Wi-Tek Cloud Easy Smart PoE Switch

WEB User Manual

www.wireless-tek.com

This manual applies to the following switch models

model	Interface
WI-PCES306G	4-port PoE+ and 2-port RJ45
WI-PCES310GF	8-port PoE+ and 2-port SFP

Disclaimers

Preface

Reader object

This document is suitable for the following people

- Network Engineer
- Technical Promotion Personnel
- Network Administrator

Technical Support

- Website:

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 and FF.

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.

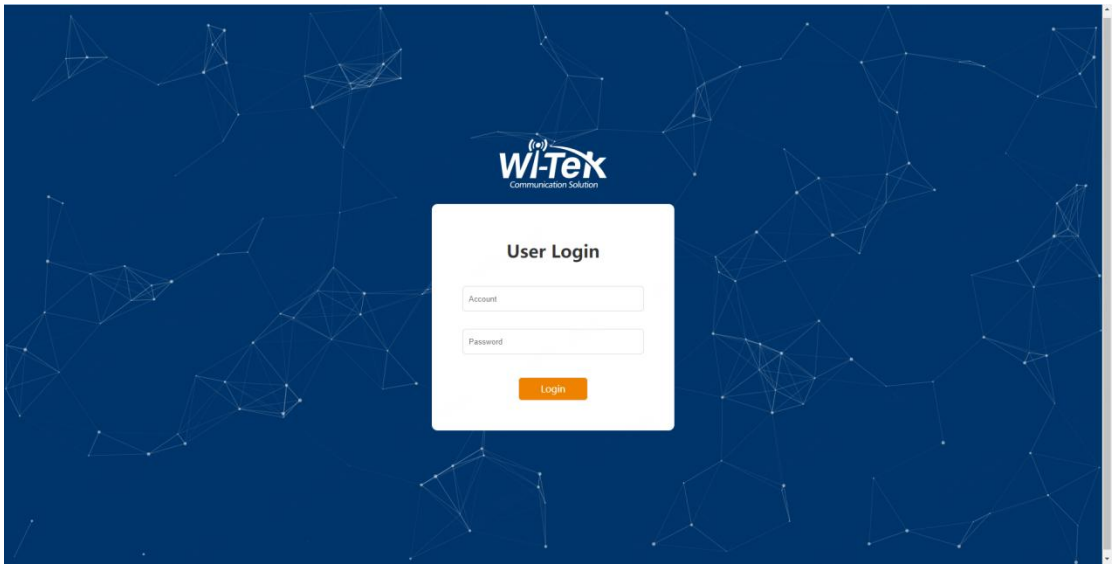
2.3 Starting the Web-based Configuration Utility

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 192.168.0.1) and then press Enter.

After a successful connection, the login window displays.

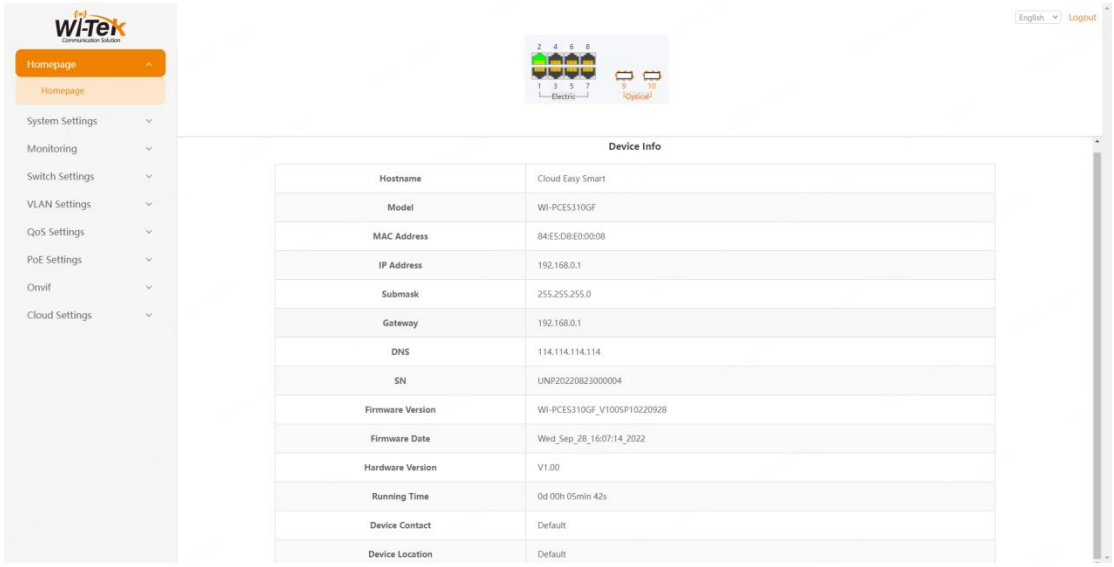


2.5 Logging In

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.

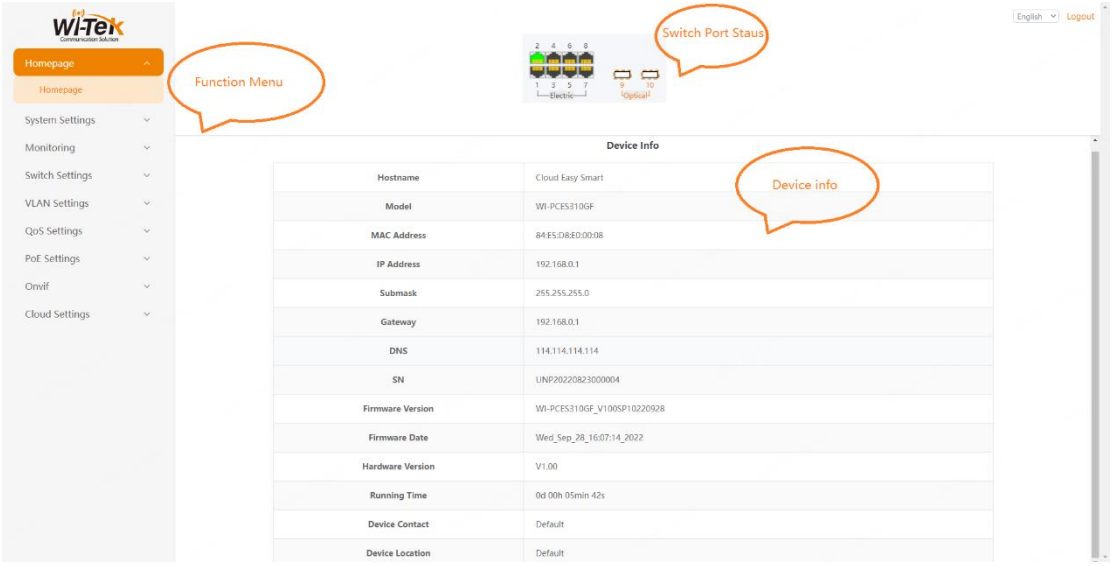
By default, the application logs out after five minutes of inactivity.
To logout, click Logout in the top right corner of any page. The system logs out of the device.
When a timeout occurs or you intentionally log out of the system, a message appears and

the Login page appears, with a message indicating the logged-out state. After you log in, the application returns to the initial page.

2.6Web-based Switch Configuration

The Websmart switch software provides Layer 2 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:



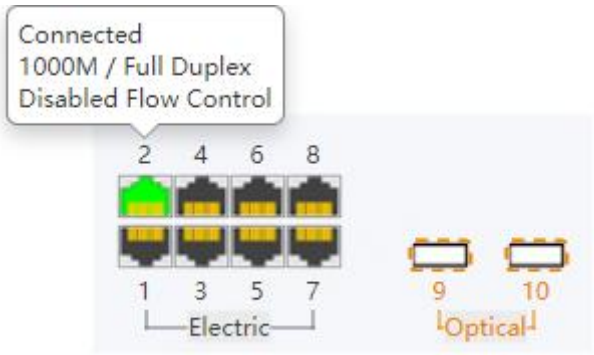
As you can see, the page is divided into two parts:

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.

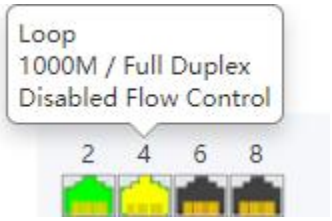
The right part is the content area, which is divided into upper and lower parts. The upper side is the port status bar, Chinese and English display switching and 《**Logout**》 button, and the lower side is the page content presentation and configuration area.

Port Status Bar:

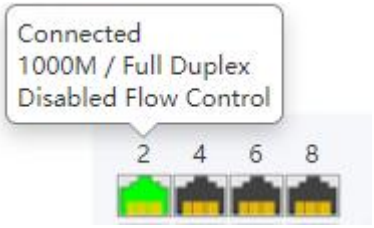
Move the mouse to the port to display the basic status of the port (including port connection status, rate duplex and flow control status).



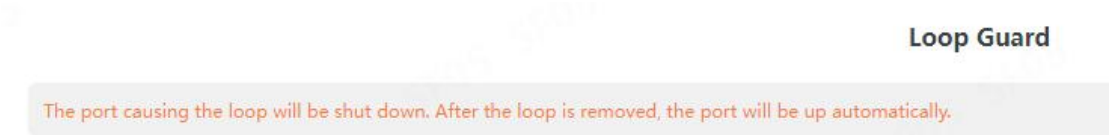
When a loop appears on the port, the port icon displays yellow



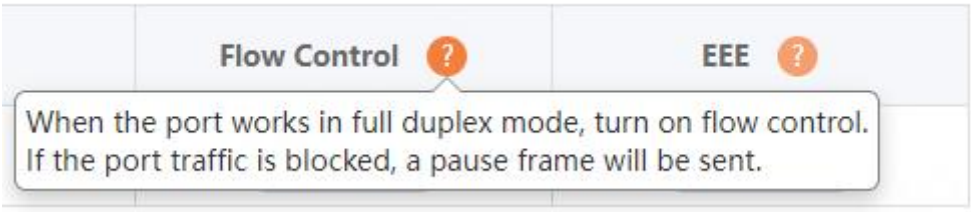
When the port works normally, the port icon displays green



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



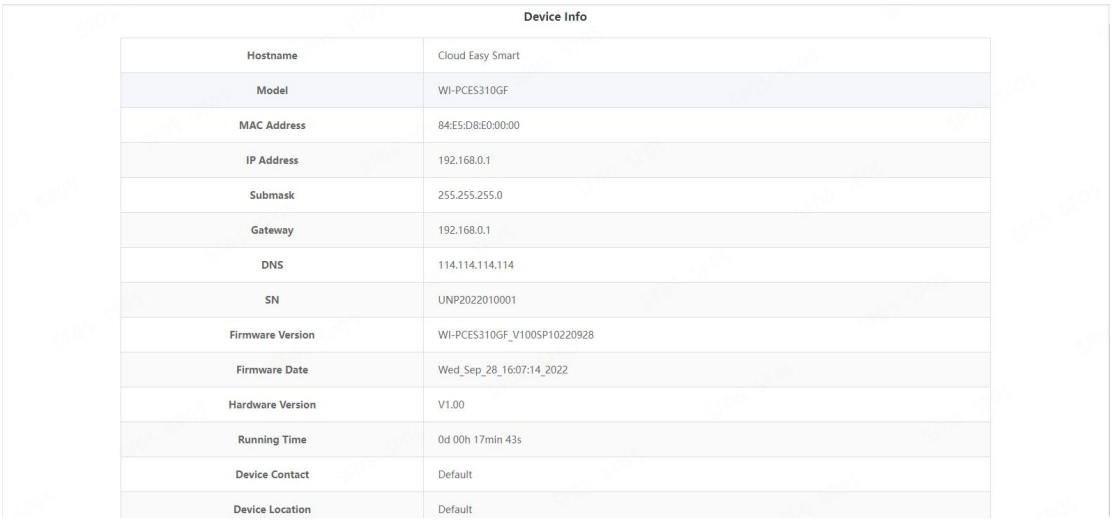
And a question mark with an orange background (indicating the prompt description of the operation, and the mouse moves up to display the description text).



3 Web Smart Configuration

3.1 Homepage

The homepage interface displays the basic information of the device.



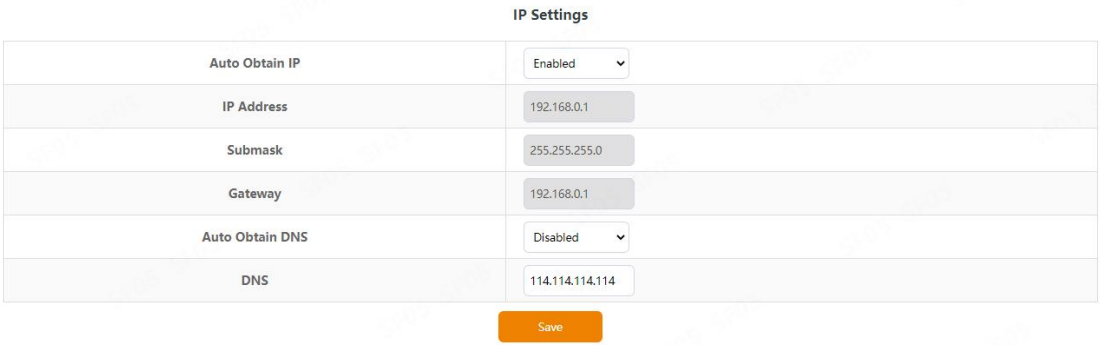
3.2 System Settings

3.2.1 Device Info

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

3.2.2 IP Settings

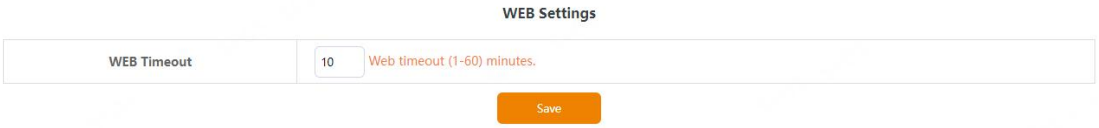
Configure device management IP (default static IP: 192.168.0.1)



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 three digits of the MAC address of the current device).

3.2.3 WEB Settings

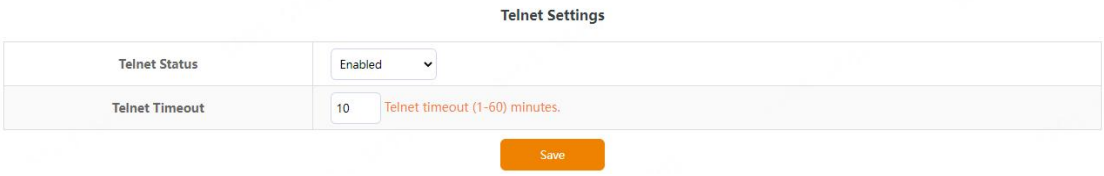
Configure web page timeout, default is 10 minutes.



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

3.2.4 Telnet Settings

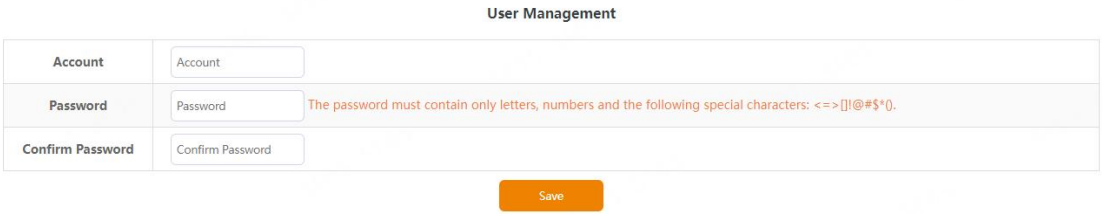
Configure Telnet timeout, default is 10 minutes.



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

3.2.5 User Management

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

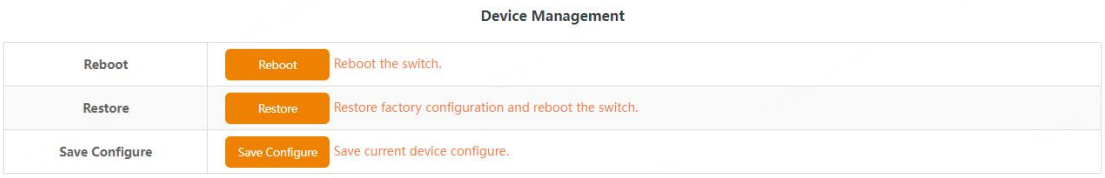


3.2.6 Upgrade

System upgrade can be divided into **Local upgrade** and **Online upgrade**:
1. Local upgrade
Click《**Select File**》and select the software package you want to upgrade in the pop-up file selection box (Decompress the package and select the bin file for upgrade.).

3.2.7 Device Management

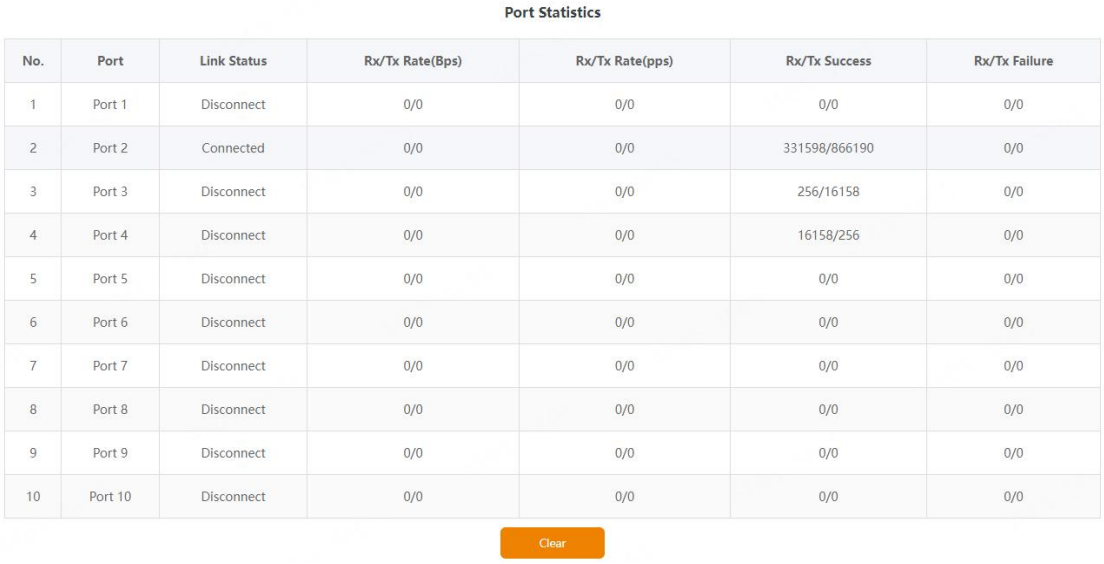
Click《**Reboot**》to restart the equipment.
Click《**Restore**》to restore the factory configuration and restart the equipment.
Click《**Save Configure**》to save current device configure.



3.3 Monitoring

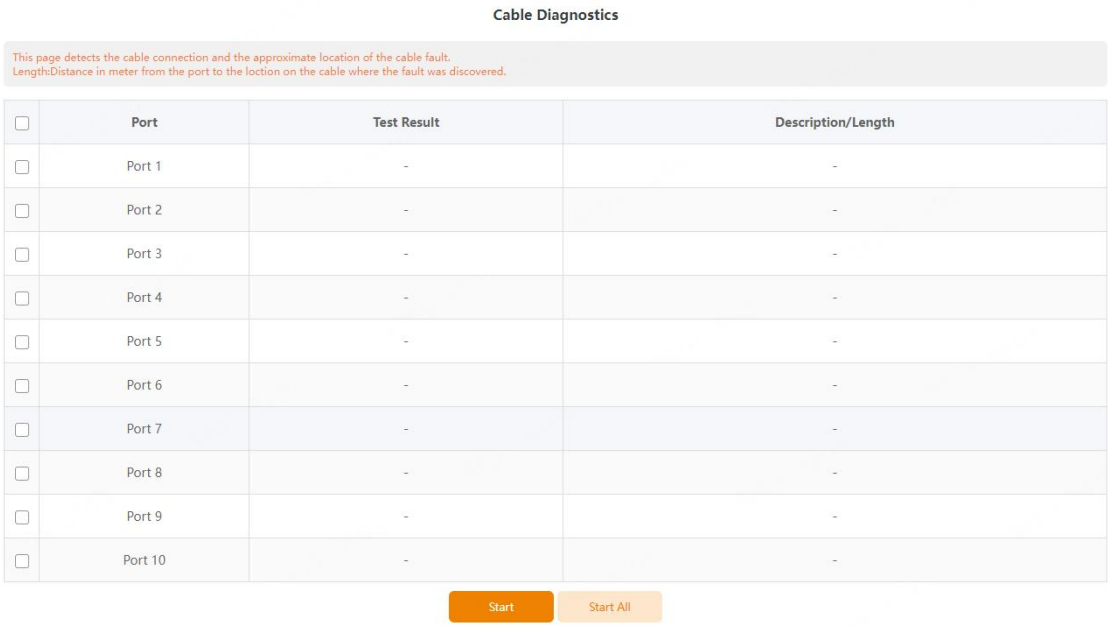
3.3.1 Port Statistics

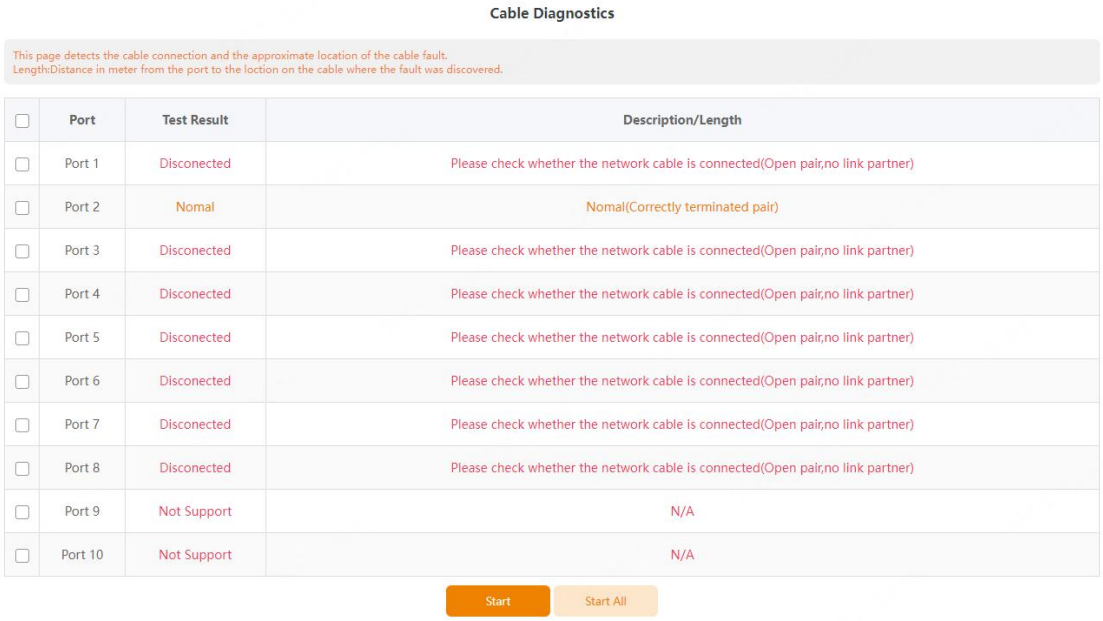
The Port Statistics page displays the data statistics and status of the device port, such as the port sending and receiving rate, sending and receiving packets, etc.



3.3.2 Cable Diagnostics

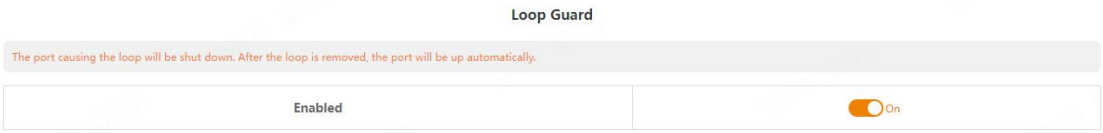
You can roughly understand the cable condition of the corresponding port through cable detection (such as whether the cable is short circuited, disconnected, etc.).
Click 《**Start All**》 and wait for the test results to return.





3.3.3 Loop Guard

Configure enable loop guard.



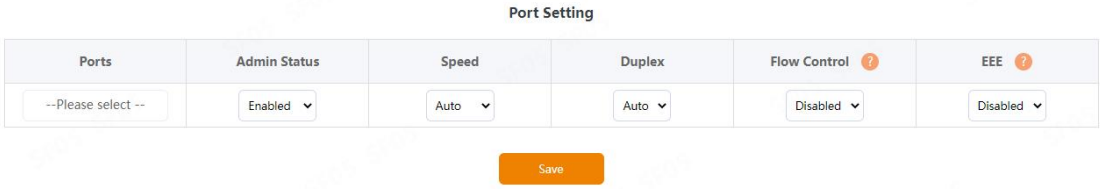
Tips:
The port causing the loop will be shut down. After the loop is removed, the port will be up automatically.（Default is enable）。

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.



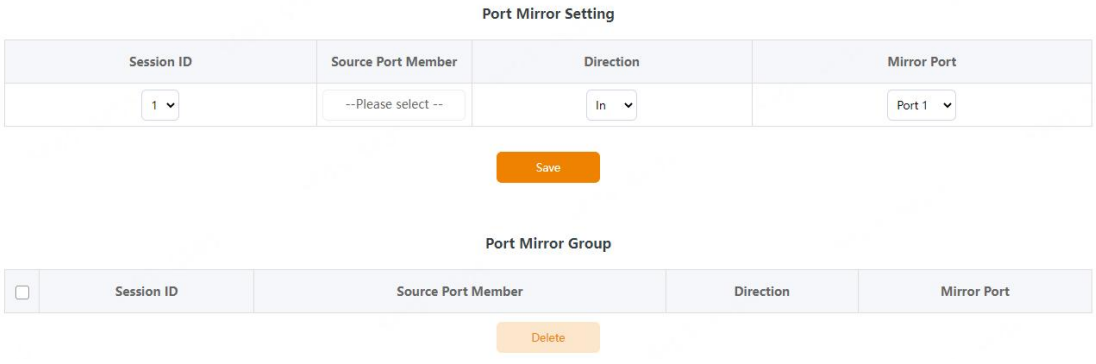
Display part:
Displays the configuration attributes and actual effective attributes of each port of the device.

Port List

No.	Port	Admin Status	Speed Duplex		Flow Control		EEE
			Config	Actual	Config	Actual	
1	Port 1	Enabled	Auto/Auto	Link Down	Disabled	Disabled	Disabled
2	Port 2	Enabled	Auto/Auto	1000M/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

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.

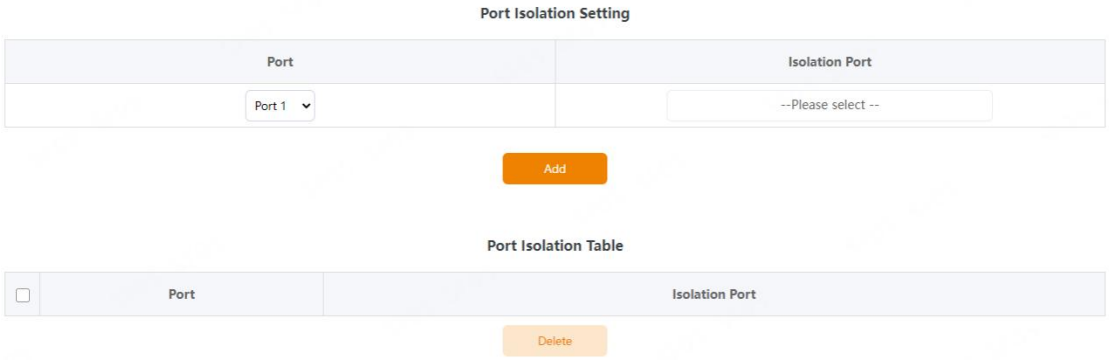


Tips:

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

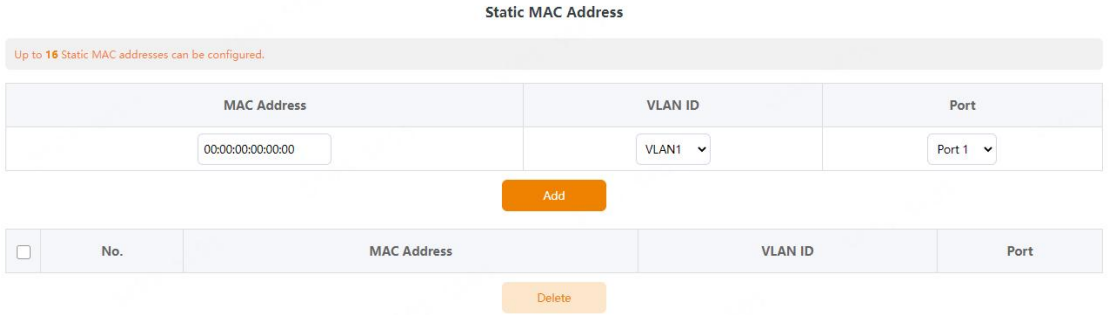
3.4.3 Port Isolation

Configure isolation port group

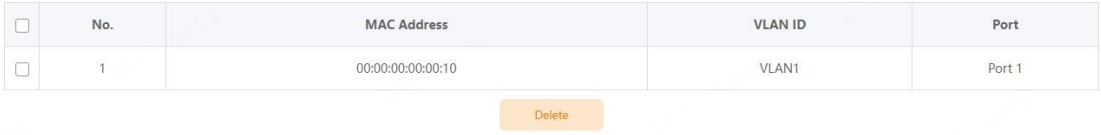


3.4.4 Static MAC

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.



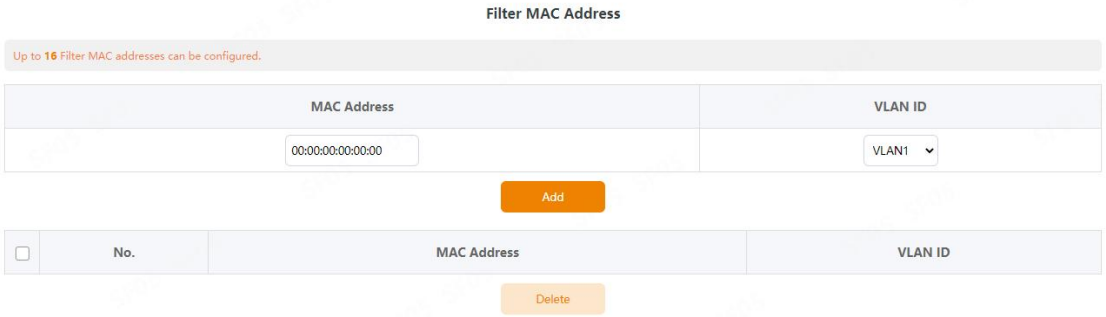
Static MAC deletion and display:
After adding a legal static Mac, the corresponding data will be displayed; Check the static Mac and click《**Delete**》. After the configuration is successful, the MAC address, VLAN and corresponding port will be unbound.



Tips:
1. Static MAC addresses maximum can be configured 16.

3.4.5 Filter MAC

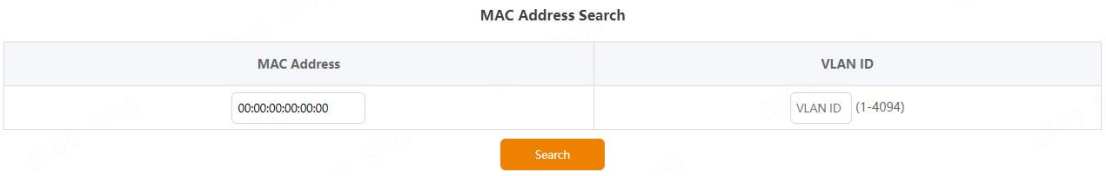
Configure filtered MAC address



Tips:
1. Filter MAC addresses maximum can be configured 16.

3.4.6 Search MAC

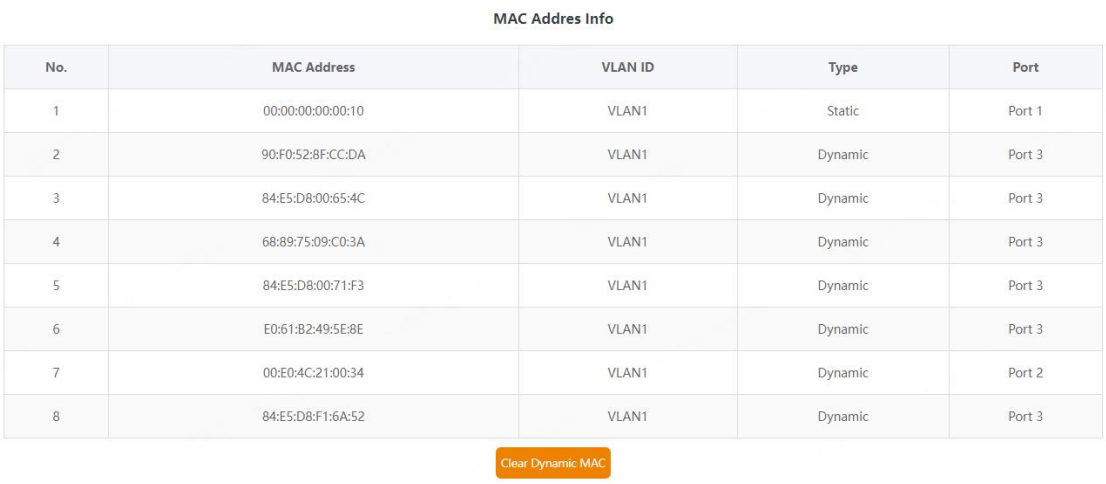
Search the MAC table learned by the device (support fuzzy search)



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

3.4.7 MAC List

Displays the list of MAC learned by the device



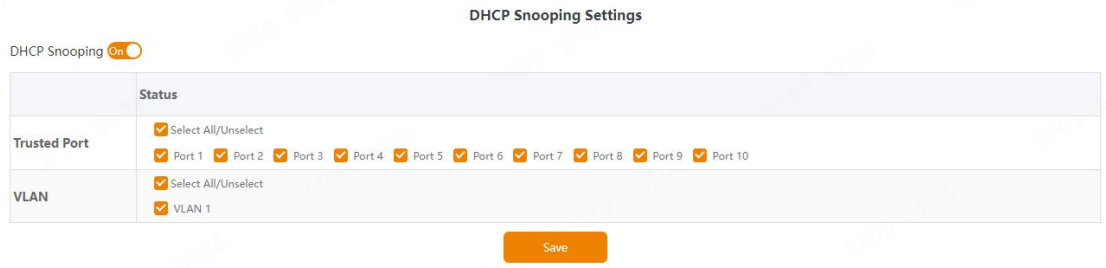
Click《**Clear Dynamic MAC**》and the device will get the learning MAC list again.

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

3.4.8 DHCP Snooping

Configure DHCP Snooping function, which is disabled by default.

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.



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.

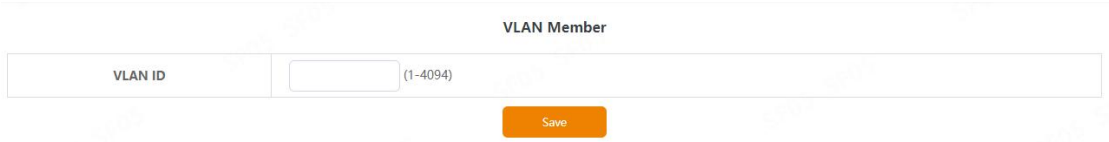
2. Generally, the DHCP server port (upper connection port) is set as the trust port.

3.5 VLAN Settings

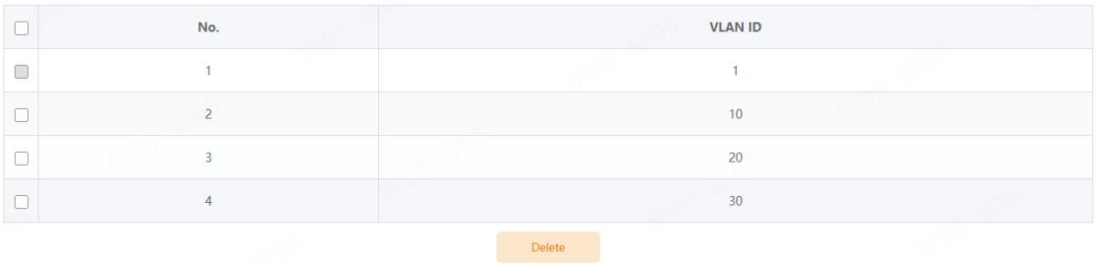
Add or delete device VLAN members and port VLAN configuration

3.5.1 VLAN Member

Configuration part:
Enter a valid VLAN ID and click 《**Save**》to configure a new VLAN member;



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

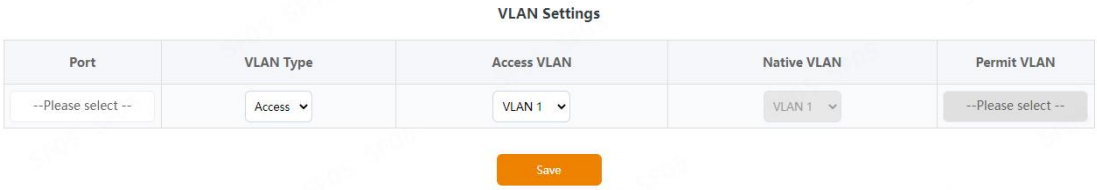


Tips:
1. Configure up to 16 VLAN members;
2. When VLAN ID is bound by port, it cannot be deleted.

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《**Save**》to

configure and save port VLAN (Permit VLAN and Native VLAN are selected from the VLAN members configured above);



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.

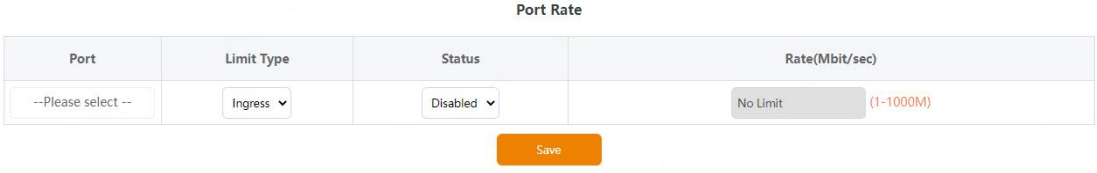
Port	VLAN Type	Access VLAN	Native VLAN	Permit VLAN
Port 1	Access	1	--	--
Port 2	Access	1	--	--
Port 3	Access	1	--	--
Port 4	Access	1	--	--
Port 5	Access	1	--	--
Port 6	Access	1	--	--
Port 7	Access	1	--	--
Port 8	Access	1	--	--
Port 9	Access	1	--	--
Port 10	Access	1	--	--

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 Save to configure the port rate.



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

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《**Save**》 to configure storm control.

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

Tips:
1. Rate limit range: 1-1000M

3.7 PoE Settings

Tips:
Some models support Poe function

3.7.1 PoE Global Info

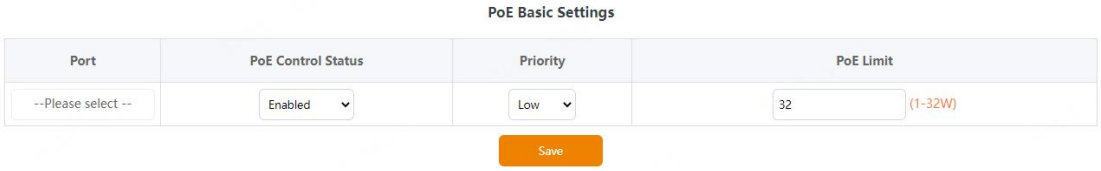
Displays the global information of the device Poe function

PoE Global Info

PoE Hardware Version	V1.0
PoE Work Status	Normal
PoE Support Type	802.3af/802.3at
PoE Consumption Power	0W
PoE Port Number	8
PoE Total Power	120W
PoE Voltage	54 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 《**Save**》 to configure PoE.



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

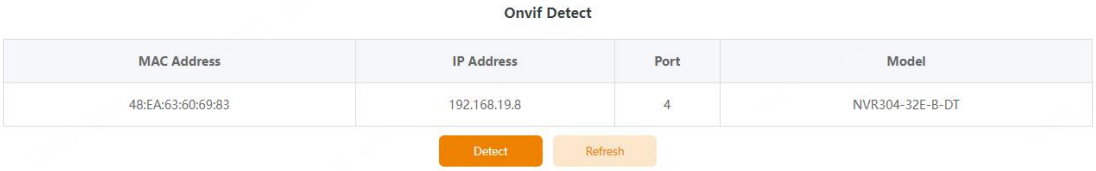
Entry	Port	PoE Control Status	Power Status	PoE Limit(1-32W)	Power	Priority	Class
1	Port1	Enabled	Off	32W	0W	Low	N/A
2	Port2	Enabled	Off	32W	0W	Low	N/A
3	Port3	Enabled	Off	32W	0W	Low	N/A
4	Port4	Enabled	Off	32W	0W	Low	N/A
5	Port5	Enabled	On	32W	0W	Low	N/A
6	Port6	Enabled	On	32W	0W	Low	N/A
7	Port7	Enabled	On	32W	0W	Low	N/A
8	Port8	Enabled	On	32W	0W	Low	N/A

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

3.8 Onvif

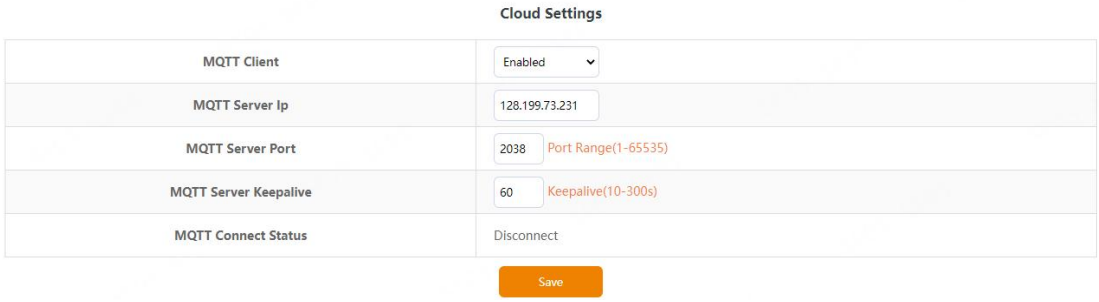
Support Onvif protocol function to discover devices.

Click《**Detect**》to discover devices.

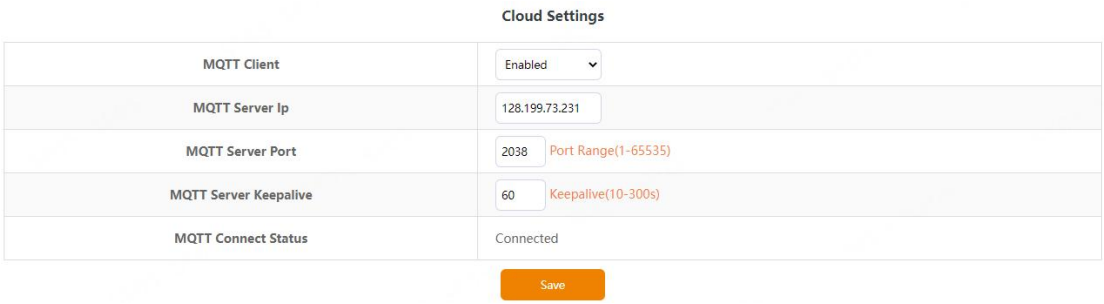


3.9 Cloud Settings

The cloud settings function is implemented based on the MQTT protocol, and the device is used as an MQTT client.



Select “Enabled” for “MQTT Client”, configure the IP address and port of the cloud for MQTT Server IP address and port, and click《**Save**》to configure; When the connection is successful, the “MQTT Connect Status” is displayed as Connected



Tips:

1. Cloud Settings function is optional.

2. The “MQTT Connect Status” needs to refresh the page to update the status.

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.XX.XX.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 three 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