SD-504 / SD-524 Series
IP PoE Surge Protector
User's Manual

About This Manual

Copyright

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Purpose

This GUI user guide gives specific information on how to operate and use the management functions of the SD-504 / SD-524 Series via HTTP web browser

Audience

The Manual is intended for use by network administrators who are responsible for operating and maintaining network equipment; consequently, it assumes a basic working knowledge of general switch functions, the Internet Protocol (IP), and Hypertext Transfer Protocol (HTTP).

CONVENTIONS

The following conventions are used throughout this manual to show information.

WARRANTY

See the Customer Support/ Warranty booklet included with the product. A copy of the specific warranty terms applicable to your Manufacture products and replacement parts can be obtained from your Manufacture Sales and Service Office authorized dealer.

Disclaimer

AETEK Inc. does not warrant that the hardware will work properly in all environments and applications, and marks no warranty and representation, either implied or expressed, with respect to the quality, performance, merchantability, or fitness for a particular purpose. Manufacture disclaims liability for any inaccuracies or omissions that may have occurred. Information in this User Guide is subject to change without notice and does not represent a commitment on the part of Manufacture. Manufacture assumes no responsibility for any inaccuracies that may be contained in this User Guide. Manufacture makes no commitment to update or keep current the information in this User Guide, and reserves the righter to make improvements to this User Guide and /or to the products described in this User Guide, at any time without notice.

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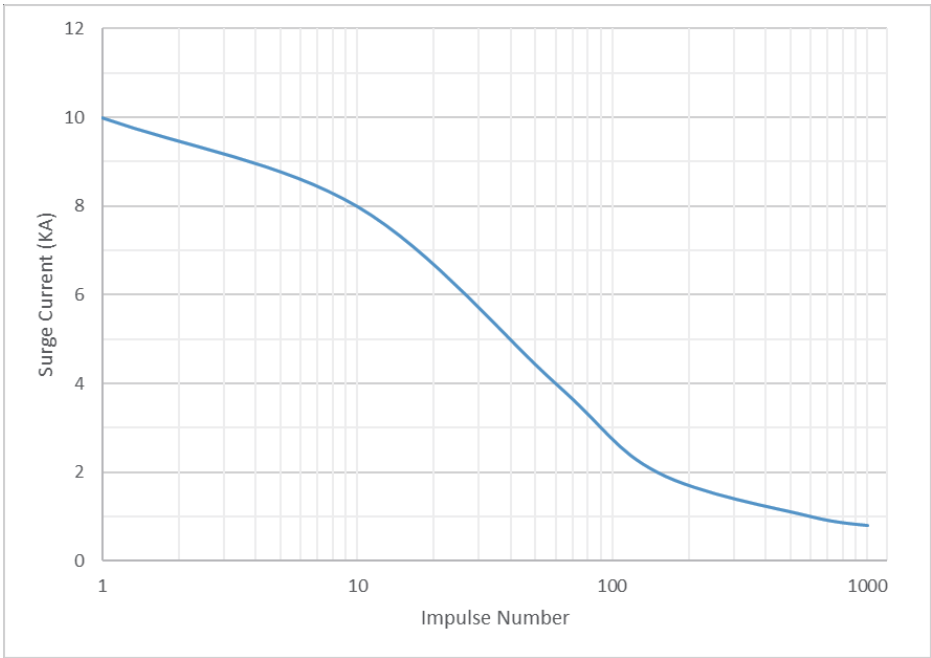
Overview

The use of surge protectors to protect sensitive and expensive equipment from lightning strikes and surges on Ethernet cables has become very important. SD-504 and SD-524 are Managed PoE surge protectors, it is designed with smart GUI and quick swap replacement system. The smart GUI provides the quick overview of the surge module life status for easy and efficient maintenance. The quick swamp replacement system allows you to swap the modules without removing the entire unit from the din-rail or the rack. SD-504 and SD-524 keep your valuable PoE switches, PoE PDs and any other IP devices safe from lightning and other forms of electrical interference such as power surges and spikes over networking cables. These 2 models are fully compatible with 802.3af/802.3at/802.3bt/UPoE standard, providing protection to both Ethernet data and PoE power feed, these include outdoor IP cameras, wireless AP and other networking devices. These harden-graded PoE surge protectors operating between -40˚C and 75˚C during harsh weather conditions, plug-and-play design defends the surge up to 20KV / 10KA easily.

Features

- Web UI Setup
- Alarm log event
- Slide-in modular design
- Quick swap when life time of single PoE surge module is expired
- Supports 10M/100M/1G/2.5G bps Ethernet
- Supports 802.3af / 802.3at / 802.3bt / UPoE
- Protects eight wires of networking cable including PoE
- Protects up to 20KV / 10KA surge
- Failure LED indicator
- Operating temperature between -40˚C to 75 ˚C

Surge Current vs Impulse Number



Chapter 1 Operation of Web-based Management

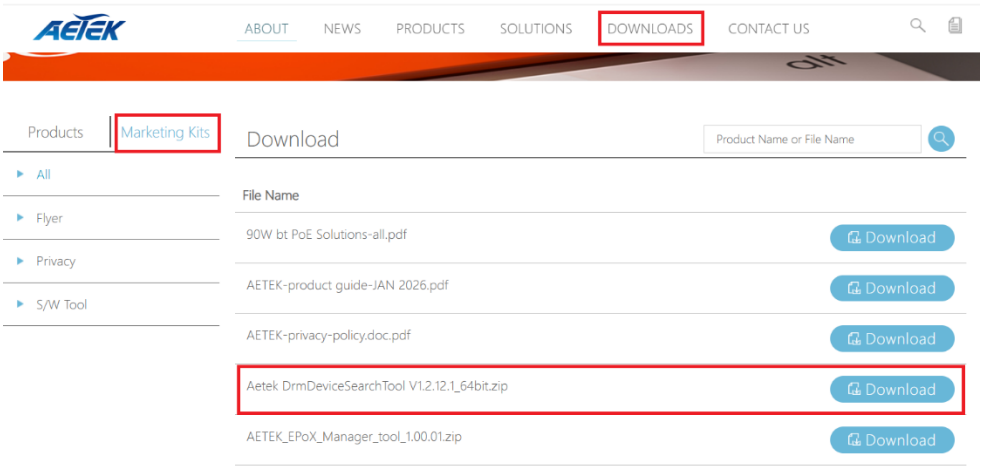
Initial Configuration

This chapter instructs you how to configure and manage the SD-504/SD-524 Series through the web user interface. With this facility, you can easily access and monitor through LAN port of the smart camera housing all the status of the smart camera housing, including, input Module Status, output Module Status, Blower status, and so on.

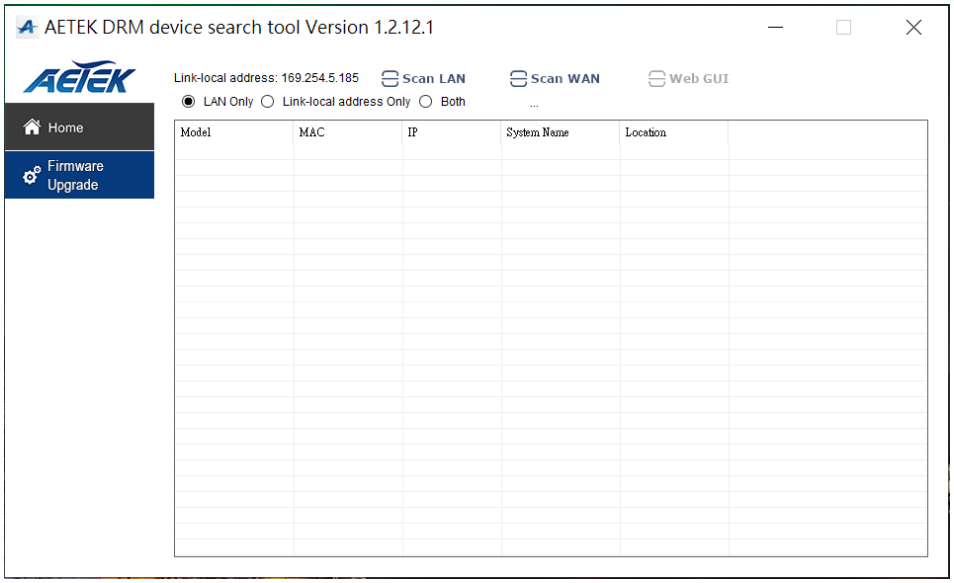
The default values of the SD-504/SD-524 Series are listed in the table below:

IP Address	DHCP Client
Subnet Mask	-
Default Gateway	-

Another Please download AETEK DRM Tool at AETEK web site : http://www.aetektec.com for scan SD-504/SD-524 ip address.



Please download the file, extract it, and install the program. The download file included DRM Tool user manual, Then follow the instructions scan SD-504/SD-524 IP address for login WEB UI. (Note: The SD-504/SD-524 is no support DRM firmware upgrade function)



After the SD-504/SD-524 Series has been finished configuration it interface, you can browse it. For instance, type **http:// 192.168.1.1** in the address row in a browser, it will show the following screen and ask you inputting username and password in order to login and access authentication.

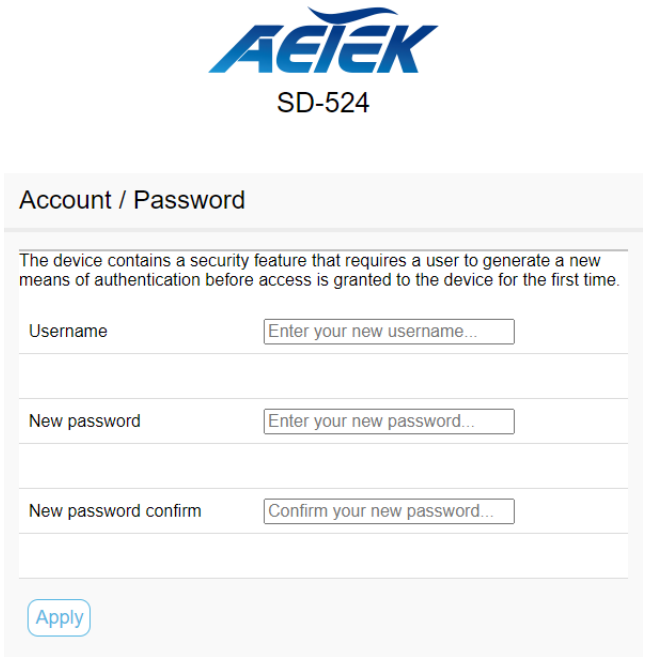


Figure 1-1: The first time login page

The first time login need key in new username and password, please enter the new username and password, and then click the <Apply> button. The login process now is completed. In this login menu, you have to input the complete username and password respectively, the SD-504/SD-524 Series will not give you a shortcut to username automatically. This looks inconvenient, but safer.

In the SD-504/SD-524 Series, allowed two or more users using administrator's identity to manage this switch, which administrator to do the last setting, it will be an available configuration to effect the system.

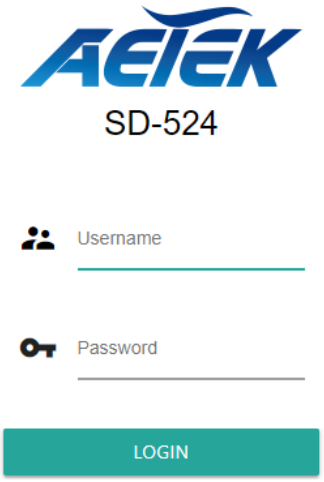


Figure 1-2: The login page

NOTE:
When you login the Switch WEB page to manage. You must first type the Username of the admin. Password of the admin, so when you type after the end Username, please press enter. Management page to enter WEB.

When you login SD-504/SD-524 series switch Web UI management, you can use both ipv4 login to manage

To optimize the display effect, we recommend you use Microsoft IE 6.0 above, Netscape V7.1 above or Firefox V1.00 above and have the resolution 1024x768. The switch supported neutral web browser interface

Chapter 2 System

This chapter describes the entire basic configuration tasks which includes the System Information and any manage of the IP PoE Surge (e.g. Time, Account, IP, Syslog and NTP.)

The Web UI supports all frequently used web browsers listed below:

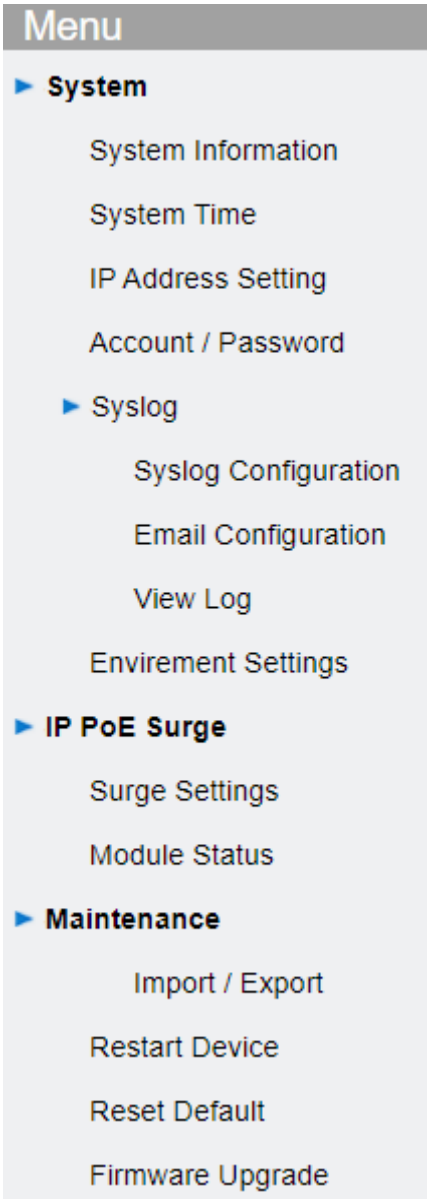


Figure 2-0: Menu list

In the Web UI, the left column shows the configuration menu. The top system bar shows the IP PoE Surge's current status described below.

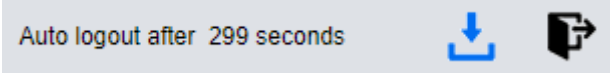


Figure 2-1: Top system bar

On the top-right part, it shows auto logout count down and useful functions for users to save the

system configuration, log out the system. The rest of the screen area displays the configuration settings.

- Auto logout: Default auto logout after 300 seconds.

- Save configure: Click the button then saves all system configuration into the system.

- Logout: Click the button then logout the system.

2-1 System Information

You can identify the system by configuring system name, location and the contact of the switch. The switch system's contact information is provided here.

Web interface

To configure System Information in the web interface:

1. Click System -> System Information.
2. Input System Name, Location and Contact information in this page.
3. Click Apply.

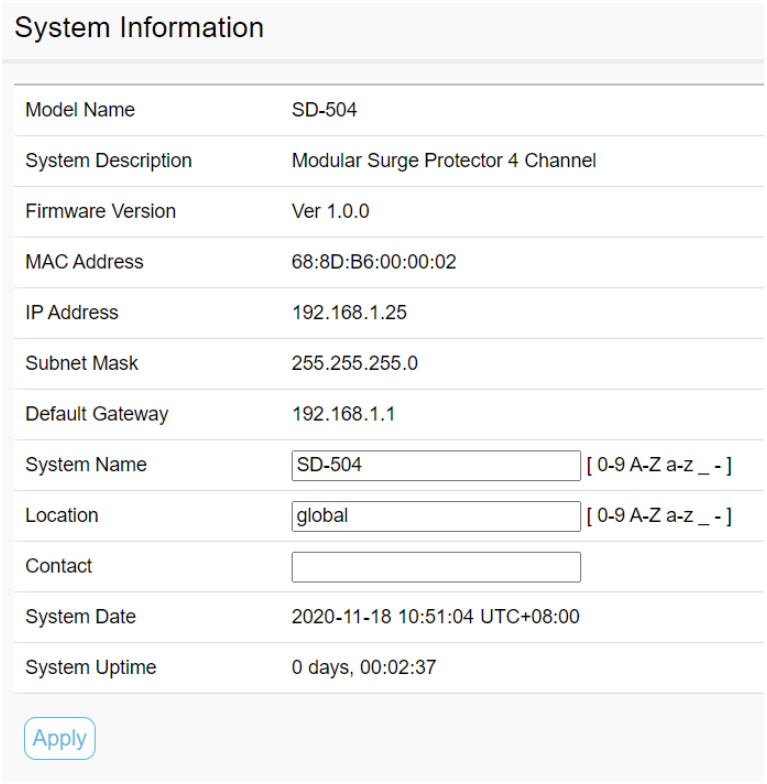


Figure 2-2: System Information

Parameter description:

- **Description**

  Displays the system description.

- **Model Name**

  Displays the factory defined model name for identification purpose.

- **MAC Address**

  Base MAC address of the switch.

- **IP Address**

  The IP Address of this switch.

- **Subnet Mask**

  The Subnet Mask IP Address of this switch.

- **Default Gateway**

  The Gateway IP Address of this switch.

- **Firmware Version**

  The software version of this switch.

- **System Time**

  The current (GMT) system time and date. The system time is obtained through the Timing server running on the switch, if any.

- **UPTime**

  The period of time the device has been operational.

- **System name :**

  An administratively assigned name for this managed node. By convention, this is the node's fully-qualified domain name. A domain name is a text string drawn from the alphabet (A-Z, a-z), digits (0-9), minus sign (-). No space characters are permitted as part of a name. The first character must be an alpha character. And the first or last character must not be a minus sign. The allowed string length is 0 to 128.

- **Location :**

  The physical location of this node(e.g., telephone closet, 3rd floor). The allowed string length is 0 to 128, and the allowed content is the ASCII characters from 32 to 1.

- **Contact :**

  The textual identification of the contact person for this managed node, together with information on how to contact this person. The allowed string length is 0 to 128, and the allowed content is the ASCII characters from 32 to 126.

2-2 System Time

The IP PoE Surge provides manual and automatic ways to set the system time via NTP. Manual setting is simple and you just input “Year”, “Month”, “Day”, “Hour” , “Minute” and “Second” within the valid value range indicated in each item.

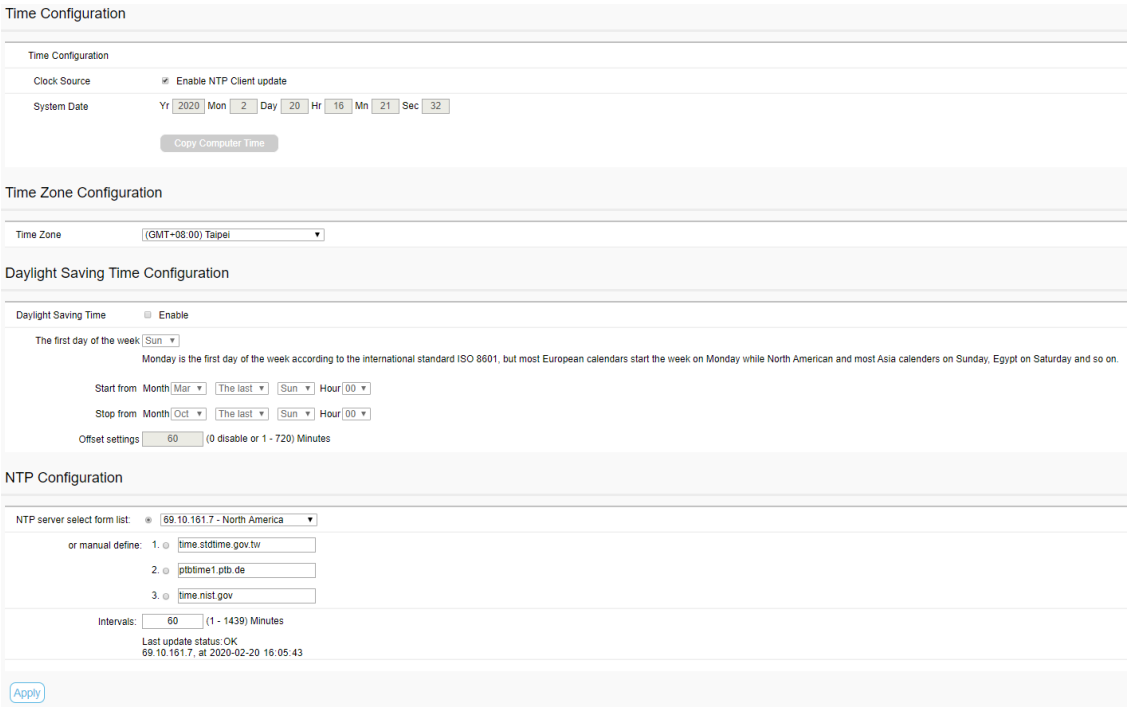


Figure 2-3: System Time

- **Web Interface :**

  To configure Time in the web interface:

  1. Click System and System Time
  2. Specify the Time parameter.
  3. Click Apply.

2-3 IP Address Settings

The IPv4 address for the switch could be obtained via DHCP Server for VLAN 1. To manually configure an address, you need to change the switch's default settings to values that are compatible with your network. You may also need to establish a default gateway between the switch and management stations that exist on another network segment.

Web Interface

To configure an IP Settings in the web interface:

1. Click System -> IP Address Settings.
2. Enable or Disable the IPv4 DHCP Client.
3. Specify the IPv4 Address, Subnet Mask and Gateway.
4. Input IPv4 DNS Server if desired.
5. Click Apply

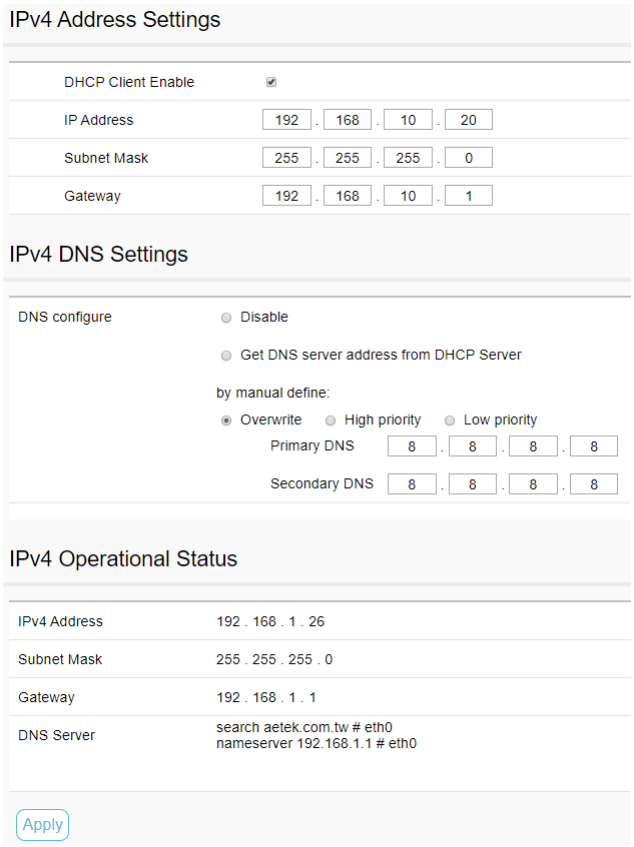


Figure 2-4: IP Address Setting

Parameter Description:

- **DHCP Client Enable**

  Enable the DHCP client by clicking this checkbox. If this option is enabled, the system will configure the IPv4 address and mask of the interface using the DHCP protocol. The DHCP client will announce the configured System Name as hostname to provide DNS lookup.

- **IPv4 Address**

  The IPv4 address of the interface in dotted decimal notation.

  If DHCP is enabled, this field is not used. The field may also be left blank if IPv4 operation on the interface is not desired.

- **Subnet Mask**

  User IP subnet mask of the entry.

- **Default Gateway**

  The IP address of the IP gateway. Valid format is dotted decimal notation, or a valid IPv6 notation. Gateway and Network must be in the same type.

- **DNS Server**

  This setting controls the DNS name resolution done by the switch.

2-4 Account / Password

This page provides an overview of the current users. Use this page to modify the user name and password.

Web Interface

To configure User Account in the web interface:

1. Click System -> Account/Password.
2. Specify the User Name.

3. Specify new password and confirm new password.
4. Click Apply.

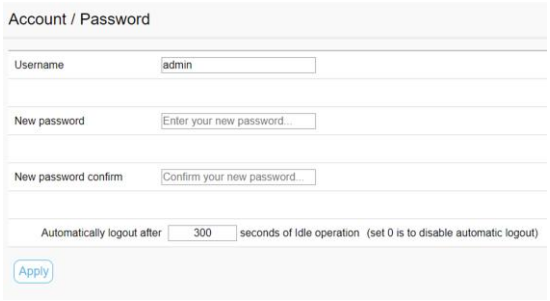


Figure 2-5: Account / Password

Parameter Description:

- **User Name**

  The name identifying the user. The field can be input 31 characters.

- **New Password**

  To type the new password. The field can be input 31 characters, and the allowed content is the ASCII characters from 32 to 126.

- **New Password Confirm**

  To type the new password again. You must type the same password again in the field.

- **Automatically logout**

To type the automatically logout time. The field can be input the number 0~9999 for timeout seconds, set 0 will never timeout.

2-5 SysLog

2-5.1 Syslog Configuration

The Syslog Configuration is a standard for logging program messages. It allows separation of the software that generates messages from the system that stores them and the software that reports and analyzes them. It can be used as well a generalized informational, analysis and debugging messages. It is supported by a wide variety of devices and receivers across multiple platforms.

Web Interface

To configure the SysLog Settings in the web interface:

1. Click System -> Syslog Configuration.
2. Specify Enable and TFTP Server 1(~5) parameters.
3. Click Apply.

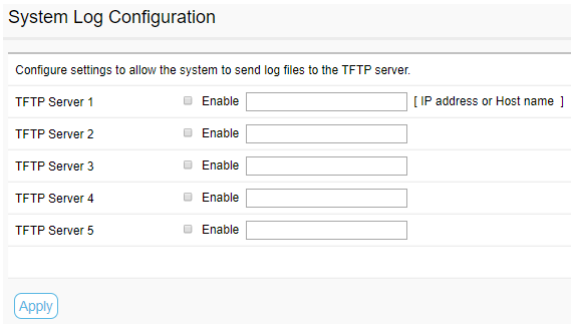


Figure 2-6: Syslog Configuration

Parameter Description:

- **Enable**

  To enable/disable Syslog function.

- **TFTP Server 1(~5)**
  SysLog Server. (IP address or Host name)

2-5.2 Email Configuration

The Email Configuration is a standard for logging program messages. It allows separation of the software that generates messages from the system that stores them and the software that reports and analyzes them. It can be used as well a generalized informational, analysis and debugging messages. It is supported by a wide variety of devices and receivers across multiple platforms.

Web Interface

To configure the SMTP Settings in the web interface:

1. Click System -> Email Configuration.
2. Specify Mail Server.
3. Specify User Name.
4. Specify Password.
5. Specify Sender.
6. Specify Return Path.
7. Specify Email Address 1(~5) parameters.
8. Click Apply.

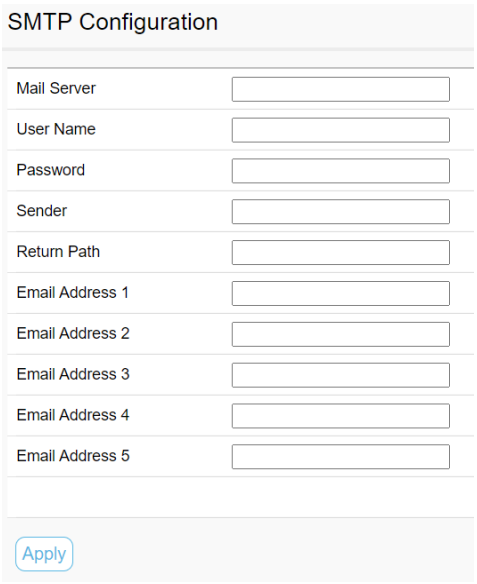


Figure 2-7: SMTP Configuration

Parameter Description:

- **Mail Server**

  SMTP server.(Ex: smtp.gmail.com)

- **User Name**

  The account of specify SMTP server(Ex: your@gmail.com).

- **Password**

  The password of specify User Name.

- **Sender**

  Specify Mail Address of sender.

- **Return Path**

  Specify Mail Address of reply mail.

- **Email Address 1(~5)**

  Specify Mail Address of receivers.

2-5.3 View Log

To display Log, click System -> SysLog - > View Log

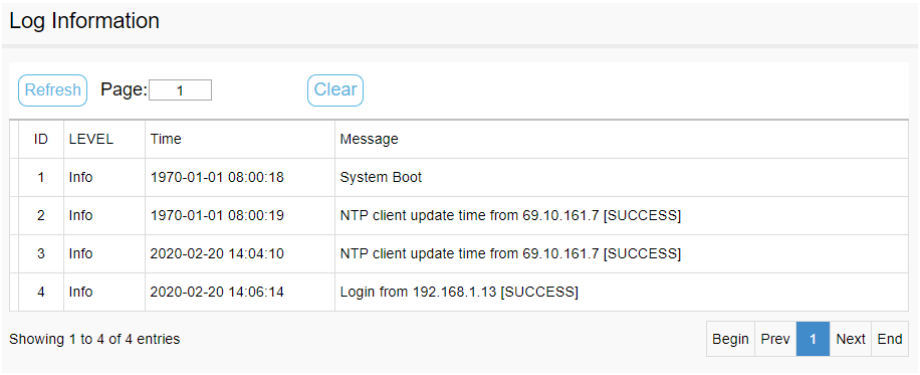


Figure 2-8: View log

Parameter Description:

- **Level**

The log event category.

- **Time**

  The log event occurs time.

- **Message**

  The log event content.

- **Refresh[Button]**

  To reload log events.

- **Clear[Button]**
  To clear log events.

- **Navigate Bar**
  Display page number and navigation buttons.

2-6 Environment Settings

This page provides the current environment setting. Use this page to modify the Temperature Display.

Web Interface

To configure User Account in the web interface:

1. Click System -> Environment Settings.
2. Specify the Temperature Display.
3. Click Apply.

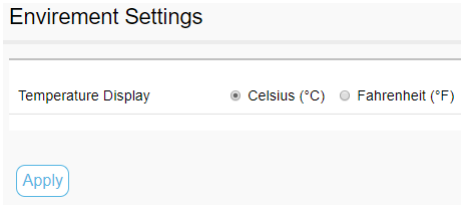


Figure 2-9: Environment Settings

Parameter Description:

- Temperature Display

  To select the option Celsius (°C) or Celsius (°F) to display.

Chapter 3 IP PoE Surge

This chapter describes the IP PoE Surge configurations including Surge Settings, Module Status.

3-1 Surge Settings

This page displays current IP PoE Surge settings. It can also be configured here.

Web Interface

To configure a power and miscellaneous devices in the web interface:

1. Click IP PoE Surge -> Surge Settings.
2. Specify the “Reset Counter”, “Alarm Log Trigger” and “Location” of the channel you want to configure.
3. Click Apply.

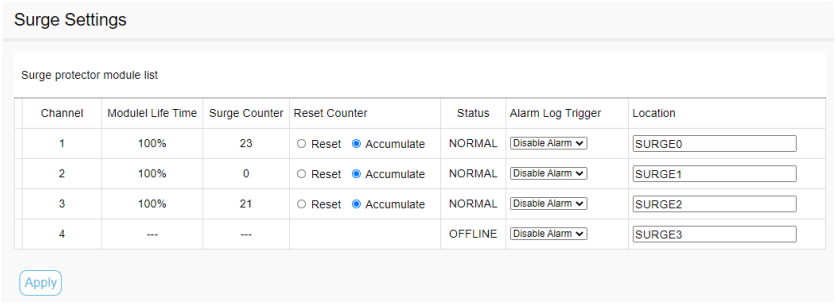


Figure 3-1: Surge Settings (SD-504)

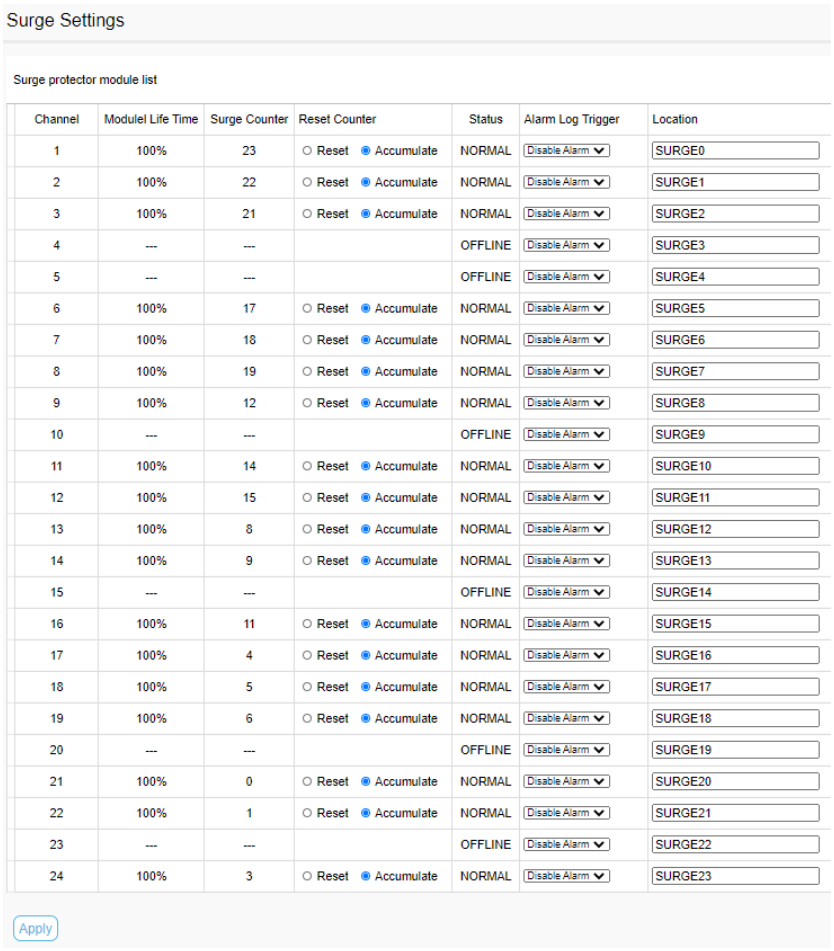


Figure 3-2: Surge Settings (SD-524)

Parameter Description:

- **Module Life Time**

  The life time of the channel.

- **Surge Counter**

  The accumulate count of the channel.

- **Reset Counter**

  Reset:

  Reset the counter of the channel to zero.

  Accumulate:

  Accumulate the counter of the channel.

- **Status**

  The status of the channel is as the list:
  "UNKNOWN", "ONLINE", "OFFLINE", "NORMAL", "FAIL", "ALARM" and "?".

- **Alarm Log Trigger**

  The alarm percentage can be set by the user. How many percentage will be sent to the alarm log. The corresponding red bar should also be changed.

- **Location**

  Let users enter information such as installation location or latitude and longitude.

3-2 Module Status

This page displays current IP PoE Surge module status.

Web Interface

To display Surge Module Life Time, Surge Count and Module Status information in the web interface, click IP PoE Surge -> Module Status.

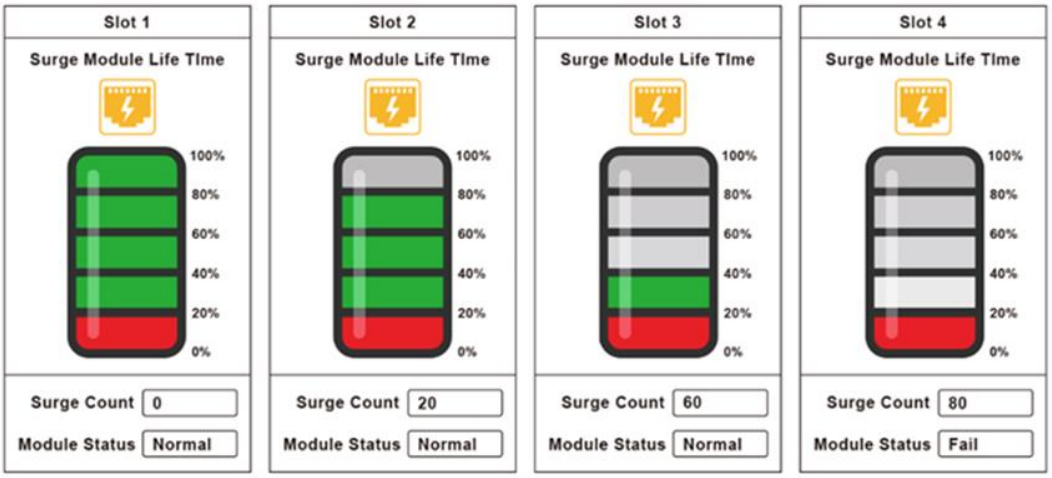


Figure 3-3: Module Status (SD-504)

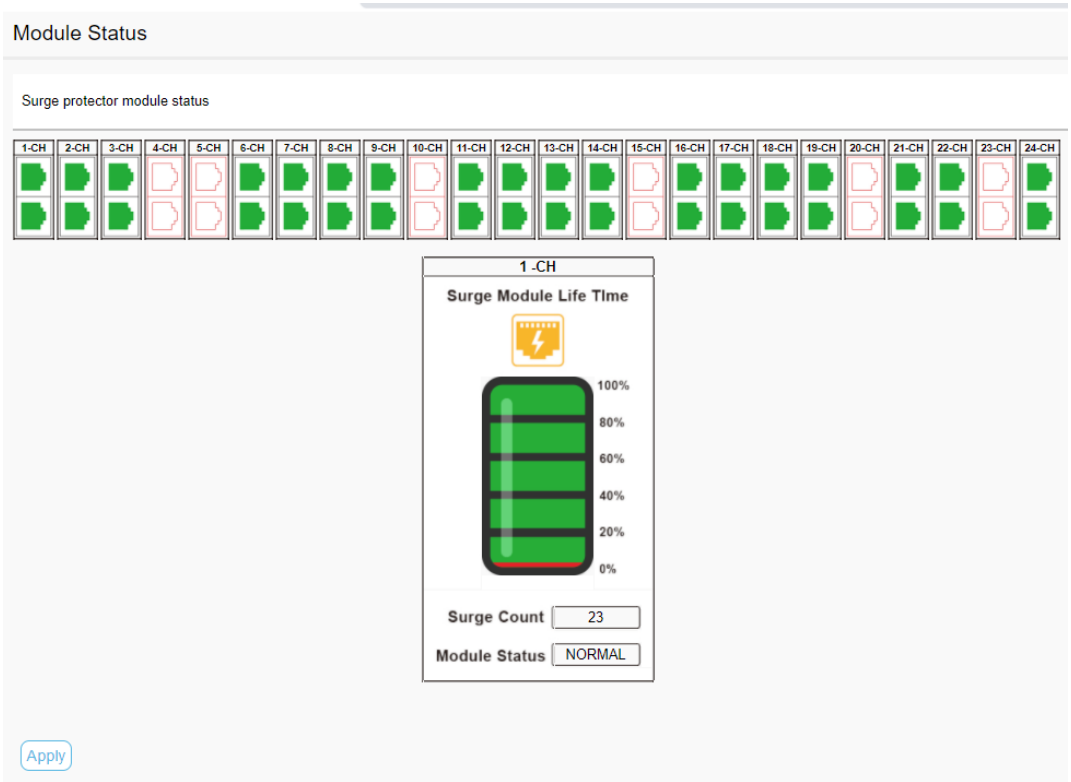


Figure 3-4: Module Status (SD-524)

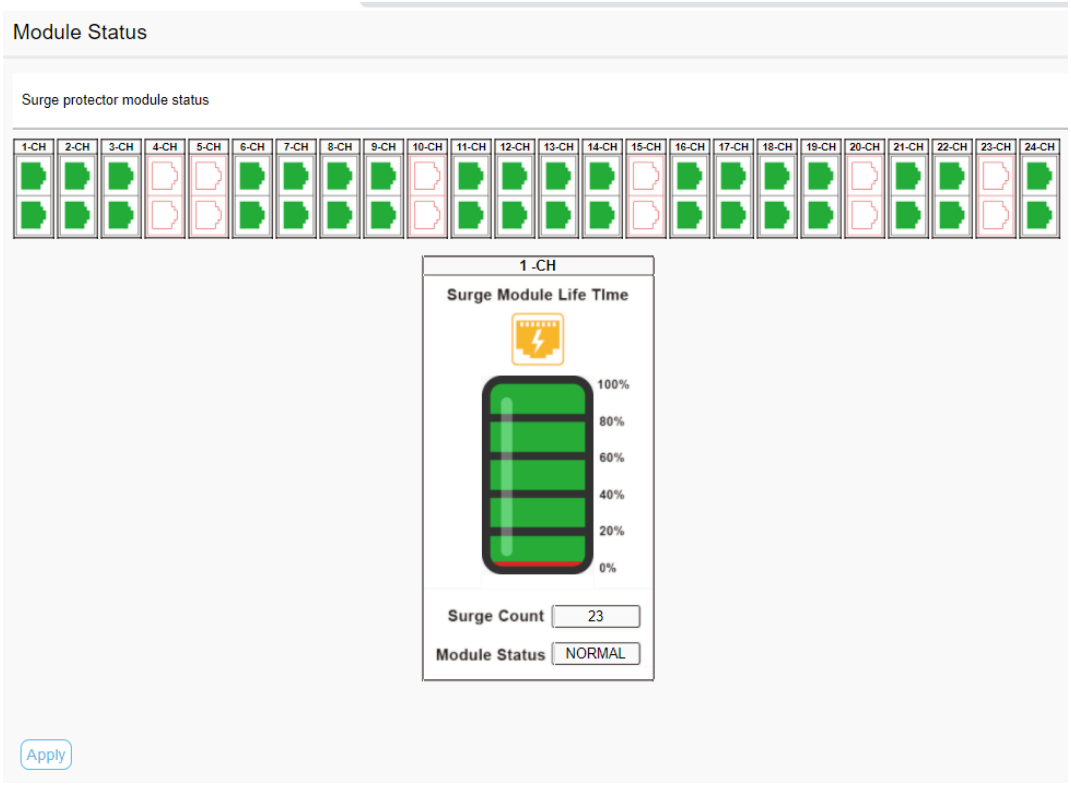


Figure 3-5: Module Status (SD-524)

Parameter Description:

- **Surge Module Life Time**

  Displays the Life Time and status icon of the channel.

- **Surge Count**

  The accumulate count of the channel.

- **Module Status**

  The status of the channel.

Chapter 4 Maintenance

This chapter provides the maintenance of the system. These includes Configuration Import/Export, Restart Device, Reset to default and Firmware Upgrade.

4-1 Configuration

4-1.1 Import / Export

This section describes how to import or export the IP PoE Surge Configuration for maintenance needs. Any current configuration files will be exported as text format, and the configuration files on the IP PoE Surge can be backed up and saved on the station running the web browser.

It is possible to transfer any of the files on the IP PoE Surge to the web browser. Select the configuration file for uploading, as the file must be backup before uploading.

Web Interface

To import or export the current device's configuration in the web interface:

1. Click Maintenance -> Configuration -> Import / Export.
2. For import configuration, select the file you want to import and click Import.
3. For export, click Export to save the configuration file.

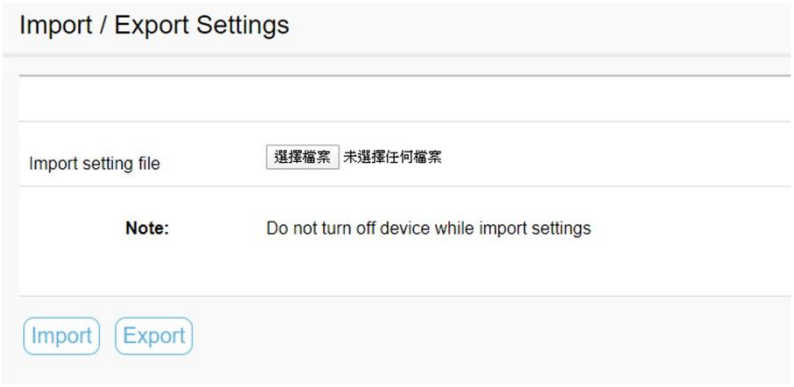


Figure 4-1.1: Import / Export

Parameter Description:

- **Import[Button]**

  Restore settings from upload file in the web interface.

- **Export[Button]**

  Backup settings to specific file in the web interface.

4-2 Restart Device

This section describes how to restart the device for any maintenance needs. Any configuration

files or scripts that you saved in the IP PoE Surge should still be available afterwards.

Web Interface

To Restart Device in the web interface:

1. Click Maintenance -> Restart Device.
2. Click Yes.

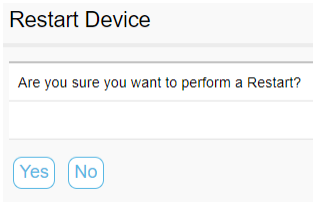


Figure 4-2: Restart Device

Parameter Description:

- **Restart Device[Button]**

  To restart device.

4-3 Reset Default

This section describes how to restore the IP PoE Surge configuration to factory default value.

Web Interface

To restore to factory default value in the web interface:

1. Click Maintenance -> Reset Default.
2. Click Yes.

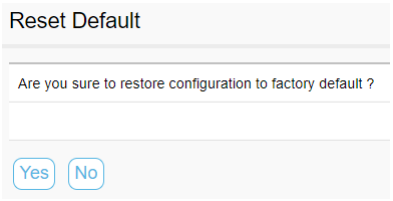


Figure 4-3: Reset Default

Parameter Description:

- **Reset[Button]**

  To reset the device to factory default value.

4-4 Firmware Upgrade

To display firmware upgrade page, click Maintenance > Firmware Upgrade. This page allows user to upgrade firmware image through HTTP.

Web Interface

To update firmware of the device in the web interface:

1. Click Maintenance -> Firmware Upgrade.
2. Choose the firmware you want to upgrade.
3. Click Upgrade.

Figure 4-4: Firmware Upgrade

Parameter Description:

- **Current Version**
  The firmware version which currently runs on this device.
- **Upgrade[Button]**

  Click to perform firmware upgrading.

Don't turn off the device during the firmware upgrading.