3. System

Device Information
System Information Settings
Peripheral Settings
Port Configuration
PoE (DGS-1510-28P Only)
System Log
Time and SNTP
Time Range

Device Information

In this window, the Device Information, CPU, and Used status are displayed. It appears automatically when you log in the Switch. To return to the Device Information window after viewing other windows, click the **DGS-1510-28P** link.

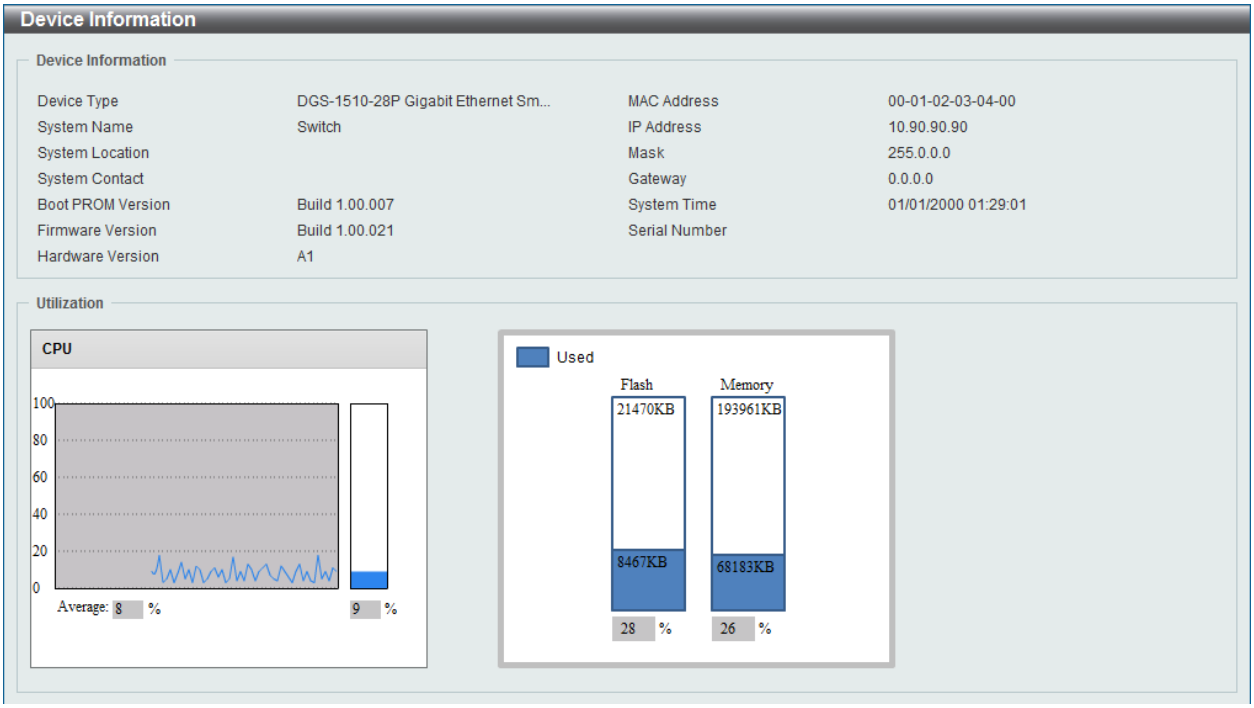

Figure 3-1 Device Information window

System Information Settings

The user can enter a System Name, System Location, and System Contact to aid in defining the Switch.

To view the following window, click **System > System Information Settings**, as shown below:

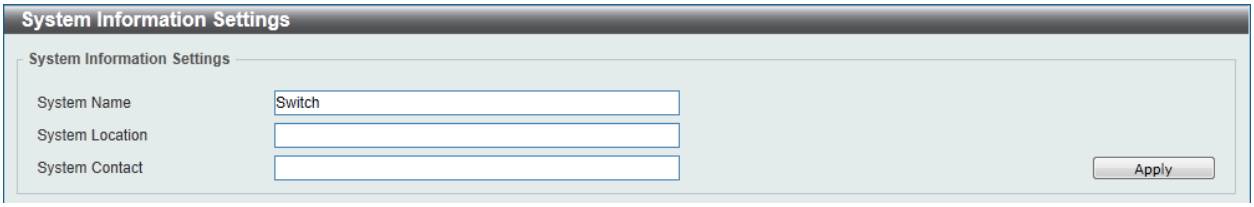

Figure 3-2 System Information Settings window

The fields that can be configured are described below:

Parameter	Description
System Name	Enter a system name for the Switch, if so desired. This name will identify it in the Switch network.
System Location	Enter the location of the Switch, if so desired.
System Contact	Enter a contact name for the Switch, if so desired.

Click the **Apply** button to accept the changes made.

Peripheral Settings

This window is used to configure the environment trap settings and environment temperature threshold settings.

To view the following window, click **System > Peripheral Settings**, as shown below:

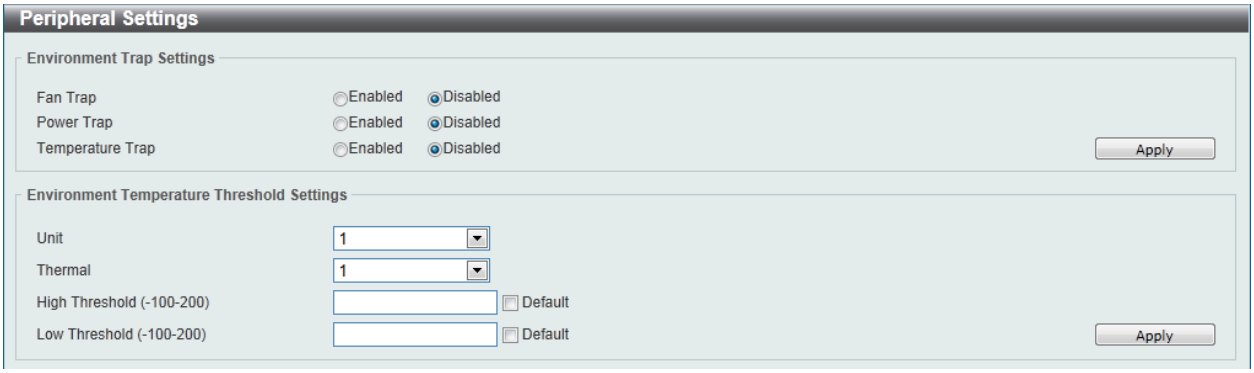

Figure 3-3 Peripheral Settings window

The fields that can be configured are described below:

Parameter	Description
Fan Trap	Click to enable or disable the fan trap state for waning fan event (fan failed or fan recover).
Power Trap	Click to enable or disable the power trap state for waning power event (power failed or power recover).
Temperature Trap	Click to enable or disable the temperature trap state for waning temperature event (temperature exceeds the thresholds or temperature recover).
Unit	Select the switch unit that will be used for this configuration here.

Thermal	Select the thermal sensor ID.
High Threshold	Enter the high threshold value of the warning temperature setting. The range is from -100 to 200 Celsius degree. Tick the **Default** check box to return to the default value.
Low Threshold	Enter the low threshold value of the warning temperature setting. The range is from -100 to 200 Celsius degree. Tick the **Default** check box to return to the default value.

Click the **Apply** button to accept the changes made.

Port Configuration

Port Settings

This window is used to view and configure the Switch's port settings.

To view the following window, click **System > Port Configuration > Port Settings**, as shown below:

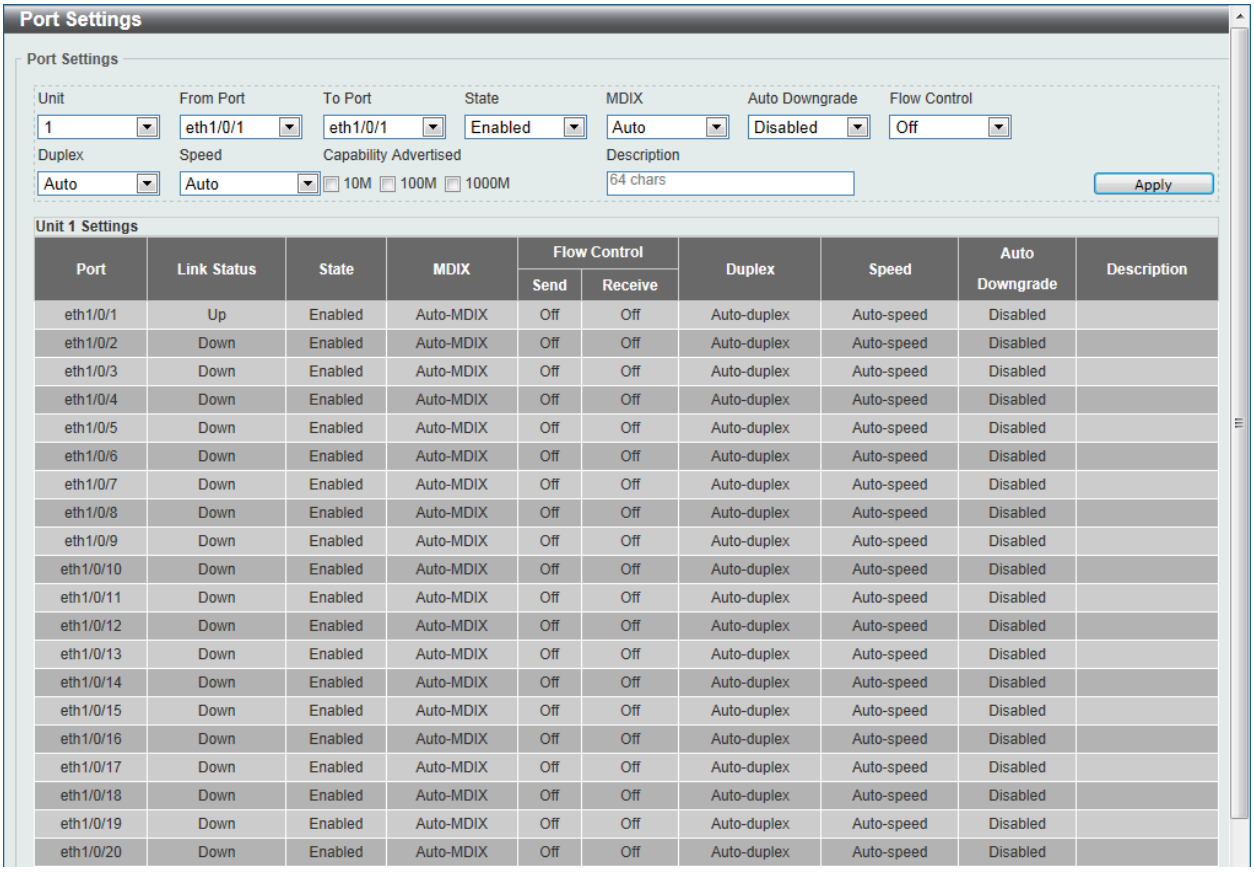

Figure 3-4 Port Settings window

The fields that can be configured are described below:

Parameter	Description
Unit	Select the switch unit that will be used for this configuration here.
From Port / To Port	Select the appropriate port range used for the configuration here.

State	Select this option to enable or disable the physical port here.
MDIX	Select the Medium Dependent Interface Crossover (MDIX) option here. Options to choose from are **Auto**, **Normal**, and **Cross**. **Auto** - Select this option for auto-sensing of the optimal type of cabling. **Normal** - Select this option for normal cabling. If this option is selected, the port is in the MDIX mode and can be connected to a PC's NIC using a straight-through cable or a port (in the MDIX mode) on another switch through a cross-over cable. **Cross** - Select this option for cross cabling. If this option is selected, the port is in the MDI mode and can be connected to a port (in the MDIX mode) on another switch through a straight cable.
Auto Downgrade	Select this option to enable or disable automatically downgrading advertised speed in case a link cannot be established at the available speed.
Flow Control	Select to either turn flow control **On** or **Off** here. Ports configured for full-duplex use 802.3x flow control, half-duplex ports use back-pressure flow control, and Auto ports use an automatic selection of the two.
Duplex	Select the duplex mode used here. Options to choose from are **Auto**, **Half**, and **Full**.
Speed	Select the port speed option here. This option will manually force the connected on the selected port to only connect at the speed specified here. Options to choose from are **Auto**, **10M**, **100M**, **1000M**, **1000M Master**, **1000M Slave**, and **10G**. The Switch allows users to configure two types of gigabit connections; **1000M Master** and **1000M Slave** which refer to connections running a 1000BASE-T cable for connection between the Switch port and another device capable of a gigabit connection. The master setting (1000M Master) will allow the port to advertise capabilities related to duplex, speed and physical layer type. The master setting will also determine the master and slave relationship between the two connected physical layers. This relationship is necessary for establishing the timing control between the two physical layers. The timing control is set on a master physical layer by a local source. The slave setting (1000M Slave) uses loop timing, where the timing comes from a data stream received from the master. If one connection is set for 1000M Master, the other side of the connection must be set for 1000M Slave. Any other configuration will result in a link down status for both ports.
Capability Advertised	When the **Speed** is set to **Auto**, these capabilities are advertised during auto-negotiation.
Description	Enter a 64 characters description for the corresponding port here.

Click the **Apply** button to accept the changes made.

Port Status

This window is used to view the Switch's physical port status and settings.

To view the following window, click **System > Port Configuration > Port Status**, as shown below:

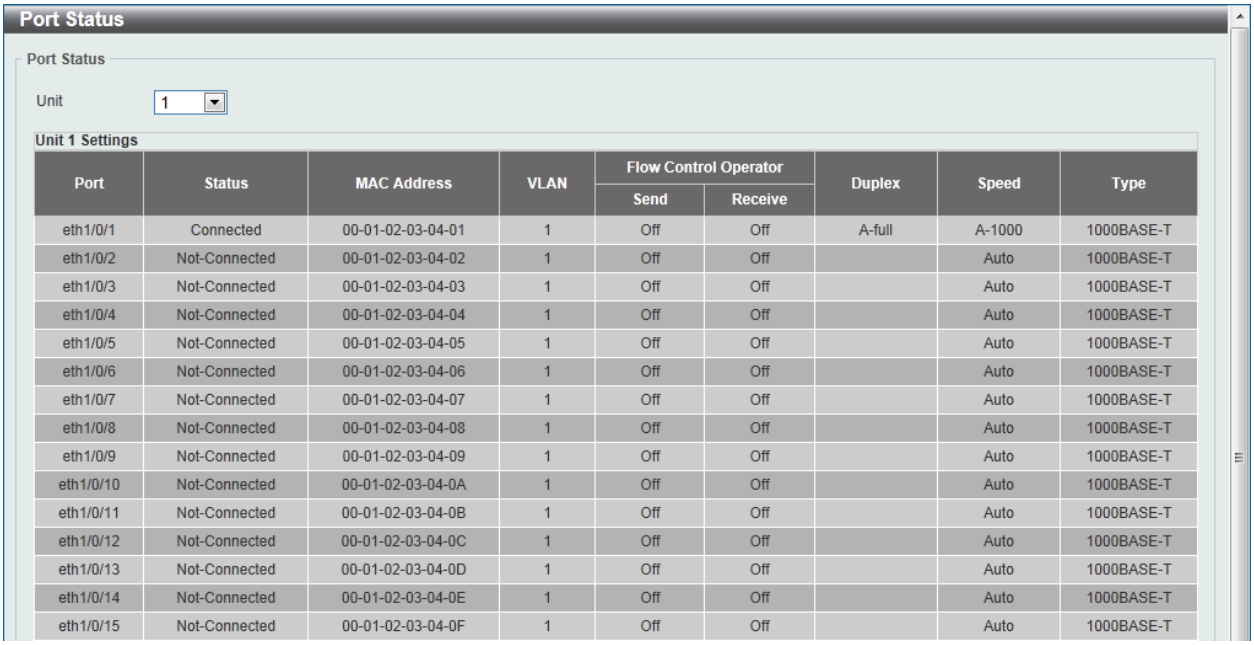

Figure 3-5 Port Status window

The fields that can be configured are described below:

Parameter	Description
Unit	Select the switch unit that will be used for this configuration here.

Port Auto Negotiation

This window is used to view detailed port auto-negotiation information.

To view the following window, click **System > Port Configuration > Port Auto Negotiation**, as shown below:

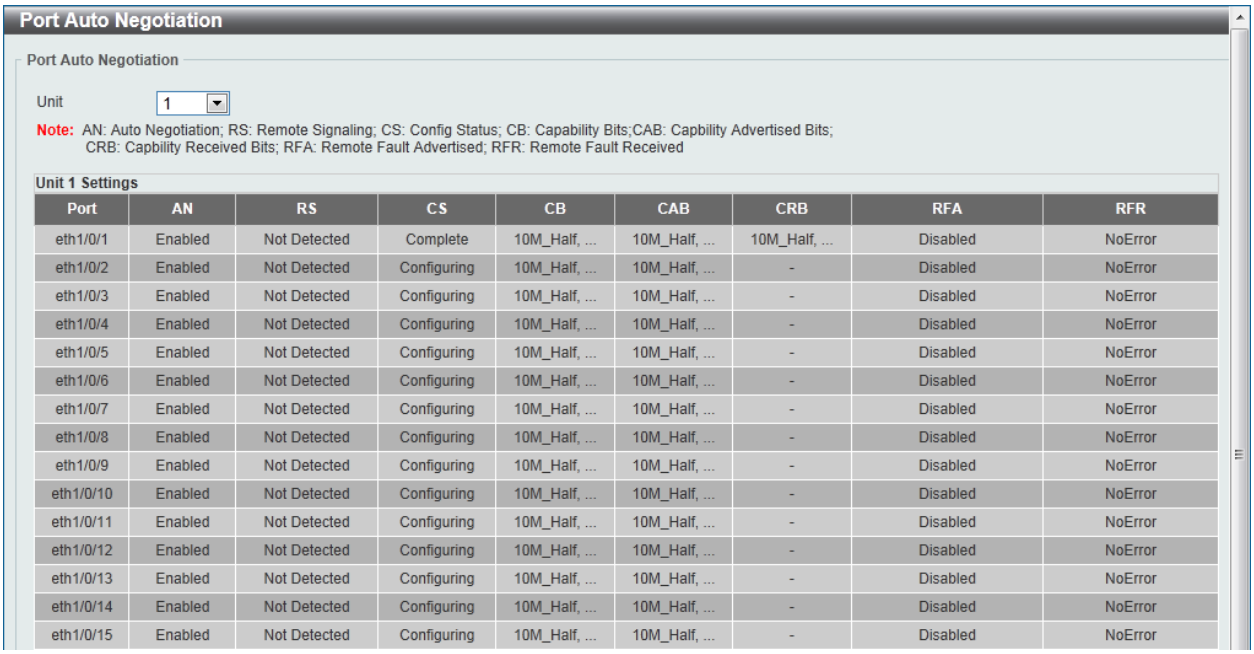

Figure 3-6 Port Auto Negotiation window

The fields that can be configured are described below:

Parameter	Description
Unit	Select the switch unit that will be used for this configuration here.

Error Disable Settings

This window is used to configure the sending of SNMP notifications for error disable state.

To view the following window, click **System > Port Configuration > Error Disable Settings**, as shown below:

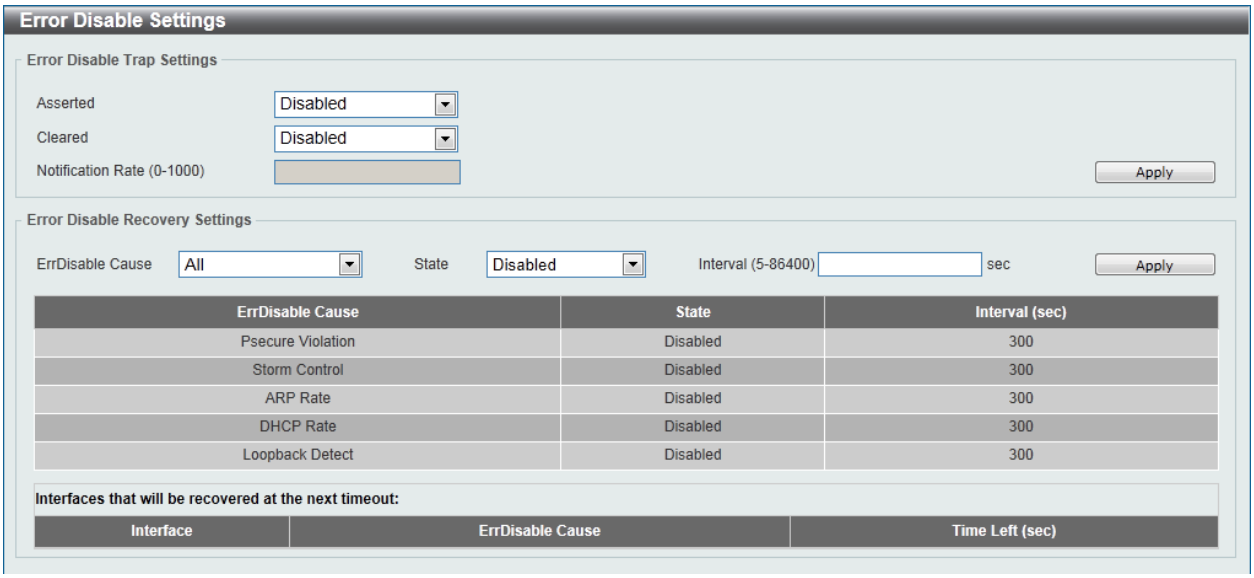

Figure 3-7 Error Disable Settings window

The fields that can be configured for **Error Disable Trap Settings** are described below:

Parameter	Description
Asserted	Select this option to enable or disable the notifications when entering into the error disable state.
Cleared	Select this option to enable or disable the notifications when exiting from the error disable state.
Notification Rate	Enter the number of traps per minute. The packets that exceed the rate will be dropped. The value is between 0 and 1000.

Click the **Apply** button to accept the changes made.

The fields that can be configured for **Error Disable Recovery Settings** are described below:

Parameter	Description
ErrDisable Cause	Select the error disable causes here. Options to choose from are **All**, **Psecure Violation**, **Storm Control**, **ARP Rate**, **DHCP Rate** and **Loopback Detect**.
State	Select this option to enable or disable the auto-recovery for an error

	port caused by the specified cause.
Interval	Enter the time between 5 and 86400 seconds to recover the port.

Click the **Apply** button to accept the changes made.

Jumbo Frame

This window is used to view and configure the Jumbo Frame size and settings. The Switch supports jumbo frames. Jumbo frames are Ethernet frames with more than 1,518 bytes of payload. The Switch supports jumbo frames with a maximum frame size of up to 9216 bytes.

To view the following window, click **System > Port Configuration > Jumbo Frame**, as shown below:

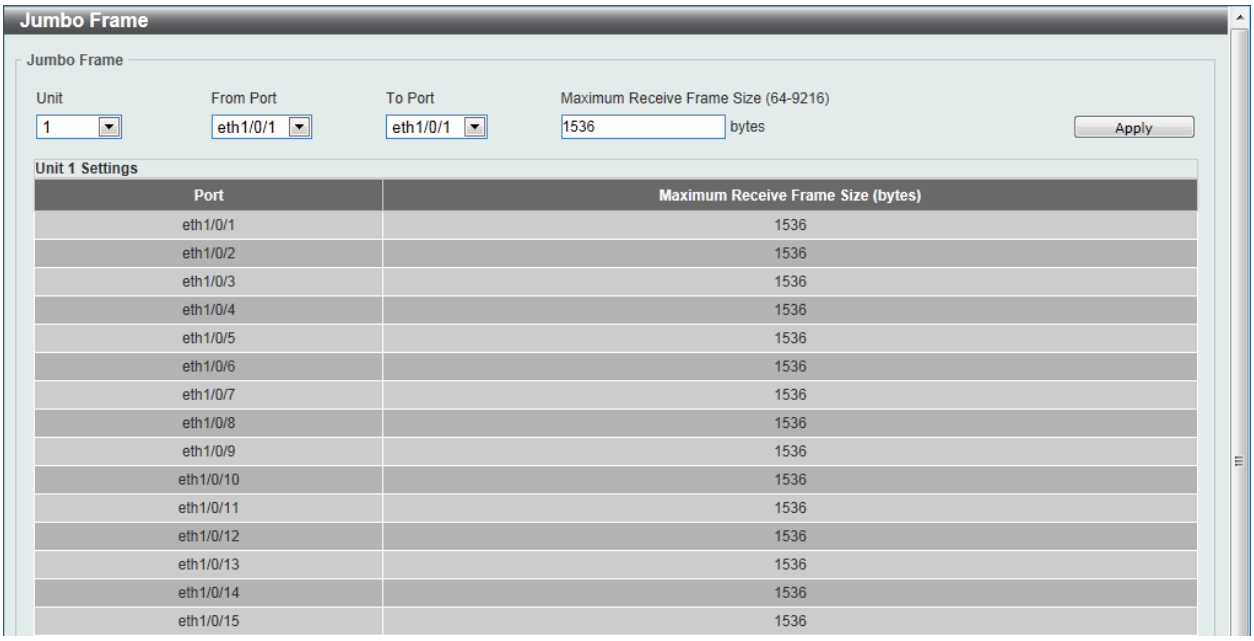

Figure 3-8 Jumbo Frame window

The fields that can be configured are described below:

Parameter	Description
Unit	Select the switch unit that will be used for this configuration here.
From Port / To Port	Select the appropriate port range used for the configuration here.
Maximum Receive Frame Size	Enter the maximum receive frame size value here. This value must be between 64 and 9216 bytes. By default, this value is 1536 bytes.

Click the **Apply** button to accept the changes made.

PoE (DGS-1510-28P Only)

The DGS-1510-28P switch supports Power over Ethernet (PoE) as defined by the IEEE 802.3af and 802.3at. All ports can support PoE up to 30W. Ports 1-24 can supply about 48 VDC power to Powered Devices (PDs) over Category 5 or Category 3 UTP Ethernet cables. The Switch follows the standard PSE (Power Sourcing Equipment) pinout *Alternative A*, whereby power is sent out over pins 1, 2, 3 and 6. The Switches work with all D-Link 802.3af capable devices.

The Switch includes the following PoE features:

- Auto-discovery recognizes the connection of a PD (Powered Device) and automatically sends power to it.
- The Auto-disable feature occurs under two conditions: firstly, if the total power consumption exceeds the system power limit; and secondly, if the per port power consumption exceeds the per port power limit.
- Active circuit protection automatically disables the port if there is a short. Other ports will remain active.

Based on 802.3af/at PDs receive power according to the following classification:

Class	Maximum power used by PD
0	12.95W
1	3.84W
2	6.49W
3	12.95W
4	25.5W

PSE provides power according to the following classification:

Class	Max power supplied by PSE
0	16.2W
1	4.2W
2	7.4W
3	16.2W
4	31.6W

PoE System

This window is used to configure the PoE system, and display the detailed power information and PoE chip parameters for PoE modules.

To view the following window, click **System > PoE > PoE System**, as shown below:

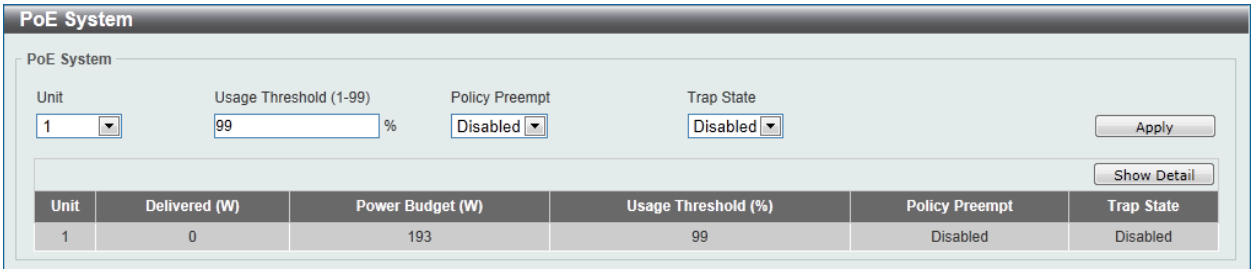

Figure 3-9 PoE System window

The fields that can be configured are described below:

Parameter	Description
Unit	Select the switch unit that will be used for this configuration here.
Usage Threshold	Enter the usage threshold to generate a log and send the corresponding standard notification. The range is from 1 to 99 percent.
Policy Preempt	Select this option to enable or disable the disconnection of PD which in power-provisioned with lower priority in order to release the power to the new connected PD with higher priority under power shortage conditions.
Trap State	Select this option to enable or disable the sending of PoE notifications.

Click the **Apply** button to accept the changes made.

Click the **Show Detail** button to see the PoE system Parameters table at the bottom of the window.

After clicking the **Show Detail** button, the following table will appear.

PoE System Parameters

Unit	Max Ports	Device ID	SW Version
1	24	E111	13

PoE Status

This window is used to configure the description, and display the PoE status of each port.

To view the following window, click **System > PoE > PoE Status**, as shown below:

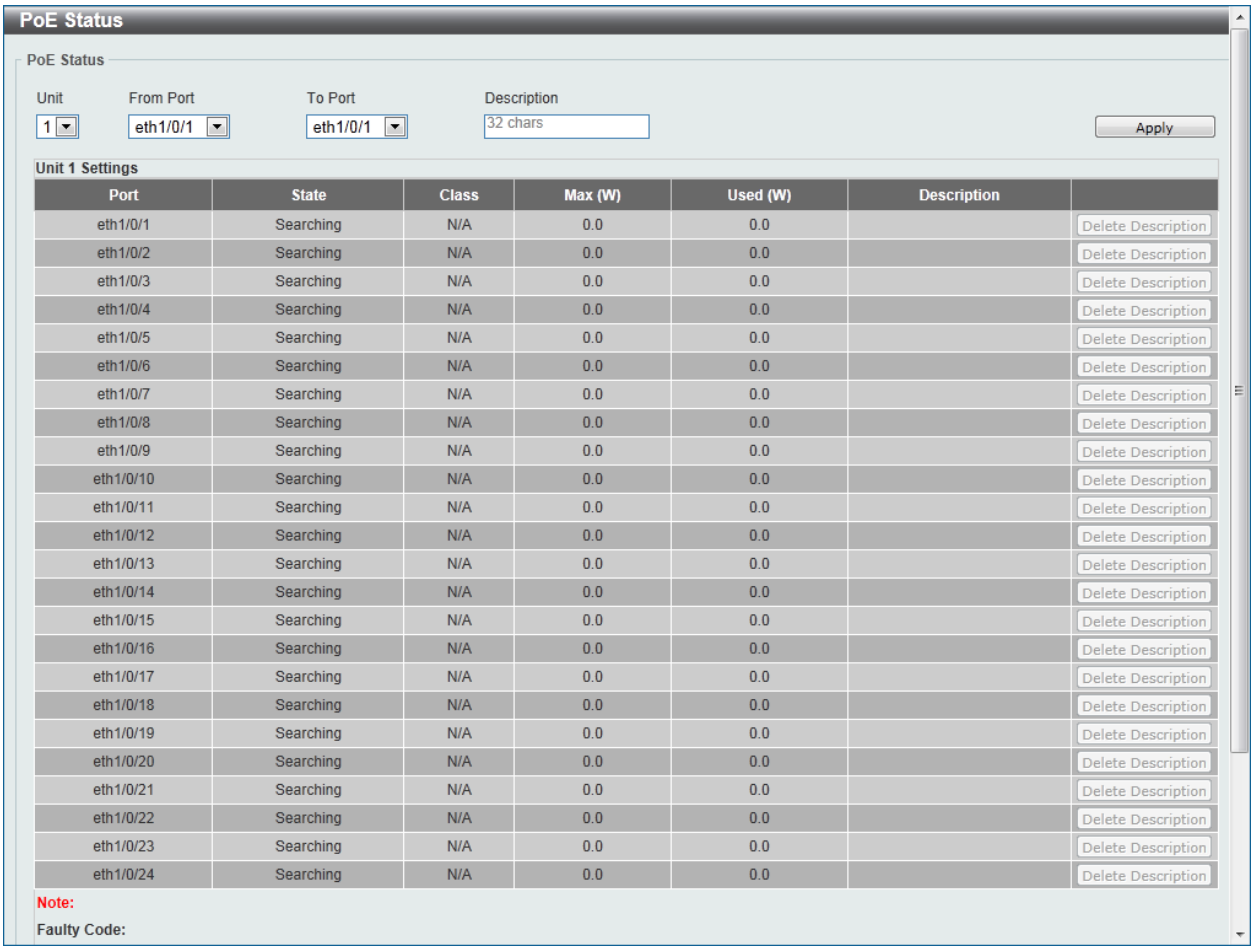

Figure 3-10 PoE Status window

The fields that can be configured are described below:

Parameter	Description
Unit	Select the switch unit that will be used for this configuration here.
From Port / To Port	Select the appropriate port range used for the configuration here.
Description	Enter the text that describes the PD connected to a PoE interface. The maximum length is 32 characters.

Click the **Delete Description** button to clear the setting in the corresponding Description field.

Click the **Apply** button to accept the changes made.

PoE Configuration

This window is used to configure the PoE port.

To view the following window, click **System > PoE > PoE Configuration**, as shown below:

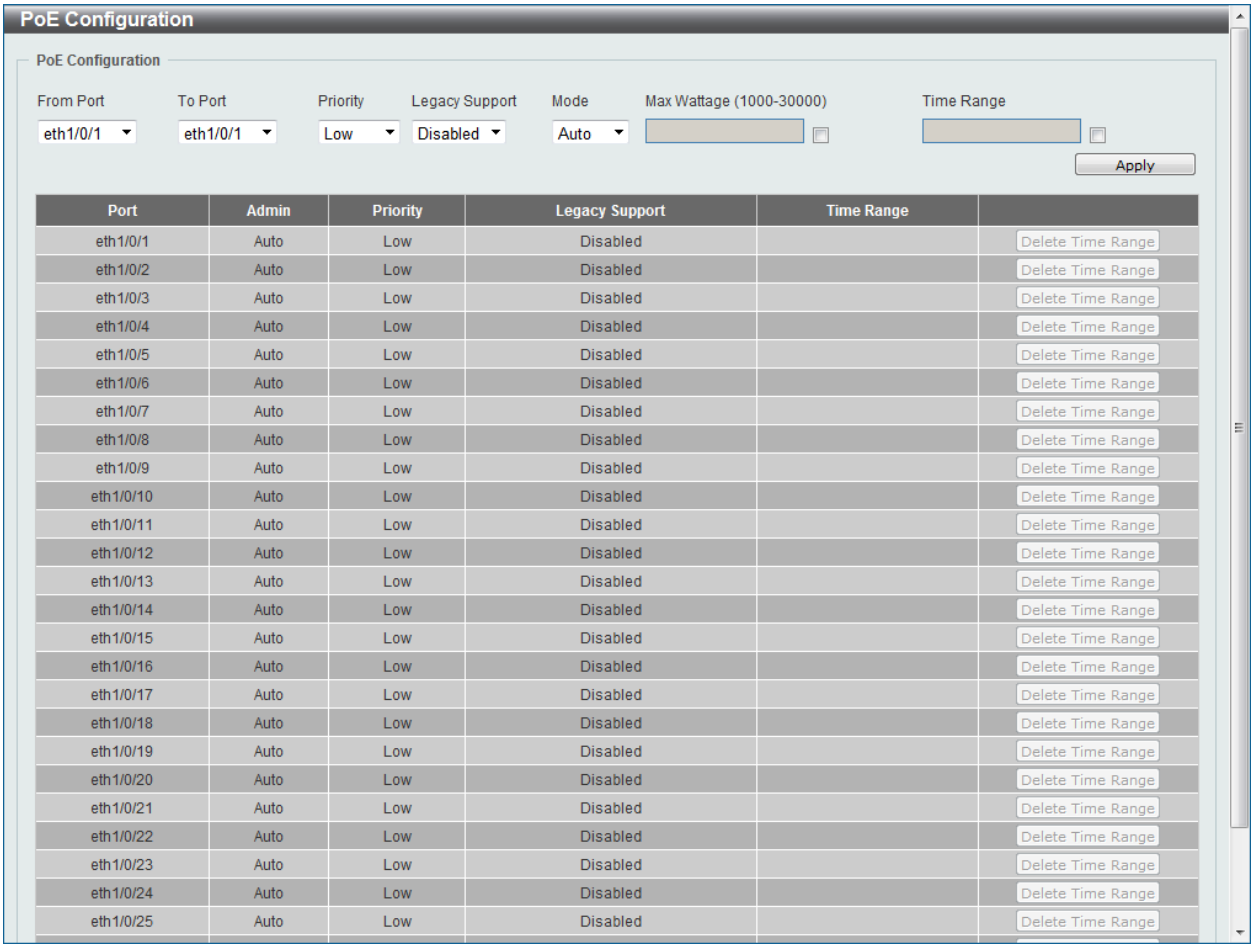

Figure 3-11 PoE Configuration window

The fields that can be configured are described below:

Parameter	Description
Unit	Select the switch unit that will be used for this configuration here.
From Port / To Port	Select the appropriate port range used for the configuration here.
Priority	Select the priority for provisioning power to the port. Options to choose from are **Critical**, **High** and **Low**.
Legacy Support	Select this option to enable or disable the support of legacy PD.
Mode	Select the power management mode for the PoE ports. Options to choose from are **Auto** and **Never**.
Max Wattage	When selecting **Auto** in the **Mode** drop-down list, this option appears. Tick the check box and enter the maximum wattage of power that can be provisioned to the auto-detected PD. If the value is not entered, the class of the PD automatically determines the maximum wattage which can be provisioned. The valid range for maximum wattage is between 1000 mW and 30000 mW.

Time Range	When selecting **Auto** in the **Mode** drop-down list, this option appears. Tick the check box and enter the name of the time range to determine the activation period.

Click the **Delete Time Range** button to clear the setting in the corresponding Time Range field.

Click the **Apply** button to accept the changes made.

PoE Statistics

This window is used to display the PoE statistics.

To view the following window, click **System > PoE > PoE Statistics**, as shown below:

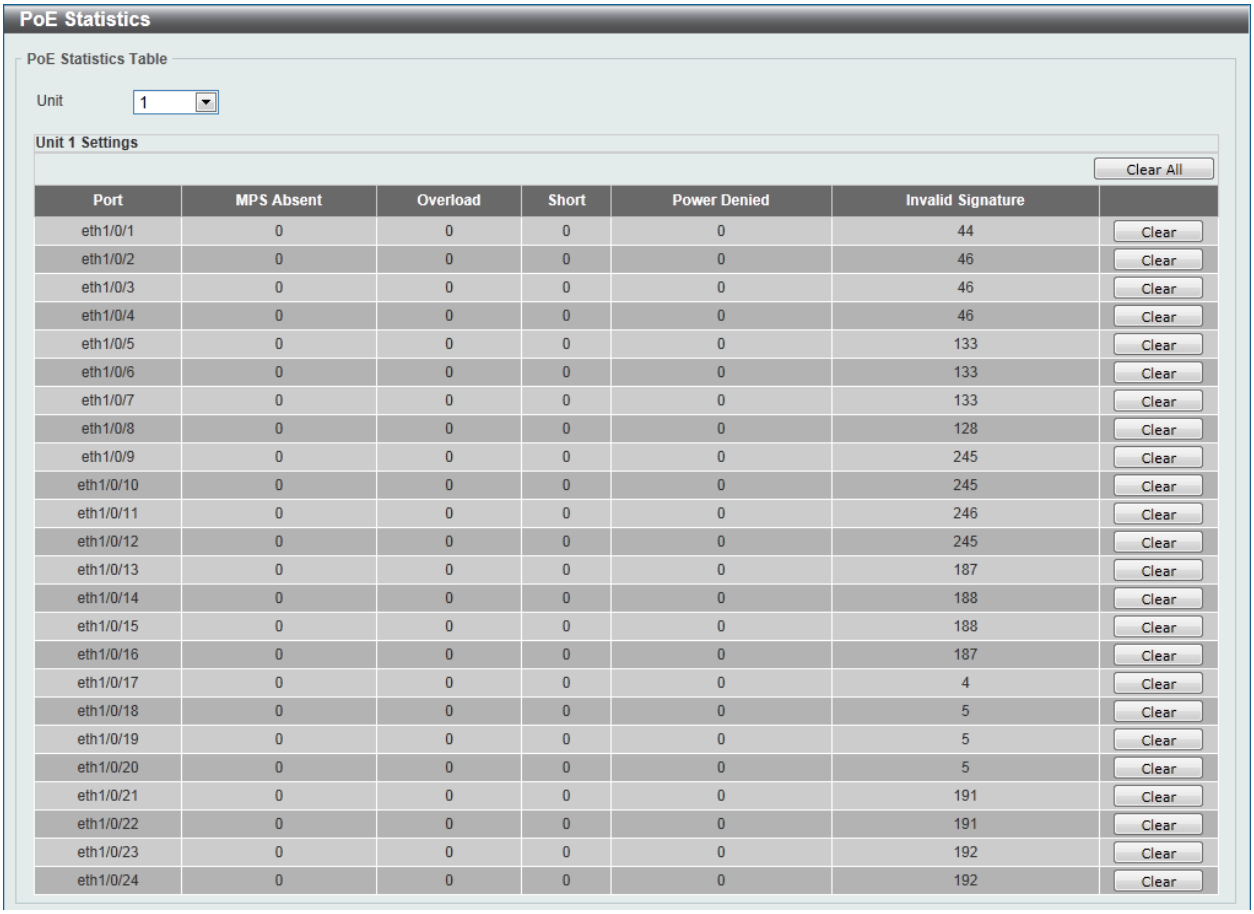

Figure 3-12 PoE Statistics window

The fields that can be configured are described below:

Parameter	Description
Unit	Select the switch unit that will be used for this configuration here.

Click the **Clear All** button to clear PoE statistics for all ports.

Click the **Clear** button to clear the PoE statistics for the corresponding port.

PoE Measurement

This window is used to display the PoE measurement.

To view the following window, click **System > PoE > PoE Measurement**, as shown below:

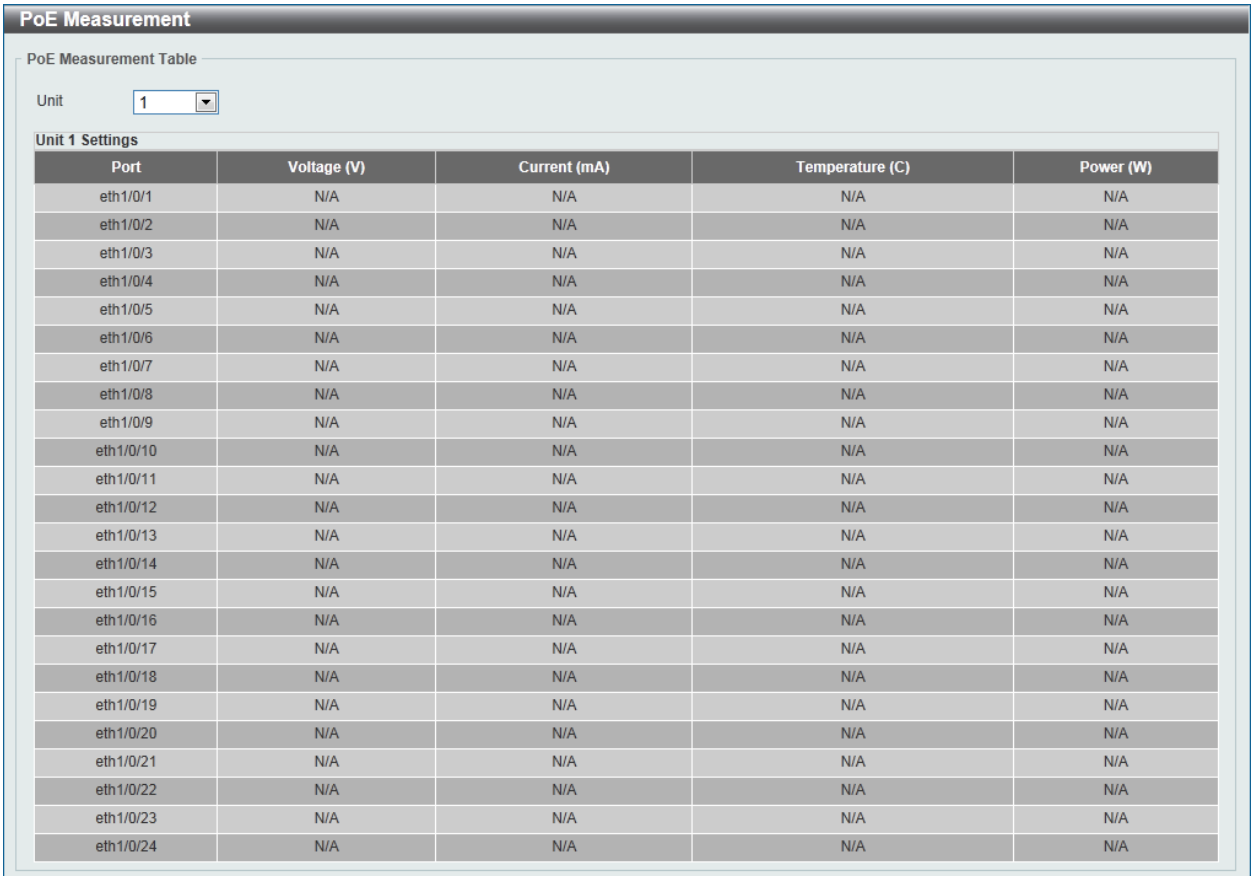

Figure 3-13 PoE Measurement window

The fields that can be configured are described below:

Parameter	Description
Unit	Select the switch unit that will be used for this configuration here.

PoE LLDP Classification

This window is used to display the PoE LLDP Classification.

To view the following window, click **System > PoE > PoE LLDP Classification**, as shown below:

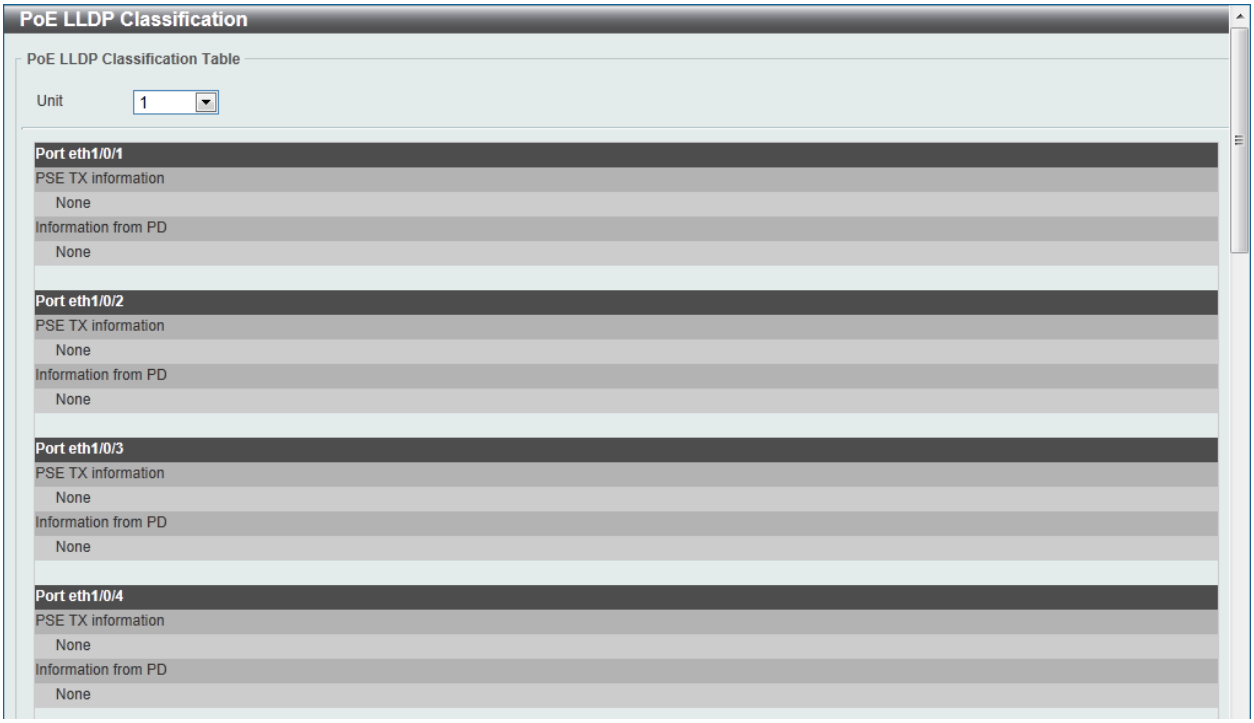

Figure 3-14 PoE LLDP Classification window

The fields that can be configured are described below:

Parameter	Description
Unit	Select the switch unit that will be used for this configuration here.

System Log

System Log Settings

This window is used to view and configure the system's log settings.

To view the following window, click **System > System Log > System Log Settings**, as shown below:

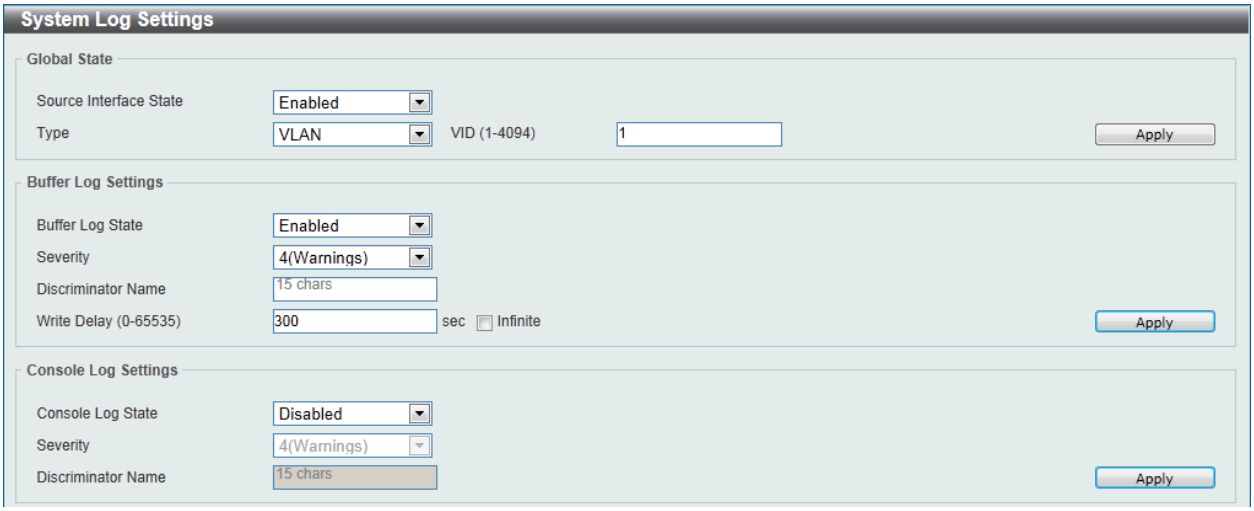

Figure 3-15 System Log Settings window

The fields that can be configured for **Global State** are described below:

Parameter	Description
Source Interface State	Select this option to enable or disable the source interface's global state.
Type	Select the type of interface that will be used. Option to choose from is **VLAN**.
VID	Enter the VLAN ID used here. The value is between 1 and 4094.

Click the **Apply** button to accept the changes made.

The fields that can be configured for **Buffer Log Settings** are described below:

Parameter	Description
Buffer Log State	Select whether the enable or disable the buffer log's global state here. Options to choose from are **Enable**, **Disabled**, and **Default**. When selecting the **Default** option, the buffer log's global state will follow the default behavior.
Severity	Select the severity value of the type of information that will be logged. Options to choose from are **0 (Emergencies)**, **1 (Alerts)**, **2 (Critical)**, **3 (Errors)**, **4 (Warnings)**, **5 (Notifications)**, **6 (Informational)**, and **7 (Debugging)**.
Discriminator Name	Enter the discriminator name used here. This name can be up to 15 characters long.
Write Delay	Enter the interval for periodic writing of the logging buffer to FLASH. This value must be between 0 and 65535 seconds. By default, this value is 300 seconds. Tick the **Infinite** option, to disable the write delay feature.

Click the **Apply** button to accept the changes made.

The fields that can be configured for **Console Log Settings** are described below:

Parameter	Description
Console Log State	Select whether the enable or disable the console log's global state here.
Severity	Select the severity value of the type of information that will be logged. Options to choose from are **0 (Emergencies)**, **1 (Alerts)**, **2 (Critical)**, **3 (Errors)**, **4 (Warnings)**, **5 (Notifications)**, **6 (Informational)**, and **7 (Debugging)**.
Discriminator Name	Enter the discriminator name used here. This name can be up to 15 characters long.

Click the **Apply** button to accept the changes made.

System Log Discriminator Settings

This window is used to view and configure the system log's discriminator settings.

To view the following window, click **System > System Log > System Log Discriminator Settings**, as shown below:

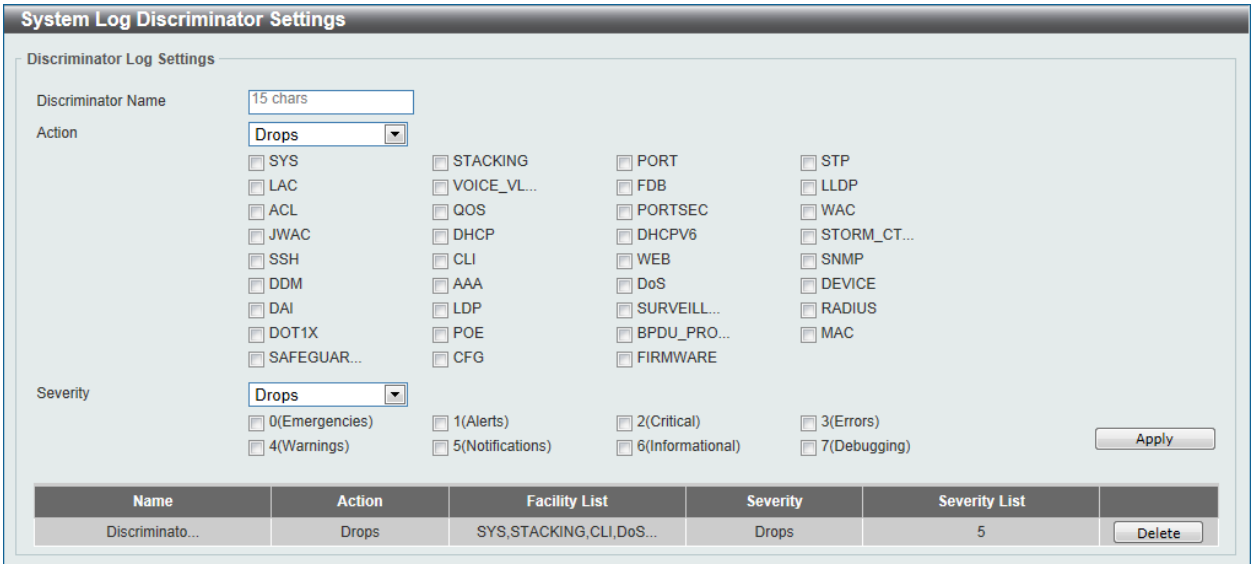

Figure 3-16 System Log Discriminator Settings window

The fields that can be configured are described below:

Parameter	Description
Discriminator	Enter the discriminator name here. This name can be up to 15 characters long.
Facility	Select the facility's behavior option and the type of facility that will be associated with the selected behavior here. Behavior options to choose from are **Drops** and **Includes**.
Severity	Select the severity behavior option and the value of the type of information that will be logged. Behavior options to choose from are **Drops** and **Includes**. Severity value options to choose from are **0 (Emergencies)**, **1 (Alerts)**, **2 (Critical)**, **3 (Errors)**, **4 (Warnings)**, **5 (Notifications)**, **6 (Informational)**, and **7 (Debugging)**.

Click the **Apply** button to accept the changes made.

Click the **Delete** button to remove the specified entry.

System Log Server Settings

This window is used to view and configure system log's server settings.

To view the following window, click **System > System Log > System Log Server Settings**, as shown below:

Figure 3-17 System Log Server Settings window

The fields that can be configured are described below:

Parameter	Description
Host IPv4 Address	Enter the system log server's IPv4 address here.
Host IPv6 Address	Enter the system log server's IPv6 address here.
UDP Port	Enter the system log server's UDP port number here. This value must be between 1024 and 65535. By default, this value is 514.
Severity	Select the severity value of the type of information that will be logged. Options to choose from are **0 (Emergencies)**, **1 (Alerts)**, **2 (Critical)**, **3 (Errors)**, **4 (Warnings)**, **5 (Notifications)**, **6 (Informational)**, and **7 (Debugging)**.
Facility	Select the facility value here. Options to choose from are 0 to 23.
Discriminator Name	Enter the discriminator name here. This name can be up to 15 characters long.

Click the **Apply** button to accept the changes made.

Click the **Delete** button to remove the specified entry.

System Log

This window is used to view and clear the system log.

To view the following window, click **System > System Log > System Log**, as shown below:

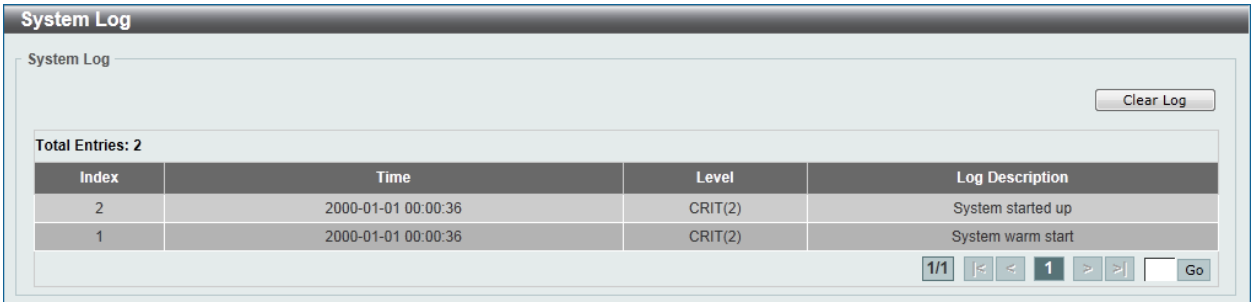

Figure 3-18 System Log window

Click the **Clear Log** button to clear the system log entries displayed in the table.

Enter a page number and click the **Go** button to navigate to a specific page when multiple pages exist.

System Attack Log

This window is used to view and clear the system attack log.

To view the following window, click **System > System Log > System Attack Log**, as shown below:

Figure 3-19 System Attack Log window

The fields that can be configured are described below:

Parameter	Description
Unit	Select the switch unit that will be used for this configuration here.

Click the **Clear Attack Log** button to clear the system attack log entries displayed in the table.

Time and SNTP

The Simple Network Time Protocol (SNTP) is a protocol for synchronizing computer clocks through the Internet. It provides comprehensive mechanisms to access national time and frequency dissemination services, organize the SNTP subnet of servers and clients, and adjust the system clock in each participant.

Clock Settings

This window is used to configure the time settings for the Switch.

To view the following window, click **System > Time and SNTP > Clock Settings**, as shown below:

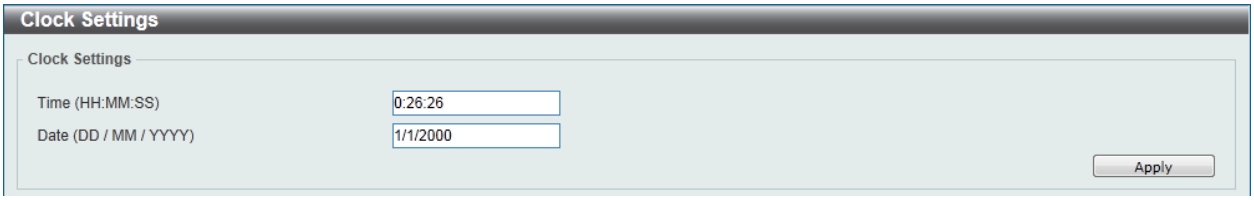

Figure 3-20 Clock Settings window

The fields that can be configured are described below:

Parameter	Description
Time (HH:MM:SS)	Enter the current time in hours, minutes, and seconds.
Date (DD / MM / YYYY)	Enter the current day, month, and year to update the system clock.

Click the **Apply** button to accept the changes made.

Time Zone Settings

This window is used to configure time zones and Daylight Savings Time settings for SNTP.

To view the following window, click **System > Time and SNTP > Time Zone Settings**, as shown below:

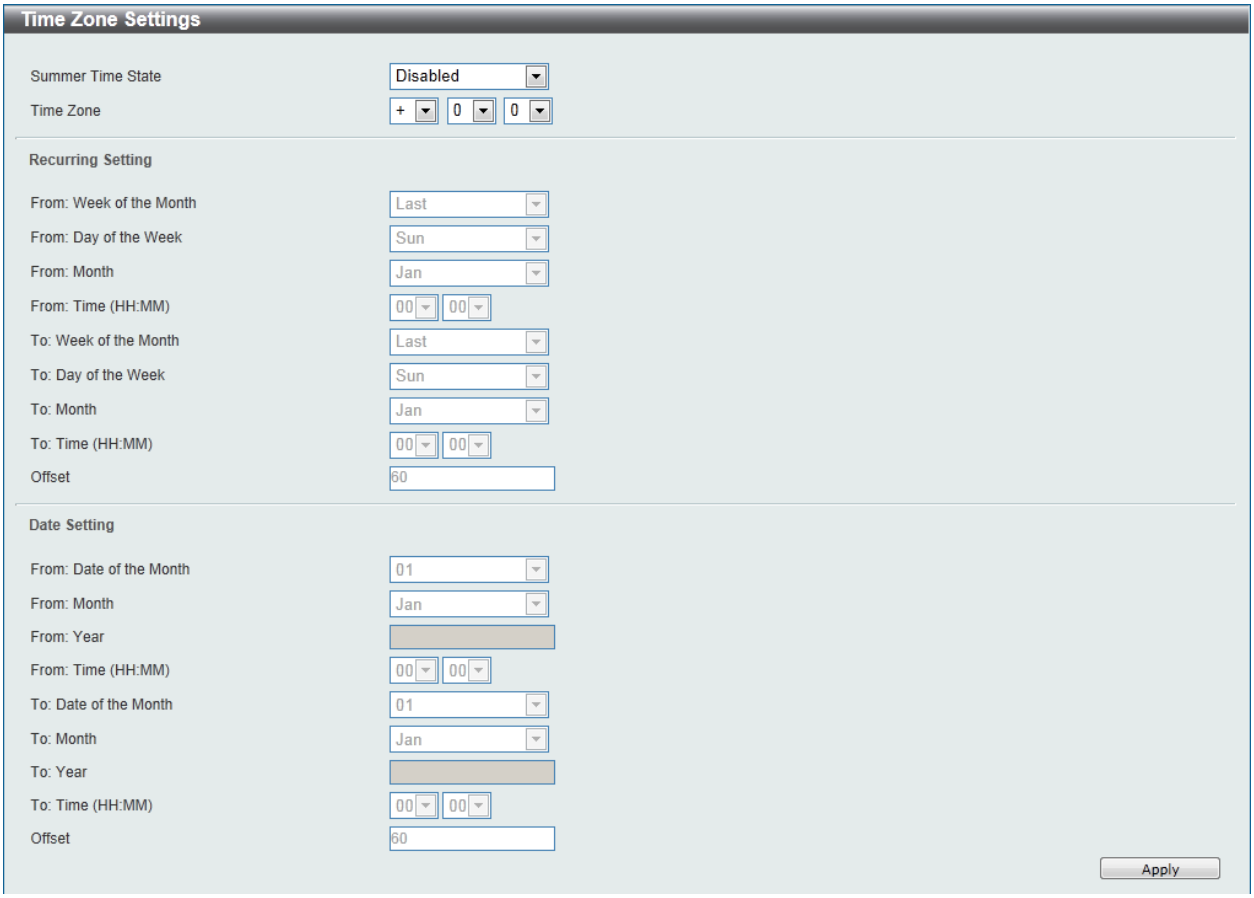

Figure 3-21 Time Zone Settings window

The fields that can be configured are described below:

Parameter	Description
Summer Time State	Select the summer time setting. Options to choose from are **Disabled**, **Recurring Setting**, and **Date Setting**. **Disabled** - Select to disable the summer time setting. **Recurring Setting** - Select to configure the summer time that should start and end on the specified week day of the specified month. **Date Setting** - Select to configure the summer time that should start and end on the specified date of the specified month.
Time Zone	Select to specify your local time zone's offset from Coordinated Universal Time (UTC).

The fields that can be configured for **Recurring Setting** are described below:

Parameter	Description
From: Week of the Month	Select week of the month that summer time will start.

From: Day of the Week	Select the day of the week that summer time will start.
From: Month	Select the month that summer time will start.
From: Time (HH:MM)	Select the time of the day that summer time will start.
To: Week of the Month	Select week of the month that summer time will end.
To: Day of the Week	Select the day of the week that summer time will end.
To: Month	Select the month that summer time will end.
To: Time (HH:MM)	Select the time of the day that summer time will end.
Offset	Enter the number of minutes to add during summer time. The default value is 60. The range of this offset is 30, 60, 90 and 120.

The fields that can be configured for **Date Setting** are described below:

Parameter	Description
From: Date of the Month	Select date of the month that summer time will start.
From: Month	Select the month that summer time will start.
From: Year	Enter the year that the summer time will start.
From: Time (HH:MM)	Select the time of the day that summer time will start.
To: Date of the Month	Select date of the month that summer time will end.
To: Month	Select the month that summer time will end.
To: Year	Enter the year that the summer time will end.
To: Time (HH:MM)	Select the time of the day that summer time will end.
Offset	Enter the number of minutes to add during summer time. The default value is 60. The range of this offset is 30, 60, 90 and 120.

Click the **Apply** button to accept the changes made.

SNTP Settings

This window is used to configure the time settings for the Switch.

To view the following window, click **System > Time and SNTP > SNTP Settings**, as shown below:

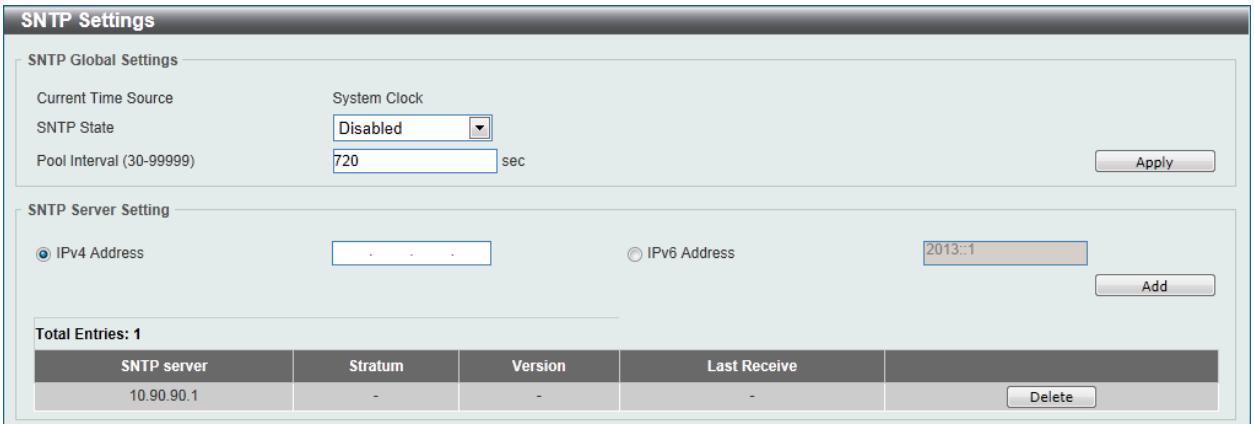

Figure 3-22 SNTP Settings window

The fields that can be configured for **SNTP Global Settings** are described below:

Parameter	Description
SNTP State	Select this option to enable or disable SNTP.
Pool Interval	Enter the synchronizing interval in seconds. The value is from 30 to 99999 seconds. The default interval is 720 seconds.

Click the **Apply** button to accept the changes made.

The fields that can be configured for **SNTP Server Setting** are described below:

Parameter	Description
IPv4 Address	Enter the IP address of the SNTP server which provides the clock synchronization.
IPv6 Address	Enter the IPv6 address of the SNTP server which provides the clock synchronization.

Click the **Add** button to add the SNTP server.

Click the **Delete** button to remove the specified entry.

Time Range

This window is used to view and configure the time range settings.

To view the following window, click **System > Time Range**, as shown below:

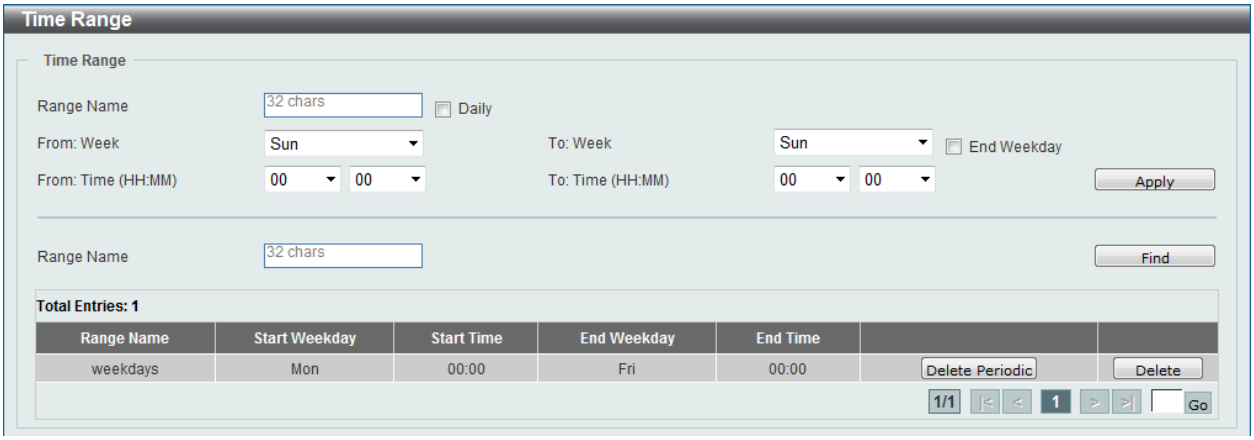

Figure 3-23 Time Range window

The fields that can be configured are described below:

Parameter	Description
Range Name	Enter the name of the time range. This name can be up to 32 characters long.
From Week / To Week	Select the starting and ending days of the week that will be used for this time range. Tick the **Daily** option to use this time range for every day of the week. Tick the **End Week Day** option to use this time range from the starting day of the week until the end of the week, which is Sunday.

From Time / To Time	Select the starting and ending time of the day that will be used for this time range. The first drop-down menu selects the hour and the second drop-down menu selects the minute.

Click the **Apply** button to accept the changes made.

Click the **Find** button to locate a specific entry based on the information entered.

Click the **Delete Periodic** button to delete the periodic entry.

Click the **Delete** button to remove the specified entry.

Enter a page number and click the **Go** button to navigate to a specific page when multiple pages exist.