# 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(V2) | 4-port Gigabit PoE+ RJ45 and 2-port Gigabit RJ45 uplink |
| WI-PCES310GF(V2) | 8-port Gigabit PoE+ RJ45 and 2-port Gigabit SFP |
| WI-PCES318GF(V2) | 16-port Gigabit PoE+ RJ45 and 2-port Gigabit SFP |
| WI-PCES326GF(V2) | 24-port Gigabit PoE+ RJ45 and 2-port Gigabit SFP |

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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.

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# 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

### 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.

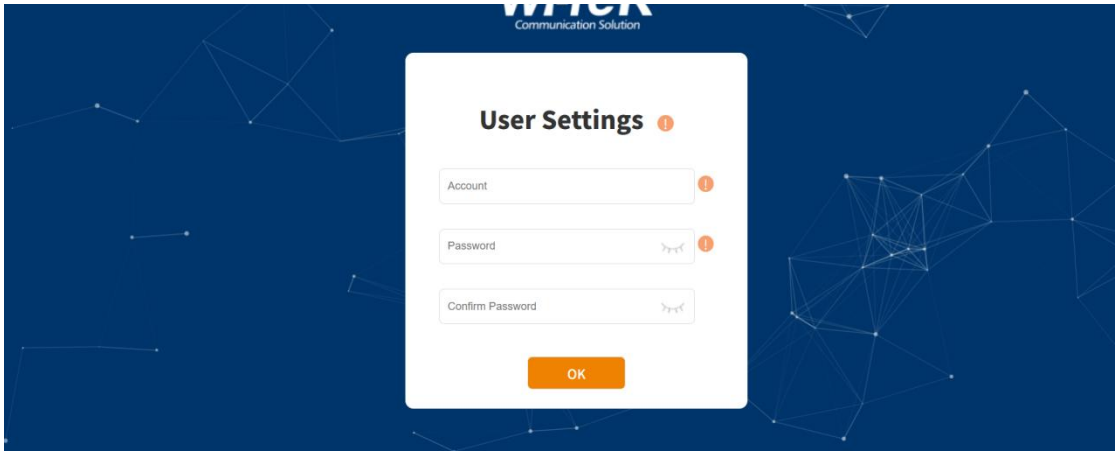
## 2.3 Starting the Web-based Configuration Utility

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.

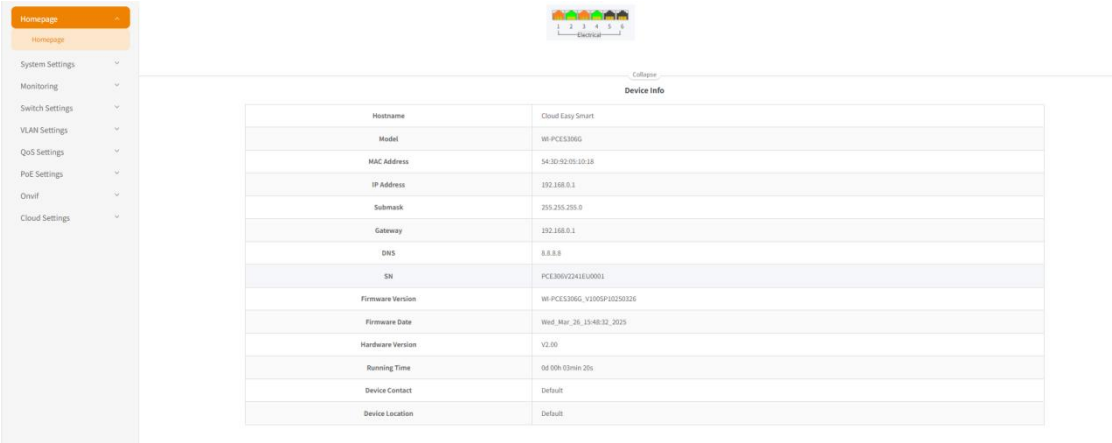
After a successful connection, the login window displays.




## 2.4 Logging In

To log in to the device configuration utility:
**In the factory state, the first login requires setting an account and password.**

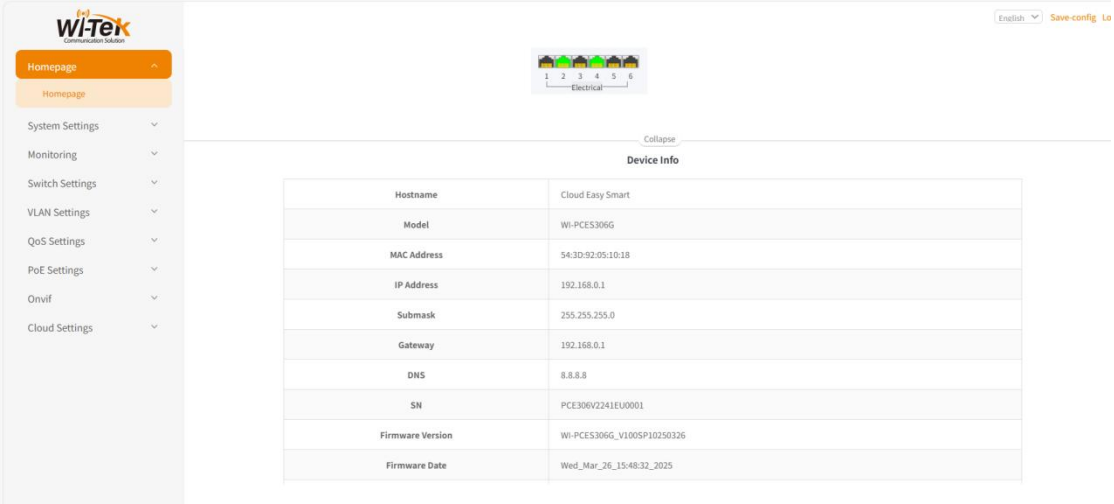
When the account and password is set successful, the System Information window displays.




## 2.5 Web-based Switch Configuration

The Easysmart 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.

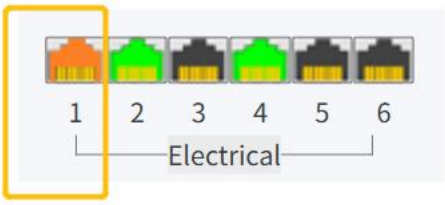
For the purposes of this manual, the user interface is separated into three sections, as shown in the following figure:



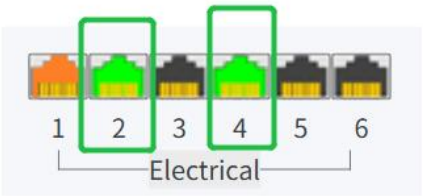

As you can see, the page is divided into two parts:
The left part is the menu bar, which displays the links of all configuration functions of the equipment, such as monitoring management and switch configuration module.
The right part is the content area, which is divided into upper and lower parts. The upper side is the port status bar, 《Save》 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

When the port is connected with 10/100M speed, the port color is yellow , like in the following picture:




When the port is connected with 1000M speed, the port color is green, like in following picture:

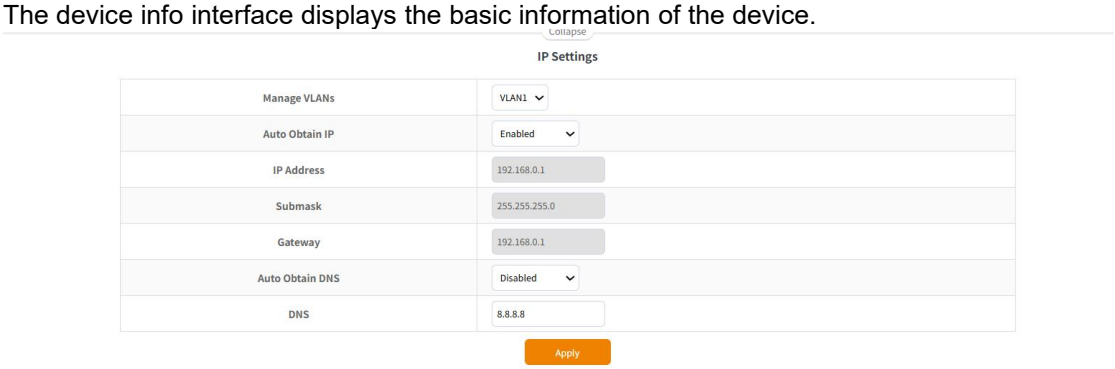



# 3 Web Smart Configuration

## 3.1 System Settings

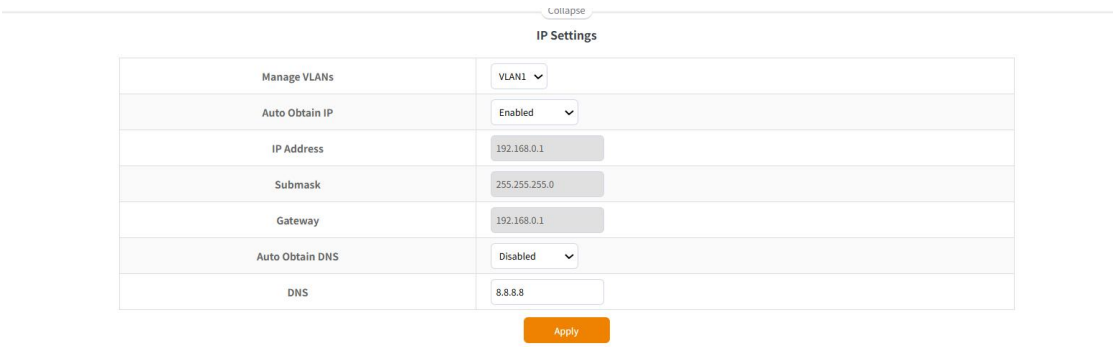
### 3.1.1 Device Info

The device info interface displays the basic information of the device.




### 3.1.2 IP Settings

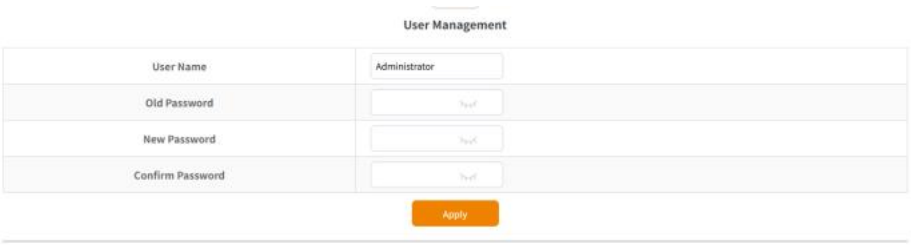
Configure device management IP (default static IP: 192.168.0.1)




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).

### 3.1.3 User Management

Configure the user account information,including username and password



Tips:

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

### 3.1.4 Firmware Upgrade

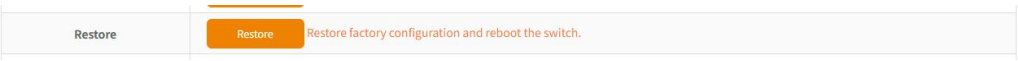
System firmware upgrade can be divided into **Local upgrade** and **Online upgrade**:

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.).

### 3.1.5 Reset

Click《**Fatcory Default**》to reset the equipment to factory default settings.




### 3.1.6 Save Configuration

Click the menu or the <Save> icon on the left upper side to save current configuration of the switch.

### 3.1.7 Reboot

Click《**Reboot**》to restart the equipment.

## 3.2 Switch Settings

### 3.2.1 Port Settings

Port configuration can batch configure the status, speed, duplex, flow control 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 **《Save》** to distribute the configuration.

Copper 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 devices

Port List

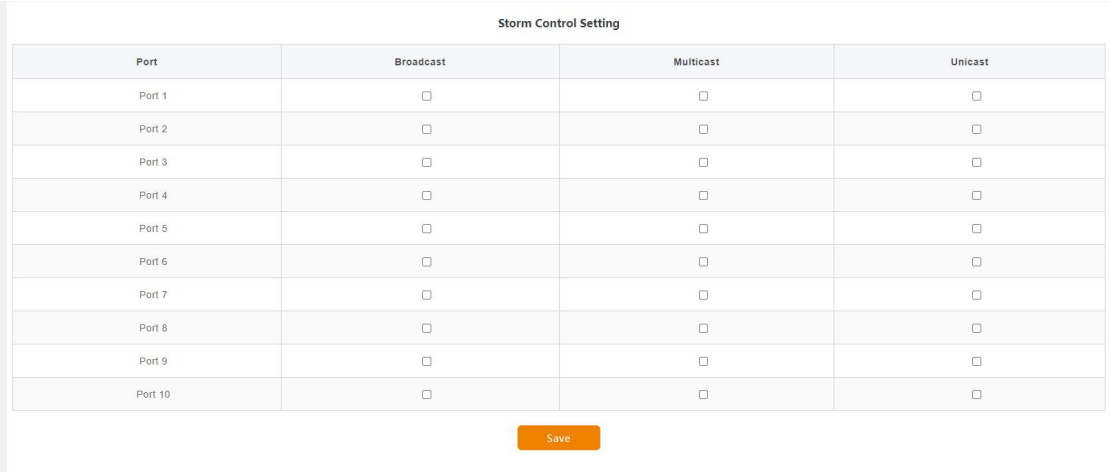
| No. | Port | Admin Status | Speed Duplex | | Flow Control | | EEE |
|---|---|---|---|---|---|---|---|
| | | | Config | Actual | Config | Actual | |
| 1 | Port 1 | Enabled | Auto/Full | 100M/Full | Enabled | Enabled | Disabled |
| 2 | Port 2 | Enabled | Auto/Auto | Link Down | Enabled | Disabled | Enabled |
| 3 | Port 3 | Enabled | Auto/Auto | Link Down | Disabled | Disabled | Disabled |
| 4 | Port 4 | Enabled | Auto/Auto | 1000M/Full | 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 |

### 3.2.2 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.

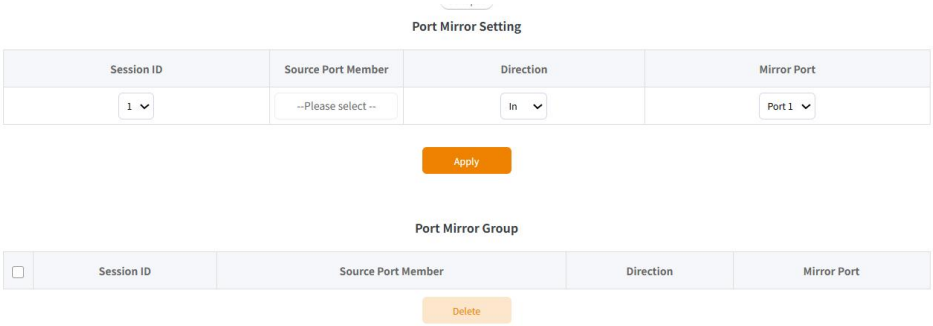
### 3.2.3 Storm Control

Select the port number,configured storm control type(Broadcast, Multicast, Unicast), and click《**Save**》 to configure storm control.




### 3.2.4 Port Mirroring

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



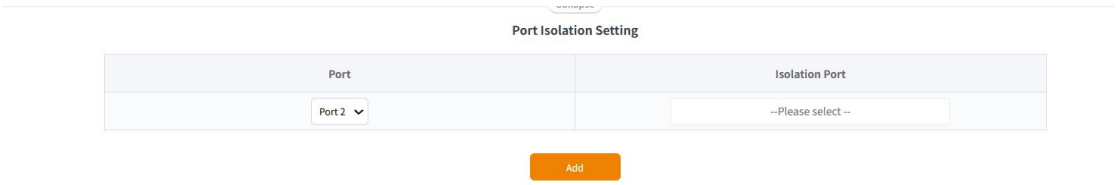

Tips:

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

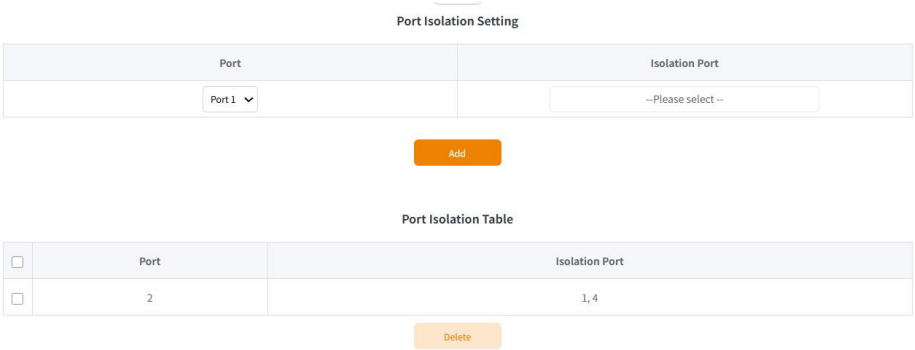
### 3.2.5 Port Isolation

The port isolation is divided into two parts: configuration part and display part

Configure isolation port group

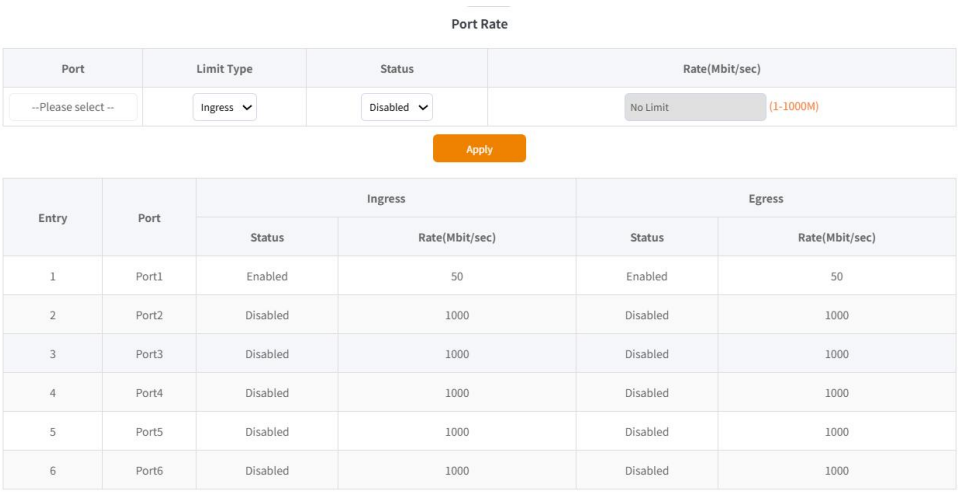



Display the port isolation list



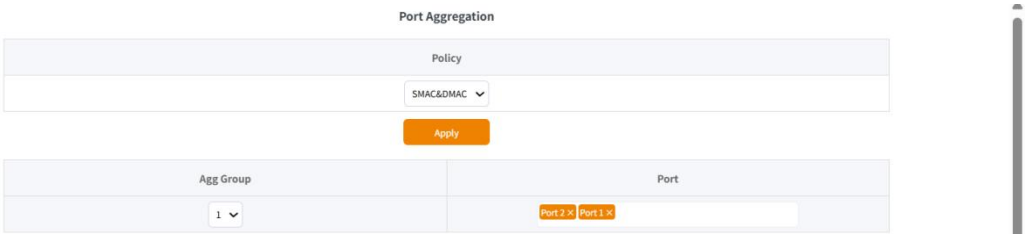

### 3.2.6 Port Rate Control

Select the port for configurating Ingress or Egress, enter the rate vulue and click save to configure the bandwidth control settings




### 3.2.7 Link Aggregation

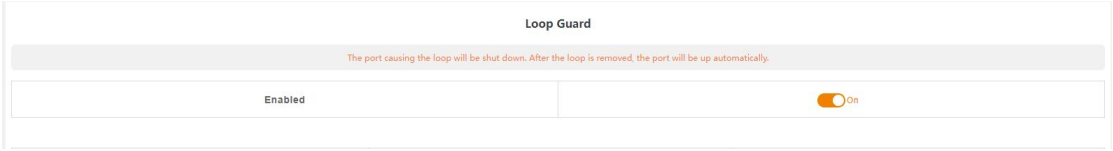
Configuration section:
Users can add or modify the ports of aggregation group members. The load balancing algorithm supports two modes: source MAC and destination MAC, and source and destination IP.




Tips:
1. Aggregation groups contain at least 2 member ports and up to 8 member ports;
2. Ports with ingress/egress rate limiting are not allowed to be aggregation group member ports;
3. Port rate/duplex mode/negotiation mode/flow control state is inconsistent and is not allowed to be an aggregation group member port;
4. Ports that are members of another aggregation group are not allowed to be aggregation group member ports;
5. Ports in different VLANs are not allowed to be member ports of an aggregation group;
6. Up to 8 aggregation groups can be created;
7. Aggregated member ports do not allow configuration modification;

### 3.2.8 Loop Guard

Configure enable loop guard.




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

### 3.2.9 Search MAC

Search the MAC table learned by the device

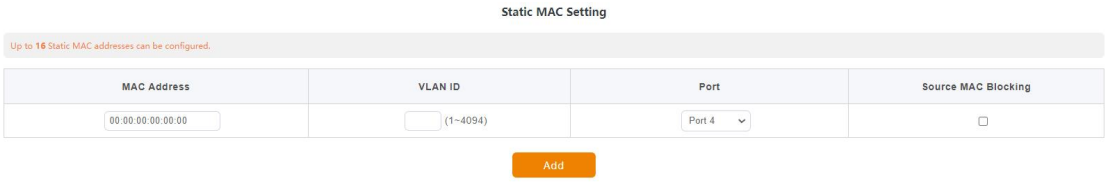
Tips:
1. The inquiry waiting process will interrupt the communication with the equipment

### 3.2.10 Static MAC

The static MAC configuration is divided into two parts.

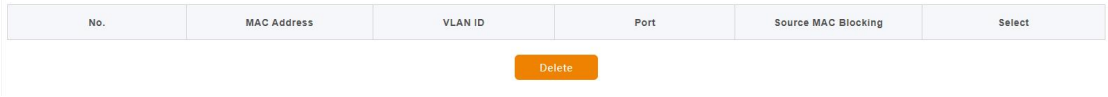
Static MAC add:

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




Static MAC deletion and display:

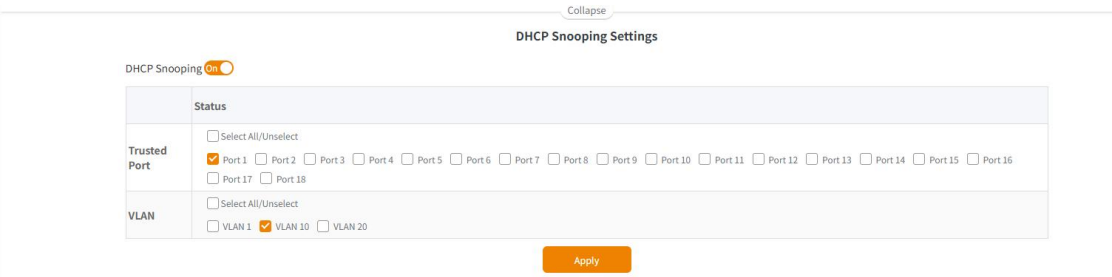
After adding a legal static Mac, the corresponding data will be displayed; Check the static Mac and click《**Delete**》. After the configuration is successful, the MAC address, VLAN and corresponding port will be unbound.




### 3.2.11 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.

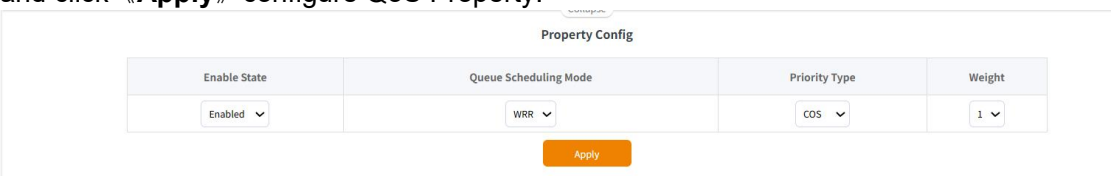
## 3.3 QoS

### 3.3.1 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.




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.

### 3.3.2 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 | 2 |
| 2 | 2 |
| 3 | 3 |
| 4 | 4 |
| 5 | 5 |
| 6 | 6 |
| 7 | 7 |

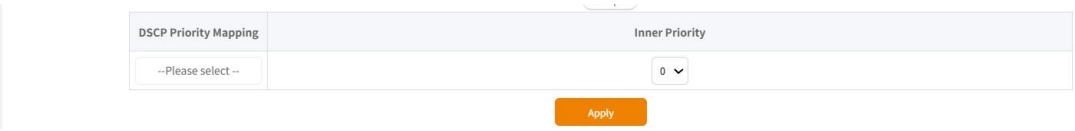
Tips：
1. The default COS priority corresponds to the internal priority 0-7 in turn.

Parameter description for this page:

| Object | Description | Default value |
|---|---|---|
| **COS Priority** | Users can control the reception of congested traffic by configuring the correspondence between COS Priority and Inner Priority. | 0-7 |
| **Inner Priority** | | 0-7 |

### 3.3.3 DSCP Priority Mapping

Including configuration and display：
Configuration part：
Select the configured DSCP Priority Mapping and Inner Priority，and click《**Apply**》configure.




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 | 2 | 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 |

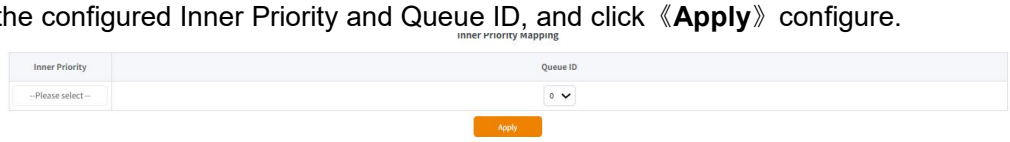
Tips：
1. Default DSCP priority 0-7 corresponds to internal priority 0, 8-15 corresponds to internal priority 1, and so on.

Parameter description for this page:

| Object | Description |
|---|---|
| **DSCP Priority Mapping** | Users can control the reception of congested traffic by configuring the correspondence between DSCP Priority and Inner Priority |
| **Inner Priority** | |

### 3.3.4 Inner Priority Mapping

Including configuration and display：
Configuration part：
Select the configured Inner Priority and Queue ID, and click《**Apply**》configure.



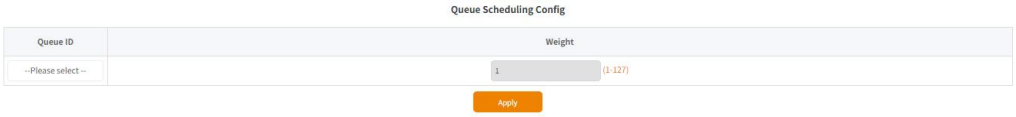

Display part：
Display the Inner Priority and Queue ID.

| 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.

### 3.3.5 Queue Scheduling

Including configuration and display：
Configuration part：
Select the configured Queue ID and Weight, and click《**Apply**》configure.




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 |

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

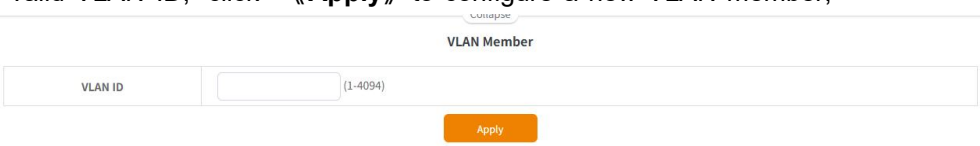
## 3.4 VLAN Settings

Add or delete device VLAN members and port VLAN configuration

### 3.4.1 VLAN Member

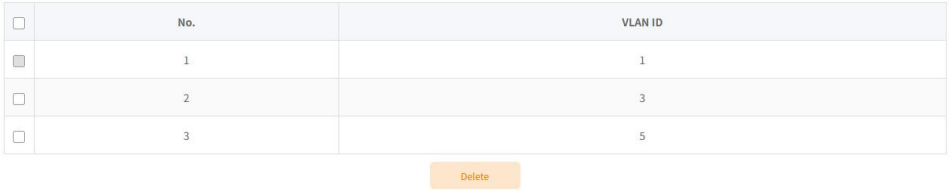
Configuration part:

Enter a valid VLAN ID, click 《**Apply**》 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

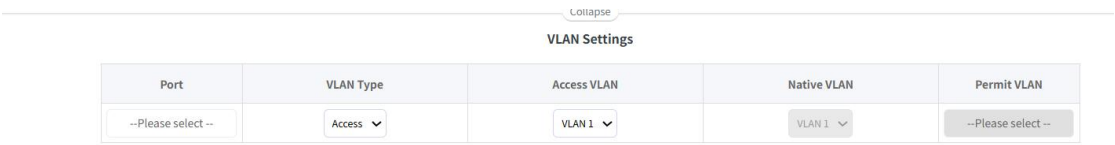



Tips:
1. Configure up to 16 VLAN members;
2. When VLAN ID is bound by port, it cannot be deleted.

### 3.4.2 VLAN Settings

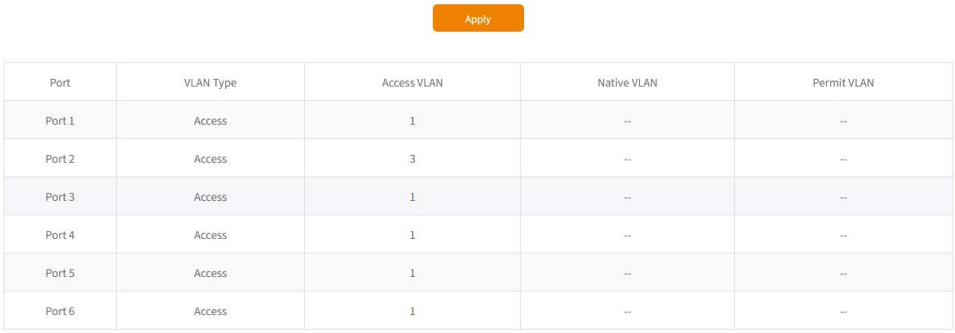
Port VLAN configuration is divided into two parts:

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.

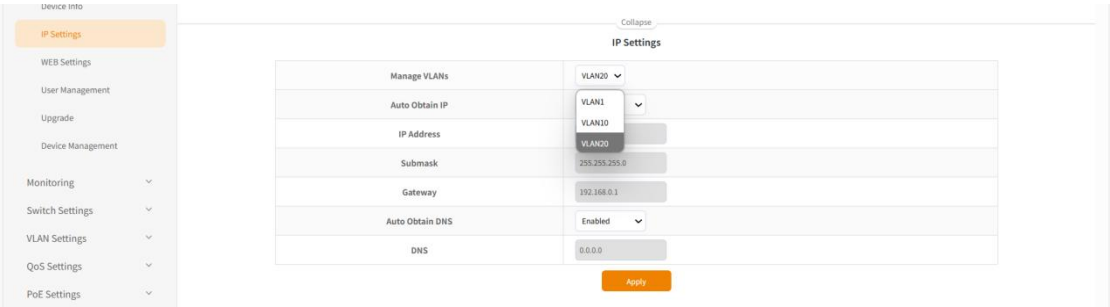



### 3.4.3 Configuring Management VLAN

Choose the menu **System Settings > IP Settings> Management VLAN** to load the following page

Follow these steps to configure the management VLAN:

1) Specify the management VLAN ID.




2) Click **Apply**.

| | |
|---|---|
| Management VLAN ID | Configure specific management VLANs, which should be within the range the configured 802.1Q VLANs. After configuration, only PCs with management VLAN tags can access to the management interface. Multiple management VLAN IDs can be configured. |

**Note:**

- Only the computer in this VLAN can access the management interface of the switch.
- By default, the management VLAN ID is 1.

## 3.5 PoE Settings

Tips:
Some models support Poe function

### 3.5.1 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 | 4 |
| PoE Total Power | 60W |
| PoE Voltage | 53 V |
| Software Version | V1.0.3 |

### 3.5.2 PoE Global Info

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.

**PoE Basic Settings**

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

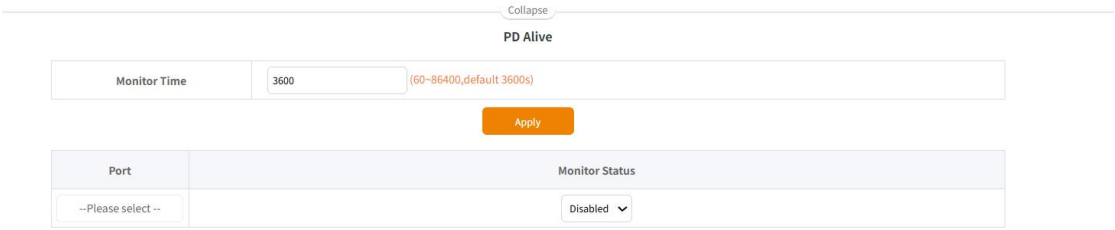
Display part:
Display the power of port PoE and the current power supply status;

| Entry | Port | PoE Control Status | Power Status | Extend PoE Mode | PoE Limit(1-32W) | Power | Priority | Class |
|---|---|---|---|---|---|---|---|---|
| 1 | Port1 | Enabled | On | Off | 32W | 1W | Low | 0 |
| 2 | Port2 | Enabled | Off | Off | 32W | 0W | Low | N/A |
| 3 | Port3 | Enabled | Off | Off | 32W | 0W | Low | N/A |
| 4 | Port4 | Enabled | Off | Off | 32W | 0W | Low | N/A |

### 3.5.3 PD Alive

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.




Display part:
Displays the number of restarts of device PD Alive.

| | | | |
|---|---|---|---|
| 2 | Port2 | Disabled | 0 |
| 3 | Port3 | Disabled | 0 |
| 4 | Port4 | Disabled | 0 |

## 3.6 Onvif

Support Onvif protocol function to discover devices

Click《**Detect**》to find the device.

## 3.7 Cloud Settings

### 3.7.1 MQTT Client

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

| | |
|---|---|
| MQTT Connect Status | Disconnect |
| Connected Server IP | 0.0.0.0 |
| Connected Server Port | 0 |

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 192.169.0.XX (e.g. 192.168.0.2), 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