment, such as monitoring management and switch configuration module.

The right part is the content area, which is divided into upper and lower parts. The upper side is the port status bar, Chinese and English display switching and **Logout** button, and the lower side is the page content presentation and configuration area.

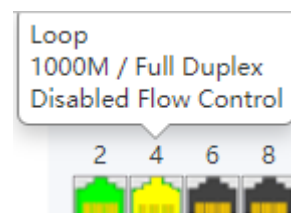
Port Status Bar:

Move the mouse to the port to display the basic status of the port (including port connection status, rate duplex and flow control status). Click **Collapse** to hide the port status bar and display more content areas to view other configuration information.

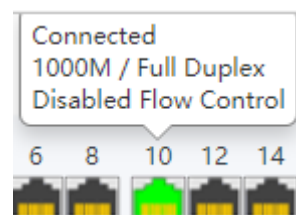
configuration information.



When a loop appears on the port, the port icon displays yellow



When the port works normally, the port icon displays green



The content area sometimes presents orange text (indicating the description of the function block)

Loop Guard

The port causing the loop will be shut down. After the loop is removed, the port will be up automatically.

Enabled

3. Web Smart Configuration

3.1. Homepage

The homepage interface displays the basic information of the device.

Device Info	
Hostname	Switch
Model	Switch
MAC Address	84:E5:D8:E0:00:00
IP Address	192.168.2.1
Submask	255.255.255.0
Gateway	192.168.2.1
DNS	223.6.6.6
SN	SN202201000001
Firmware Version	V100SP10230822
Firmware Date	Tue_Aug_22_10:47:55_2023
Hardware Version	V1.00
Running Time	0d 03h 49min 34s
Device Contact	Default
Device Location	Default

3.2. System Settings

3.2.1. Device Info

Configure the information of the device, including Device Name, Device Contact and Device Location.

Device Info	
Hostname	Switch
Device Contact	Default
Device Location	Default

3.2.2. IP Settings

Configure device management IP (default static IP: **192.168.0.250**)

IP Settings	
DHCP Client	Disabled
IP Address	192.168.2.1
Submask	255.255.255.0
Gateway	192.168.2.1
Auto Obtain DNS	Disabled
DNS	223.6.6.6

When "Auto Obtain IP" is displayed as follows:

IP Settings

DHCP Client	Enabled
IP Address	192.168.2.1
Submask	255.255.255.0
Gateway	192.168.2.1
Auto Obtain DNS	Enabled
DNS	223.6.6.6

Tips:

1. When configuring IP, the device will be disconnected briefly. If automatic IP acquisition is enabled, you need to obtain the configuration IP from the uplink device or web management through device management IP: 10.XX.XX.XX (XX.XX.XX is the last two digits of the MAC address of the current device).

3.2.3. WEB Settings

Configure web page timeout, default is 5 minutes.

WEB Settings

WEB Timeout	5	Web timeout (1-60) minutes.
-------------	---	-----------------------------

Tips:

1. The timeout can be configured for 1-60 minutes

3.2.4. Telnet Settings

Configure Telnet timeout, default is 10 minutes.

Telnet Settings

Telnet Status	Enabled	
Telnet Timeout	10	Telnet timeout (1-60) minutes.

Tips:

1. The timeout can be configured for 1-60 minutes

3.2.5. User Management

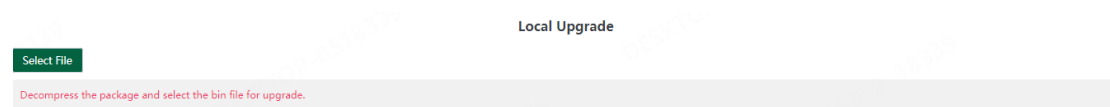
Configure the account and password for web page login (The password must contain 6-16 characters and contain only letters, numbers and the following special characters: <=>[]!@#\$(.))

User Management

Account	Account	
Password	Password	The password must contain only letters, numbers and the following special characters: <=>[]!@#\$(.).
Confirm Password	Confirm Password	

3.2.6. Upgrade

Click **Select File** and select the software package you want to upgrade in the pop-up file selection box (the software upgrade package is a file in xxx.bin format).



3.2.7. Device Management

Click **Reboot** to restart the equipment.

Click **Restore** to restore the factory configuration and restart the equipment.

Click **Save Configure** to save current device configure.

Device Management

Reboot	Reboot	Reboot the switch.
Restore	Restore	Restore factory configuration and reboot the switch.
Save Configure	Save Configure	Save current device configure.

3.3. Monitoring

3.3.1. Port Statistics

The Port Statistics page displays the data statistics and status of the device port, such as the port sending and receiving rate, sending and receiving packets, etc.

Port Statistics

No.	Port	Link Status	Rx/Tx Rate(Bps)	Rx/Tx Rate(pps)	Rx/Tx Success	Rx/Tx Failure
1	Port 1	Connected	70/0	1/0	638232/3837034	0/0
2	Port 2	Connected	0/0	0/0	917070/65481	0/0
3	Port 3	Disconnect	0/0	0/0	0/0	0/0
4	Port 4	Disconnect	0/0	0/0	0/0	0/0
5	Port 5	Disconnect	0/0	0/0	0/0	0/0
6	Port 6	Disconnect	0/0	0/0	0/0	0/0
7	Port 7	Disconnect	0/0	0/0	0/0	0/0
8	Port 8	Disconnect	0/0	0/0	0/0	0/0
9	Port 9	Disconnect	0/0	0/0	0/0	0/0
10	Port 10	Disconnect	0/0	0/0	0/0	0/0
11	Port 11	Disconnect	0/0	0/0	0/0	0/0
12	Port 12	Disconnect	0/0	0/0	0/0	0/0
13	Port 13	Disconnect	0/0	0/0	0/0	0/0
14	Port 14	Disconnect	0/0	0/0	0/0	0/0
15	Port 15	Disconnect	0/0	0/0	0/0	0/0
16	Port 16	Disconnect	0/0	0/0	0/0	0/0
17	Port 17	Disconnect	0/0	0/0	0/0	0/0
18	Port 18	Disconnect	0/0	0/0	0/0	0/0
19	Port 19	Disconnect	0/0	0/0	0/0	0/0
20	Port 20	Disconnect	0/0	0/0	0/0	0/0
21	Port 21	Disconnect	0/0	0/0	0/0	0/0
22	Port 22	Disconnect	0/0	0/0	0/0	0/0
23	Port 23	Disconnect	0/0	0/0	0/0	0/0
24	Port 24	Disconnect	0/0	0/0	0/0	0/0
25	Port 25	Disconnect	0/0	0/0	0/0	0/0
26	Port 26	Disconnect	0/0	0/0	0/0	0/0
27	Port 27	Disconnect	0/0	0/0	0/0	0/0
28	Port 28	Disconnect	0/0	0/0	0/0	0/0

Clear

3.3.2. Cable Diagnostics

You can roughly understand the cable condition of the corresponding port through cable detection (such as whether the cable is short circuited, disconnected, etc.).

Click **Start All** and wait for the test results to return.

Cable Diagnostics

This page detects the cable connection and the approximate location of the cable fault.
Length: Distance in meter from the port to the location on the cable where the fault was discovered.

☐	Port	Test Result	Description/Length
☐	Port 1	-	-
☐	Port 2	-	-
☐	Port 3	-	-
☐	Port 4	-	-
☐	Port 5	-	-
☐	Port 6	-	-
☐	Port 7	-	-
☐	Port 8	-	-
☐	Port 9	-	-
☐	Port 10	-	-
☐	Port 11	-	-
☐	Port 12	-	-
☐	Port 13	-	-
☐	Port 14	-	-
☐	Port 15	-	-
☐	Port 16	-	-
☐	Port 17	-	-
☐	Port 18	-	-
☐	Port 19	-	-
☐	Port 20	-	-
☐	Port 21	-	-
☐	Port 22	-	-
☐	Port 23	-	-
☐	Port 24	-	-
☐	Port 25	-	-
☐	Port 26	-	-
☐	Port 27	-	-
☐	Port 28	-	-

Start

Start All

Cable Diagnostics

This page detects the cable connection and the approximate location of the cable fault.
Length: Distance in meter from the port to the location on the cable where the fault was discovered.

☐	Port	Test Result	Description/Length
☐	Port 1	Normal	Normal(Correctly terminated pair)
☐	Port 2	Normal	Normal(Correctly terminated pair)
☐	Port 3	Disconnected	Please check whether the network cable is connected(Open pair,no link partner)
☐	Port 4	Disconnected	Please check whether the network cable is connected(Open pair,no link partner)
☐	Port 5	Disconnected	Please check whether the network cable is connected(Open pair,no link partner)
☐	Port 6	Disconnected	Please check whether the network cable is connected(Open pair,no link partner)
☐	Port 7	Disconnected	Please check whether the network cable is connected(Open pair,no link partner)
☐	Port 8	Disconnected	Please check whether the network cable is connected(Open pair,no link partner)
☐	Port 9	Disconnected	Please check whether the network cable is connected(Open pair,no link partner)
☐	Port 10	Disconnected	Please check whether the network cable is connected(Open pair,no link partner)
☐	Port 11	Disconnected	Please check whether the network cable is connected(Open pair,no link partner)
☐	Port 12	Disconnected	Please check whether the network cable is connected(Open pair,no link partner)
☐	Port 13	Disconnected	Please check whether the network cable is connected(Open pair,no link partner)
☐	Port 14	Disconnected	Please check whether the network cable is connected(Open pair,no link partner)
☐	Port 15	Disconnected	Please check whether the network cable is connected(Open pair,no link partner)
☐	Port 16	Disconnected	Please check whether the network cable is connected(Open pair,no link partner)
☐	Port 17	Disconnected	Please check whether the network cable is connected(Open pair,no link partner)
☐	Port 18	Disconnected	Please check whether the network cable is connected(Open pair,no link partner)
☐	Port 19	Disconnected	Please check whether the network cable is connected(Open pair,no link partner)
☐	Port 20	Disconnected	Please check whether the network cable is connected(Open pair,no link partner)
☐	Port 21	Disconnected	Please check whether the network cable is connected(Open pair,no link partner)
☐	Port 22	Disconnected	Please check whether the network cable is connected(Open pair,no link partner)
☐	Port 23	Disconnected	Please check whether the network cable is connected(Open pair,no link partner)
☐	Port 24	Disconnected	Please check whether the network cable is connected(Open pair,no link partner)
☐	Port 25	Disconnected	Please check whether the network cable is connected(Open pair,no link partner)
☐	Port 26	Disconnected	Please check whether the network cable is connected(Open pair,no link partner)
☐	Port 27	Not Support	N/A
☐	Port 28	Not Support	N/A

Start

Start All

3.3.3. Loop Guard

Configure enable loop guard

Loop Guard

The port causing the loop will be shut down. After the loop is removed, the port will be up automatically.

Enabled	OFF ☐
---------	------------------------------

Tips:

The port causing the loop will be shut down. After the loop is removed, the port will be up automatically. (Default is disable).

3.3.4. IGMP Snooping

Configure IGMP Snooping

IGMP Snooping

Unknown multicast Handel Action	FLOOD ▼
---------------------------------	---------

Status	VLAN ID
Enabled ▼	VLAN 1 ▼

Entry	Group IP Address	VLAN ID	Aging Time	Member port
-------	------------------	---------	------------	-------------

Unknown multicast Handel Action can configure **FLOOD** or **DROP**, Select the VLAN you want to enable and click **Apply** to save.

Tips:

IGMP Snooping only supports DIP mode, the maximum multicast entry is 10, Unknown multicast Handel Action default is flood.

3.4. Switch Settings

3.4.1. Port Settings

Port configuration can batch configure the status, speed, duplex, flow control and EEE properties of ports. The page is divided into two parts:

Configuration part:

Select the port to be configured, then select each attribute to be configured, and click **Apply** to distribute the configuration.

Port Setting

Ports	Admin Status	Speed	Duplex	Flow Control ?	EEE ?
--Please select--	Enabled ▼	Auto ▼	Auto ▼	Disabled ▼	Disabled ▼

Display part:

Displays the configuration attributes and actual effective attributes of each port of the device.

Port List

No.	Port	Admin Status	Speed Duplex		Flow Control		EEE
			Config	Actual	Config	Actual	
1	Port 1	Enabled	Auto/Auto	100M/Full	Disabled	Disabled	Disabled
2	Port 2	Enabled	Auto/Auto	100M/Full	Disabled	Disabled	Disabled
3	Port 3	Enabled	Auto/Auto	Link Down	Disabled	Disabled	Disabled
4	Port 4	Enabled	Auto/Auto	Link Down	Disabled	Disabled	Disabled
5	Port 5	Enabled	Auto/Auto	Link Down	Disabled	Disabled	Disabled
6	Port 6	Enabled	Auto/Auto	Link Down	Disabled	Disabled	Disabled
7	Port 7	Enabled	Auto/Auto	Link Down	Disabled	Disabled	Disabled
8	Port 8	Enabled	Auto/Auto	Link Down	Disabled	Disabled	Disabled
9	Port 9	Enabled	Auto/Auto	Link Down	Disabled	Disabled	Disabled
10	Port 10	Enabled	Auto/Auto	Link Down	Disabled	Disabled	Disabled
11	Port 11	Enabled	Auto/Auto	Link Down	Disabled	Disabled	Disabled
12	Port 12	Enabled	Auto/Auto	Link Down	Disabled	Disabled	Disabled
13	Port 13	Enabled	Auto/Auto	Link Down	Disabled	Disabled	Disabled
14	Port 14	Enabled	Auto/Auto	Link Down	Disabled	Disabled	Disabled
15	Port 15	Enabled	Auto/Auto	Link Down	Disabled	Disabled	Disabled
16	Port 16	Enabled	Auto/Auto	Link Down	Disabled	Disabled	Disabled
17	Port 17	Enabled	Auto/Auto	Link Down	Disabled	Disabled	Disabled
18	Port 18	Enabled	Auto/Auto	Link Down	Disabled	Disabled	Disabled
19	Port 19	Enabled	Auto/Auto	Link Down	Disabled	Disabled	Disabled
20	Port 20	Enabled	Auto/Auto	Link Down	Disabled	Disabled	Disabled
21	Port 21	Enabled	Auto/Auto	Link Down	Disabled	Disabled	Disabled
22	Port 22	Enabled	Auto/Auto	Link Down	Disabled	Disabled	Disabled
23	Port 23	Enabled	Auto/Auto	Link Down	Disabled	Disabled	Disabled
24	Port 24	Enabled	Auto/Auto	Link Down	Disabled	Disabled	Disabled
25	Port 25	Enabled	Auto/Auto	Link Down	Disabled	Disabled	Disabled
26	Port 26	Enabled	Auto/Auto	Link Down	Disabled	Disabled	Disabled
27	Port 27	Enabled	Auto/Auto	Link Down	Disabled	Disabled	Disabled
28	Port 28	Enabled	Auto/Auto	Link Down	Disabled	Disabled	Disabled

3.4.2. Port Mirroring

The input / output messages of one or more source image ports are forwarded to the destination image port to monitor the network.

Port Mirror Setting

Session ID	Source Port Member	Direction	Mirror Port
1	--Please select --	In	Port 1

Apply

Port Mirror Group

☐	Session ID	Source Port Member	Direction	Mirror Port
--------------------------	------------	--------------------	-----------	-------------

Delete

Tips:

1. Source port and destination port cannot be the same
2. Another mirror group is using the destination port
3. Supports 4 Session IDs

3.4.3. Port Isolation

Configure isolation port group

Port Isolation Setting

Port	Isolation Port
Port 1 ▾	--Please select --

[Add](#)

Port Isolation Table

	Port	Isolation Port
☐		

[Delete](#)

3.4.4. Jumbo frame

Configure the size of Jumbo Frames that can be forwarded.

Jumbo Frame Config

Jumbo Frame Size(Unit: Bytes)	1522 ▾
-------------------------------	--------

[Apply](#)

Tips:

1. Jumbo Frames can be configured with 1522, 1536, 1552, 9216 and 10000;
2. The default value of Jumbo Frames is 1522.

3.4.5. Green Enable

Green Enable

Green Enable	Disabled ▾
--------------	------------

[Apply](#)

3.4.6. Static MAC

The static MAC configuration is divided into two parts.

Static MAC add:

Enter the legitimate MAC address, VLAN ID, and select the configured port number. Click **Add** to add static MAC.

Static MAC Address

Up to 16 Static MAC addresses can be configured.

MAC Address	VLAN ID	Port
00:00:00:00:00:00	VLAN1 ▾	Port 1 ▾

[Add](#)

Static MAC deletion and display:

After adding a legal static Mac, the corresponding data will be displayed;
Check the static Mac and click **Delete**. After the configuration is successful,
the MAC address, VLAN and corresponding port will be unbound.

☐	No.	MAC Address	VLAN ID	Port
☐	1	00:00:00:00:00:01	VLAN1	Port 1

Delete

Tips:

1. Static MAC addresses maximum can be configured 16.

3.4.7. Filter MAC

Configure filtered MAC address

Filter MAC Address

Up to 16 Filter MAC addresses can be configured.

MAC Address	VLAN ID
00:00:00:00:00:00	VLAN1

Add

☐	No.	MAC Address	VLAN ID
--------------------------	-----	-------------	---------

Delete

Tips:

1. Filter MAC addresses maximum can be configured 16.

3.4.8. Search MAC

Search the MAC table learned by the device (support fuzzy search?)

MAC Address Search

MAC Address	VLAN ID
00:00:00:00:00:00	VLAN ID (1-4094)

Search

Tips:

1. The inquiry waiting process will interrupt the communication with the equipment

3.4.9. MAC List

Displays the list of MAC learned by the device

MAC Address Info

No.	MAC Address	VLAN ID	Type	Port
1	84:E5:D8:00:88:F0	VLAN1	Dynamic	Port 2
2	20:7B:D2:95:AF:6A	VLAN1	Dynamic	Port 1

[Clear Dynamic MAC](#)

Click **Clear Dynamic MAC** and the device will get the learning MAC list again.

Tips:

1. The display waiting process will interrupt communication with the device

3.4.10. DHCP Snooping

Configure DHCP Snooping function, which is disabled by default.

DHCP Snooping Settings

DHCP Snooping ☐ Off

When DHCP Snooping is enabled, you can choose to trust ports or not. As shown in the following figure, the device sets the selected ports as trusted ports, and if it is not selected, all ports are untrusted ports; Click **Apply** to set the selected port as a trusted port and complete the configuration of DHCP snooping.

DHCP Snooping Settings

DHCP Snooping ☒ On

	Status
Trusted Port	☐ Select All/Unselect
	☒ Port 1 ☒ Port 2 ☐ Port 3 ☐ Port 4 ☐ Port 5 ☐ Port 6 ☐ Port 7 ☐ Port 8 ☐ Port 9 ☐ Port 10 ☐ Port 11 ☐ Port 12 ☐ Port 13 ☐ Port 14 ☐ Port 15 ☐ Port 16 ☐ Port 17 ☐ Port 18 ☐ Port 19 ☐ Port 20 ☐ Port 21 ☐ Port 22 ☐ Port 23 ☐ Port 24 ☐ Port 25 ☐ Port 26 ☐ Port 27 ☐ Port 28
VLAN	☒ Select All/Unselect ☒ VLAN 1 ☒ VLAN 10 ☒ VLAN 20 ☒ VLAN 30

[Apply](#)

Tips:

1. Enable DHCP snooping to filter DHCP messages. For the request message from DHCP client, only forward it to the trust port; for the response message from DHCP server, only forward the response message from the trust port.
2. Generally, the DHCP server port (upper connection port) is set as the trust port.

3.5. VLAN Settings

Add or delete device VLAN members and port VLAN configuration

3.5.1. VLAN Member

Configuration part:

Enter a valid VLAN ID and click **Apply** to configure a new VLAN member;

VLAN Member

VLAN ID		(1-4094)
---------	-------------------------------	----------

Display part:

Displays the VLAN members newly added by the device, Select VLAN members in the VLAN member list and click **Delete** to delete VLAN members in batch

☐	No.	VLAN ID
☐	1	1
☐	2	10
☐	3	20
☐	4	30

Tips:

1. Configure up to 16 VLAN members;
2. When VLAN ID is bound by port, it cannot be deleted.

3.5.2. VLAN Settings

Port VLAN configuration is divided into two parts:

Part I: Port VLAN configuration, select port, VLAN type (access and trunk, allow VLAN can be configured under trunk), allow VLAN and native VLAN, and click **Apply** to configure and save port VLAN (**Permit VLAN and Native VLAN are selected from the VLAN members configured above**);

VLAN Settings

Port	VLAN Type	Access VLAN	Native VLAN	Permit VLAN
--Please select --	Access ▼	VLAN 1 ▼	VLAN 1 ▼	--Please select --

Part II: Port VLAN list, which displays the VLAN configuration of the device port.

Tips: the message under Native VLAN does not have VLAN tag.

Port	VLAN Type	Access VLAN	Native VLAN	Permit VLAN
Port 1	Access	1	--	--
Port 2	Access	1	--	--
Port 3	Access	1	--	--
Port 4	Access	1	--	--
Port 5	Access	1	--	--
Port 6	Access	1	--	--
Port 7	Access	1	--	--
Port 8	Access	1	--	--
Port 9	Access	1	--	--
Port 10	Access	1	--	--
Port 11	Access	1	--	--
Port 12	Access	1	--	--
Port 13	Access	1	--	--
Port 14	Access	1	--	--
Port 15	Access	1	--	--
Port 16	Access	1	--	--
Port 17	Access	1	--	--
Port 18	Access	1	--	--
Port 19	Access	1	--	--
Port 20	Access	1	--	--
Port 21	Access	1	--	--
Port 22	Access	1	--	--
Port 23	Access	1	--	--
Port 24	Access	1	--	--
Port 25	Access	1	--	--
Port 26	Access	1	--	--
Port 27	Access	1	--	--
Port 28	Access	1	--	--

3.6. QoS Settings

Including port rate limit and storm control functions.

3.6.1. Port Rate

Configure the port ingress and egress rate, which is divided into two parts:

Configuration part:

Select one or more ports, select the configuration type and whether to enable the port speed limit (enter the value of the port speed limit when it is enabled), and click **Apply** to configure the port rate.

Port Rate

Port	Limit Type	Status	Rate(Mbit/sec)
--Please select--	Ingress ▼	Disabled ▼	No Limit (1-1000M)

Apply

Display part: displays the ingress rate and egress rate of the device port configuration.

Entry	Port	Ingress		Egress	
		Status	Rate(Mbit/sec)	Status	Rate(Mbit/sec)
1	Port1	Disabled	1000	Disabled	1000
2	Port2	Disabled	1000	Disabled	1000
3	Port3	Disabled	1000	Disabled	1000
4	Port4	Disabled	1000	Disabled	1000
5	Port5	Disabled	1000	Disabled	1000
6	Port6	Disabled	1000	Disabled	1000
7	Port7	Disabled	1000	Disabled	1000
8	Port8	Disabled	1000	Disabled	1000
9	Port9	Disabled	1000	Disabled	1000
10	Port10	Disabled	1000	Disabled	1000
11	Port11	Disabled	1000	Disabled	1000
12	Port12	Disabled	1000	Disabled	1000
13	Port13	Disabled	1000	Disabled	1000
14	Port14	Disabled	1000	Disabled	1000
15	Port15	Disabled	1000	Disabled	1000
16	Port16	Disabled	1000	Disabled	1000
17	Port17	Disabled	1000	Disabled	1000
18	Port18	Disabled	1000	Disabled	1000
19	Port19	Disabled	1000	Disabled	1000
20	Port20	Disabled	1000	Disabled	1000
21	Port21	Disabled	1000	Disabled	1000
22	Port22	Disabled	1000	Disabled	1000
23	Port23	Disabled	1000	Disabled	1000
24	Port24	Disabled	1000	Disabled	1000
25	Port25	Disabled	1000	Disabled	1000
26	Port26	Disabled	1000	Disabled	1000
27	Port27	Disabled	1000	Disabled	1000
28	Port28	Disabled	1000	Disabled	1000

Tips:

1. Rate limit range: 1-1000M

3.6.2. Storm Control

Including port storm control configuration and display:

Configuration part:

Select the configured storm control type, one or more ports and whether to enable storm control (when enabled, enter the rate of storm control configuration), and click **Apply** to configure storm control.

Storm Control

Type	Port	Status	Rate(Mbit/sec)
Broadcast ▼	--Please select --	Disabled ▼	No Limit (1-1000M)

Apply

Display part:

Display the storm control type and corresponding rate configured by the device port (display the corresponding control rate when it is turned on).

No.	Port	Broadcast(Mbit/sec)	Unknown Multicast(Mbit/sec)	Unknown Unicast(Mbit/sec)
1	Port 1	Disabled	Disabled	Disabled
2	Port 2	Disabled	Disabled	Disabled
3	Port 3	Disabled	Disabled	Disabled
4	Port 4	Disabled	Disabled	Disabled
5	Port 5	Disabled	Disabled	Disabled
6	Port 6	Disabled	Disabled	Disabled
7	Port 7	Disabled	Disabled	Disabled
8	Port 8	Disabled	Disabled	Disabled
9	Port 9	Disabled	Disabled	Disabled
10	Port 10	Disabled	Disabled	Disabled
11	Port 11	Disabled	Disabled	Disabled
12	Port 12	Disabled	Disabled	Disabled
13	Port 13	Disabled	Disabled	Disabled
14	Port 14	Disabled	Disabled	Disabled
15	Port 15	Disabled	Disabled	Disabled
16	Port 16	Disabled	Disabled	Disabled
17	Port 17	Disabled	Disabled	Disabled
18	Port 18	Disabled	Disabled	Disabled
19	Port 19	Disabled	Disabled	Disabled
20	Port 20	Disabled	Disabled	Disabled
21	Port 21	Disabled	Disabled	Disabled
22	Port 22	Disabled	Disabled	Disabled
23	Port 23	Disabled	Disabled	Disabled
24	Port 24	Disabled	Disabled	Disabled
25	Port 25	Disabled	Disabled	Disabled
26	Port 26	Disabled	Disabled	Disabled
27	Port 27	Disabled	Disabled	Disabled
28	Port 28	Disabled	Disabled	Disabled

Tips:

1. Rate limit range: 1-1000M

3.6.3. QoS Property

Including QoS Property configuration and display:

Configuration part:

Select the configured Enable State, Queue Scheduling Mode, Priority Type and Weight, and click **Apply** configure QoS Property.

Property Config

Enable State	Queue Scheduling Mode	Priority Type	Weight
Enabled ▼	WRR ▼	COS ▼	1 ▼

Apply

Display part:

Display the Enable State, Queue Scheduling Mode, Weighting of COS and DSCP

Enable State	Enabled
Queue Scheduling Mode	SP
COS	1
DSCP	6

Tips:

1. The QoS function is disabled by default;
2. The Queue Scheduling mode supports SP and WRR;
3. The priority type supports COS and DSCP;
4. Priority types with higher weights have higher priorities. When the weights are the same, COS have higher priority.

3.6.4. COS Priority Mapping

Including configuration and display:

Configuration part:

Select the configured COS Priority and Inner Priority, and click **Apply** configure.

COS Priority Mapping

COS Priority	Inner Priority
--Please select --	0 ▾

Apply

Display part:

Display the COS Priority and Inner Priority.

COS Priority	Inner Priority
0	0
1	1
2	2
3	3
4	4
5	5
6	6
7	7

Tips:

1. The default COS priority corresponds to the internal priority 0-7 in turn.

3.6.5. DSCP Priority Mapping

Including configuration and display:

Configuration part:

Select the configured DSCP Priority Mapping and Inner Priority, and click **Apply** configure.

DSCP Priority Mapping

DSCP Priority Mapping	Inner Priority
--Please select --	0 ▾

Apply

Display part:

Display the DSCP Priority Mapping and Inner Priority.

DSCP Priority	Inner Priority	DSCP Priority	Inner Priority	DSCP Priority	Inner Priority	DSCP Priority	Inner Priority
0	0	16	2	32	4	48	6
1	0	17	2	33	4	49	6
2	0	18	2	34	4	50	6
3	0	19	2	35	4	51	6
4	0	20	2	36	4	52	6
5	0	21	2	37	4	53	6
6	0	22	2	38	4	54	6
7	0	23	2	39	4	55	6
8	1	24	3	40	5	56	7
9	1	25	3	41	5	57	7
10	1	26	3	42	5	58	7
11	1	27	3	43	5	59	7
12	1	28	3	44	5	60	7
13	1	29	3	45	5	61	7
14	1	30	3	46	5	62	7
15	1	31	3	47	5	63	7

Tips:

1. Default DSCP priority 0-7 corresponds to internal priority 0, 8-15 corresponds to internal priority 1, and so on.

3.6.6. Inner Priority Mapping

Including configuration and display:

Configuration part:

Select the configured Inner Priority and Queue ID, and click **Apply** configure.

Inner Priority Mapping

Inner Priority	Queue ID
--Please select--	0

Apply

Display part:

Display the Inner Priority and Queue ID.

Inner Priority	Queue ID
0	0
1	1
2	2
3	3
4	4
5	5
6	6
7	7

Tips:

1. Default internal priority 0-7 corresponds to queue ID 0-7.

3.6.7. Queue Scheduling

Including configuration and display:

Configuration part:

Select the configured Queue ID and Weight, and click **Apply** configure.

Queue Scheduling Config

Queue ID	Weight
--Please select --	1 (1-127)

Apply

Display part:

Display the Queue ID and Weight

Queue ID	Queue Scheduling Mode	Weight
0	WRR	1
1	WRR	2
2	WRR	3
3	WRR	4
4	WRR	5
5	WRR	6
6	WRR	7
7	WRR	8

When the queue scheduling mode is SP, the weight cannot be set. The default weight of the eight queues is 1.

Queue Scheduling Config

Queue ID	Weight
--Please select --	1 (1-127)

Apply

Queue ID	Queue Scheduling Mode	Weight
0	SP	
1	SP	
2	SP	
3	SP	
4	SP	
5	SP	
6	SP	
7	SP	

Tips:

1. When the queue scheduling mode is WRR, 0-7 of the queue ID corresponds to 1-8 of the weight by default.

3.7. PoE Settings

Tips:

Some models support Poe function

3.7.1. PoE Global Info

Displays the global information of the device Poe function

PoE Global Info	
PoE Hardware Version	V1.0
PoE Work Status	Normal
PoE Support Type	802.3af/802.3at
PoE Consumption Power	1W
PoE Port Number	24
PoE Total Power	360W
PoE Voltage	55 V
Software Version	V1.0.0

3.7.2. PoE Basic settings

Includes port PoE configuration and display:

Configuration part:

Select the PoE power supply status, priority and limited power of the configured port, and click **Apply** to configure PoE.

Port	PoE Control Status	Priority	PoE Limit
--Please select --	Enabled	Low	32 (1-32W)

Apply

Display part:

Display the power of port PoE and the current power supply status;

Entry	Port	PoE Control Status	Power Status	PoE Limit(1-32W)	Power	Priority	Class
1	Port1	Enabled	Off	32W	0W	Low	N/A
2	Port2	Enabled	On	32W	1W	Low	0
3	Port3	Enabled	Off	32W	0W	Low	N/A
4	Port4	Enabled	Off	32W	0W	Low	N/A
5	Port5	Enabled	Off	32W	0W	Low	N/A
6	Port6	Enabled	Off	32W	0W	Low	N/A
7	Port7	Enabled	Off	32W	0W	Low	N/A
8	Port8	Enabled	Off	32W	0W	Low	N/A
9	Port9	Enabled	Off	32W	0W	Low	N/A
10	Port10	Enabled	Off	32W	0W	Low	N/A
11	Port11	Enabled	Off	32W	0W	Low	N/A
12	Port12	Enabled	Off	32W	0W	Low	N/A
13	Port13	Enabled	Off	32W	0W	Low	N/A
14	Port14	Enabled	Off	32W	0W	Low	N/A
15	Port15	Enabled	Off	32W	0W	Low	N/A
16	Port16	Enabled	Off	32W	0W	Low	N/A
17	Port17	Enabled	Off	32W	0W	Low	N/A
18	Port18	Enabled	Off	32W	0W	Low	N/A
19	Port19	Enabled	Off	32W	0W	Low	N/A
20	Port20	Enabled	Off	32W	0W	Low	N/A
21	Port21	Enabled	Off	32W	0W	Low	N/A
22	Port22	Enabled	Off	32W	0W	Low	N/A
23	Port23	Enabled	Off	32W	0W	Low	N/A
24	Port24	Enabled	Off	32W	0W	Low	N/A

Tips:

1. Disable port Poe. Port Poe will not be powered.

3.7.3. PD Alive

Includes PD Alive configuration and display:

Configuration part:

Configure the detection time of PD Alive (60-86400s. When no communication is detected on the port, PoE will be restarted automatically). Click **Apply** to configure PD alive.

PD Alive

Monitor Time	3600	(60~86400, default 3600s)
Apply		

Port	Monitor Status
--Please select--	Disabled ▾
Apply	

Display part:

Displays the number of restarts of device PD Alive.

Entry	Port	Monitor Status	Reset Count
1	Port1	Disabled	0
2	Port2	Disabled	0
3	Port3	Disabled	0
4	Port4	Disabled	0
5	Port5	Disabled	0
6	Port6	Disabled	0
7	Port7	Disabled	0
8	Port8	Disabled	0
9	Port9	Disabled	0
10	Port10	Disabled	0
11	Port11	Disabled	0
12	Port12	Disabled	0
13	Port13	Disabled	0
14	Port14	Disabled	0
15	Port15	Disabled	0
16	Port16	Disabled	0
17	Port17	Disabled	0
18	Port18	Disabled	0
19	Port19	Disabled	0
20	Port20	Disabled	0
21	Port21	Disabled	0
22	Port22	Disabled	0
23	Port23	Disabled	0
24	Port24	Disabled	0

3.8. Onvif

Support Onvif protocol function to discover devices

Onvif Detect

MAC Address	IP Address	Port	Model
<button>Detect</button><button>Refresh</button>			

Click «**Detect**» to find the device.

Onvif Detect

MAC Address	IP Address	Port	Model
10:F0:13:F1:7C:0C	192.168.19.66	11	Switch
48:EA:63:60:69:83	192.168.19.8	11	NVR304-32E-B-DT
48:EA:63:28:A0:63	192.168.19.52	11	IPC331S-IR3-PF40-DT

DetectRefresh

4. Frequently Asked Questions

Question 1: unable to log in to the device manager web management interface. What should I do?

Refer to the following steps:

- 1) Confirm that the PC network cable is normally connected to the device port, and the corresponding indicator flashes.
- 2) Before accessing the setting interface, it is recommended to set the computer to "static IP mode" and configure it to 10.224.0.XX (e.g. 10.224.0.121, which cannot be consistent with the device configuration IP 10.XX.XX.XX (XX.XX.XX is the last two digits of the MAC address of the current device)), subnet mask: 255.0.0.0.
- 3) Use the ping command to detect the connectivity between the computer and the device.

Question 2: what if you forget your device user name and password? How to restore the factory configuration?

If you forget the login password, long press the reset key on the panel for 5 seconds when the device is powered on, and the device will be restored to the factory setting after restarting