D-Link®
Building Networks for People

DGS-1100-05/08/08P/05PD

MANUAL
SMART MANAGED SWITCH

Ver. 2.21

WIRED

Table of Contents

About This Guide

This guide provides step-by-step instructions on how install the D-Link DGS-1100-05/05PD/08/08P Smart Managed Switches, how to use the Web Utility, and how to perform web-based management functions.

Note: The model you have purchased may appear slightly different from the illustrations shown in the document. Refer to the Product Introduction and Technical Specification sections for detailed information about your switch, its components, network connections, and technical specifications.

This guide is mainly divided into four parts:

1. Hardware Installation: Step-by-step hardware installation procedures.
2. Getting Started: A startup guide for basic switch installation and settings.
3. Web Configuration: Information about the function descriptions and configuration settings via Web.

Terms/Usage

In this guide, the term “Switch” (first letter capitalized) refers to the Smart Managed Switch, and “switch” (first letter lower case) refers to other Ethernet switches. Some technologies refer to terms “switch”, “bridge” and “switching hubs” interchangeably, and both are commonly accepted for Ethernet switches.

A **NOTE** indicates important information that helps a better use of the device.

A **CAUTION** indicates potential property damage or personal injury.

Copyright and Trademarks

1 Product Introduction

Thank you and congratulations on the purchase of your new D-Link Smart Managed Switch.

D-Link's next generation Smart Managed switch series blends plug-and-play simplicity with exceptional value and reliability for small and medium-sized business (SMB) networking. All models are housed in a robust metal case with easy-to-view front panel diagnostic LEDs.

Flexible Port Configurations. The DGS-1100 series is the new generation of Smart Managed Switches, featuring 5 to 8 10/100/1000 Mbps.

D-Link Green Technology. The DGS-1100 Series features D-Link Green Technology which helps conserve power without sacrificing operational performance. Using IEEE 802.3az Energy Efficient Ethernet (EEE), the DGS-1100 Series saves power by automatically putting inactive ports into a sleep mode.

Extensive Layer 2 Features. Designed as comprehensive L2 devices, these switches support a variety of functions such as FDB, VLAN, Spanning Tree, and Loopback Detection to enhance performance and network resilience.

Traffic Segmentation and QoS. The switches support 802.1Q VLAN standard tagging to enhance network security and performance. The switches also support 802.1p priority queues, enabling users to run bandwidth-sensitive applications such as streaming multimedia by prioritizing that traffic in network. The Surveillance VLAN will place the video traffic from pre-defined IP surveillance devices to an assigned VLAN with higher priority, so it can be separated from normal data traffic.

Network Security. Storm Control can help to keep the network from being overwhelmed by abnormal traffic. Meanwhile, Port Security provides administrators with an additional layer of security to prevent unauthorized users from accessing the network.

Versatile Management. The DGS-1100-05/05PD/08/08PD feature an intuitive, web-based management interface that allows administrators to remotely control their network down to the port level. The D-Link Network Assistant (DNA) easily allows administrators to discover multiple D-Link Smart Managed Switches within the same L2 network segment and display them on-screen for instant access. With this utility, users do not need to change the IP address of their PC. This allows for simultaneous configuration and basic setup of all discovered devices, including password changes and firmware upgrades.

DGS-1100-05

5-Port 10/100/1000Mbps Smart Managed Switch.

Front Panel

Figure 1.1 – DGS-1100-05 Front Panel

Power LED: The Power LED lights up when the Switch is connected to a power source.

Link/Act/Speed LED (Ports 1-5): 10/100/1000 Mbps ports to connect Ethernet devices to the switch.

Rear Panel

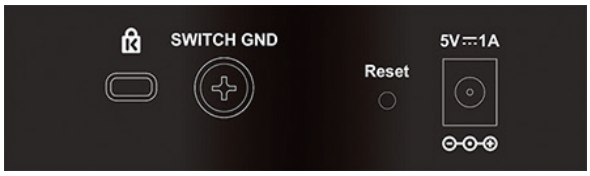


Figure 1.2 – DGS-1100-05 Rear Panel

Power: Input for a 5V/1A AC adapter.

Reset: Press the Reset button for 1 to 5 seconds to reboot the Switch. Press the Reset button for 6 to10 seconds to reset the Switch back to the default settings. The LED will light up solid amber for 2 seconds. When pressing the Reset button for longer than 10 seconds, the device will enter loader mode and the LED will light up solid green for 2 seconds. If the device cannot reboot, it will automatically enter loader mode. Alternatively, you can press Reset to power up the device and enter loader mode.

Kensington Lock: This is used to attach a physical Kensington security lock.

GND: This is used to connect the Switch to ground.

DGS-1100-05PD

2-Port 10/100/1000Mbps PoE and 3-Port 10/100/1000Mbps with 1 PD port Smart Managed Switch.

Front Panel

Figure 1.3 – DGS-1100-05PD Front Panel

Power LED: The Power LED lights up when the Switch is connected to a power source. If the Power LED is Blinking, PoE Pass Through is Off.

Link/Act/Speed LED (Ports 1-5):

Flashing: Indicates a network link through the corresponding port.

Blinking: Indicates that the Switch is either sending or receiving data to the port.

Green: Indicates that the port is running at 1000M.

Amber: Indicates that the port is running at 10/100M.

Light off: No link.

PoE PSE LED (Port 1-2):

Solid Green: PD device insert and power feeding.

Solid Amber: PD device insert but failure occurs.

Light off: No PD device insert.

PoE PD (Port 5):

Solid Green: Receiving power from PSE per 802.3at.

Solid Amber: Receiving power from PSE per PSE.

Light off: No link.

Reset: Press the Reset button for 1 to 5 seconds to reboot the Switch. Press the Reset button for 6 to10 seconds to reset the Switch back to the default settings. The LED will light up solid amber for 2 seconds. When pressing the Reset button for longer than 10 seconds, the device will enter loader mode and the LED will light up solid green for 2 seconds. If the device cannot reboot, it will automatically enter loader mode. Alternatively, you can press Reset to power up the device and enter loader mode.

Rear Panel

Figure 1.4 – DGS-1100-05PD Rear Panel

Power: Use RJ45 to connect the PD port (port 5) and Power over Ethernet Adapter Kit.
Kensington Lock: This is used to attach a physical Kensington security lock.
GND: This is used to connect the Switch to ground.

NOTE: The power budget is 18 Watts with 802.3at and 8 Watts with 802.3af for DGS-1100-05PD.

DGS-1100-08

8-Port 10/100/1000Mbps Smart Managed Switch.

Front Panel

Figure 1.5 – DGS-1100-08 Front Panel

Power LED: The Power LED lights up when the Switch is connected to a power source.
Link/Act/Speed LED (Ports 1-8): 10/100/1000 Mbps ports to connect Ethernet devices to the switch.

Rear Panel

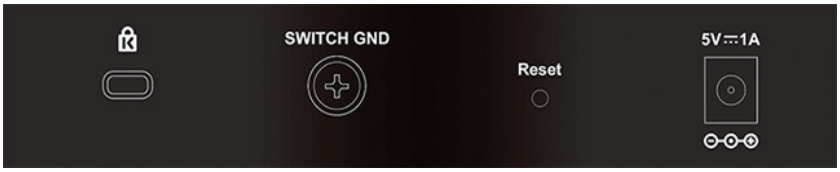


Figure 1.6 – DGS-1100-08 Rear Panel

Power: Input for a 5V/1A AC adapter.
Reset: Press the Reset button for 1 to 5 seconds to reboot the Switch. Press the Reset button for 6 to10 seconds to reset the Switch back to the default settings. The LED will light up solid amber for 2 seconds. When pressing the Reset button for longer than 10 seconds, the device will enter loader mode and the LED will light up solid green for 2 seconds. If the device cannot reboot, it will automatically enter loader mode. Alternatively, you can press Reset to power up the device and enter loader mode.
Kensington Lock: This is used to attach a physical Kensington security lock.
GND: This is used to connect the Switch to ground.

DGS-1100-08P

8-Port 10/100/1000Mbps PoE Smart Managed Switch.

Front Panel

Figure 1.7 – DGS-1100-08P Front Panel

Power LED: The Power LED lights up when the Switch is connected to a power source.

Reset: Press the Reset button for 1 to 5 seconds to reboot the Switch. Press the Reset button for 6 to10 seconds to reset the Switch back to the default settings. The LED will light up solid amber for 2 seconds. When pressing the Reset button for longer than 10 seconds, the device will enter loader mode and the LED will light up solid green for 2 seconds. If the device cannot reboot, it will automatically enter loader mode. Alternatively, you can press Reset to power up the device and enter loader mode.

Link/Act/Speed LED (Ports 1-8):

Flashing: Indicates a network link through the corresponding port.

Blinking: Indicates that the Switch is either sending or receiving data to the port.

Green: Indicates that the port is running at 1000M.

Amber: Indicates that the port is running at 10/100M.

Light off: No link.

PoE MAX. LED:

Light up: Indicates the power output to PDs is over 57W. No additional PDs can be powered for safety consideration.

Blinking: Indicates if the user unplugged certain PDs and made the PoE power budget left over 7W, the PoE MAX LED will blink 5 seconds.

Light off: Indicates the power budget is using less than 57W.

PoE LED (Ports 1-8):

Green: Indicates the PoE powered device (PD) is connected and the port supplies power successfully.

Red: The PoE port has failed, possibly due to:

1. PoE total power budget shortage.
2. Over current: Exceeds the power current of powered device's classification.
3. Short circuit: Short circuit has been performed on a powered device.

Light off: Indicates no Powered Device (PD) connected.

PoE Mode LED (Port 1-8):

Solid Green: PD device insert and power feeding.

Solid Amber: PD device insert but failure occurs.

Light off: No PD device insert.

Rear Panel

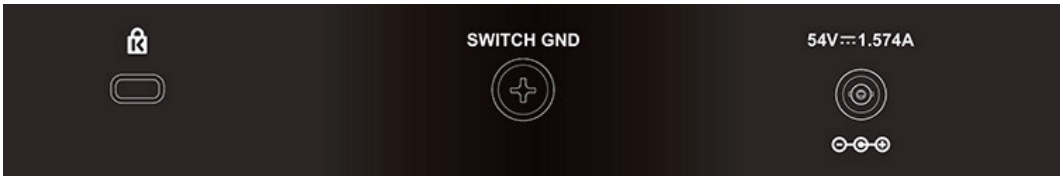


Figure 1.8 – DGS-1100-08P Rear Panel

Power: Input for a 54V/1.574A AC adapter.

Kensington Lock: This is used to attach a physical Kensington security lock.

GND: This is used to connect the Switch to ground.

NOTE: The power budget is 64 Watts for DGS-1100-08P.

LED Indicators

The Switches feature LED indicators for Power and Link/Act for each port. The following shows the LED indicators for the DGS-1100-05/05PD/08/08PD switches along with an explanation of each indicator.

Figure 1.9 –LED Indicators on DGS-1100 series

Location	Indicator LED	Color	Status	Description
Per Device	Power	Green	Solid Light	The device is powered on.
			Blinking	PoE Pass Through Off (DGS-1100-05PD only)
			Light off	The device is powered off.
	PoE Max. (Only DGS-1100-08P)	Red	Solid Light	When the power output to PDs is over 57W. No additional PDs can be powered for safety consideration.
			Blinking	If the user unplugged certain PDs and made the PoE power budget left over 7W, the PoE MAX LED will blink 5 seconds.
			Light off	When the power budget is using less the 57W.
LED Per 10/100/1000 Mbps Port	Link/Act/Speed	Green/Amber	Solid Green	Indicates there is a 1000 Mbps connection on this port.
			Blinking Green	Indicates data is being processed on this port at 1000 Mbps.
			Solid Amber	Indicates there is a 10/100 Mbps connection on this port.
			Blinking Amber	Indicates data is being processed on this port at 10/100 Mbps.
			Light off	Indicates there is no active link on this port.
LED Per PoE Port	PoE Status	Green/Amber	Solid Green	PD device insert and power feeding.
			Solid Amber	PD device insert but failure occurs. (PSE can't provide power to PD due to PD error or power budget is not enough.)
			Light off	No PD device inserts.
LED Per PD Port (DGS-1100-05PD only)	PD Status	Green/Amber	Solid Green	Receiving power from PSE per 802.3at
			Solid Amber	Receiving power from PSE per PSE.

			Light off	No link.

2 Hardware Installation

This chapter provides unpacking and installation information for your D-Link DGS-1100-05/05PD/08/08P Smart Managed Switch.

Step 1: Unpacking

Open the shipping carton and carefully unpack its contents. Please consult the packing list below to make sure all items are present and undamaged.

- One DGS-1100-05/05PD/08/08P Smart Managed Switch
- One AC external power adapter
- Four rubber feet
- Wall-mount kit
- Quick Installation Guide
- CD (User manual and DNA)

If any item is found missing or damaged, please contact the local reseller for replacement.

Step 2: Switch Installation

For safe switch installation and operation, it is recommended to you:

- Visually inspect the power cord to see that it is secured fully to the AC power connector.
- Make sure that there is proper heat dissipation and adequate ventilation around the switch.
- Do not place heavy objects on the switch.

Desktop or Shelf Installation

The DGS-1100 series switches come with a strip of four adhesive rubber pads that can be placed on the bottom of the device to prevent the device from damaging the desktop or shelf it is places on. To attach the rubber pads, simply remove them from the adhesive strip and stick one pad on each corner on the bottom panel of the Switch.

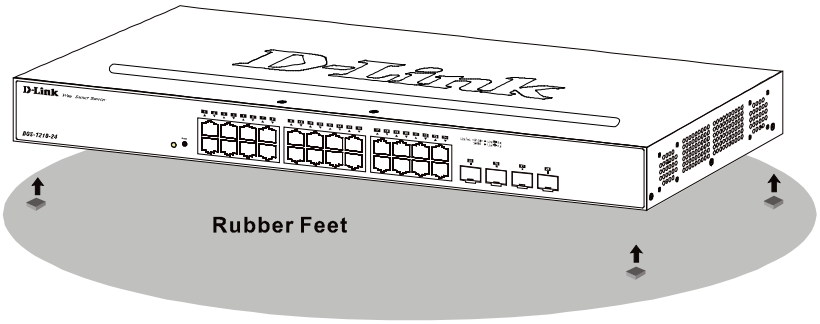


Figure 2.1 – Attach the adhesive rubber pads to the bottom

Wall-mount

The Switch can be mounted on a wall. Two mounting slots are provided on the bottom of the switch for this purpose.

Please refer to the instructions below on how to complete the wall-mounting process.

- **Mounting on a cement wall**

Step 1: Drill two holes that align with the keyholes on the back of the Switch in the wall where you want to mount the device, and place the two indluded nylon screw anchors into the drilled holes.

Step 2: Drive the included screws into the nylon screw anchors.

Step 3: Hook the mounting keyholes on the back of the Switch onto the screws to secure the device to the wall.

- **Mounting on a wood wall**

Step 1: Drive the included screws into a wood wall.

Step 2. Hook the mounting keyholes on the back of the Switch onto the screws to secure the device to the wall.

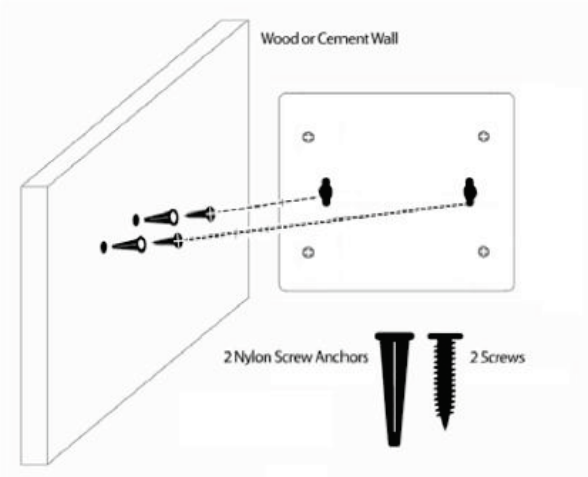


Figure 2.2 – Wall mount installation

3 Getting Started

This chapter introduces the management interface of D-Link Smart Managed Switch.

Management Options

The D-Link Smart Managed Switch can be managed through any port on the device by using the web-based management interface, or the D-Link Network Assistant (DNA).

Each switch must be assigned its own IP address, which is used for communication with the web-based management interface or a SNMP network manager. The PC should have an IP address in the same range as the Switch. Each Switch allows up to four users to access the web-based management interface concurrently.

However, if you want to manage multiple D-Link Smart Managed Switches, the D-Link Network Assistant (DNA) is a more convenient choice. By using the D-Link Network Assistant (DNA), you do not need to change the IP address of your PC, making it easier to simultaneously initialize multiple D-Link Managed Switches.

Please refer to the following installation instructions for the Web interface and the D-Link Network Assistant (DNA).

Using the Web-based Management Interface

After successfully installing the Switch, you can configure and monitor the Switch through the web-based management tool using any compatible web browser such as Internet Explorer, Google Chrome, Firefox, Opera, or Safari.

Connecting to the Switch

The access the web interface you will need the following equipment:

1. A PC with a RJ45 Ethernet port.
2. A standard Ethernet cable

Connect on end of the Ethernet cable to any of the ports on the front panel of the Switch and connect the other end of Ethernet cable to the Ethernet port on the PC.

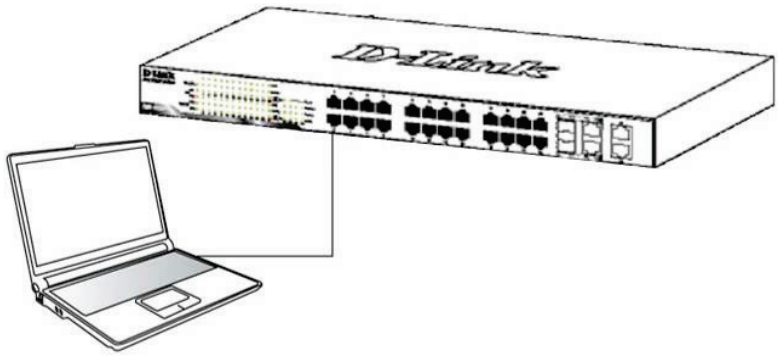


Figure 3.1 – Connected Ethernet cable

Accessing the Web-based Management Interface

In order to access the management interface, the PC must have an IP address in the same subnet as the Switch. For example, if the Switch has an IP address of **10.90.90.90**, the PC should have an IP address of **10.x.y.z** (where x/y is a number between 0 ~ 254 and z is a number between 1 ~ 254), and a subnet mask of **255.0.0.0**. To launch the web interface, simply open any compatible web browser and enter **10.90.90.90** (the factory-default IP address) in the address bar. Then press <Enter>.

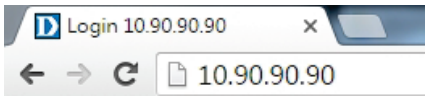


Figure 3.2 –Enter the IP address 10.90.90.90 in the web browser

NOTE: The Switch's factory default IP address is 10.90.90.90 with a subnet mask of 255.0.0.0 and a default gateway of 0.0.0.0.

This will automatically load the web configuration in your web browser.
When prompted to log in, enter the default password admin and press ok to continue.

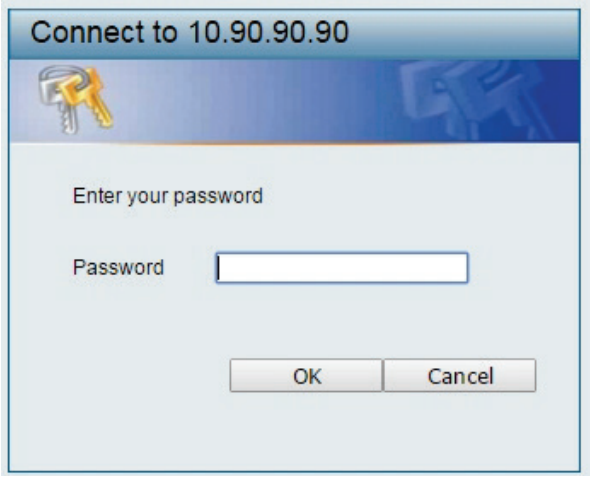


Figure 3.3 – Logon Dialog Box

Web-based Management

Please refer to Chapter 4 Configuration for detailed instructions.

D-Link Network Assistant (DNA)

D-Link Network Assistant (DNA) is a program that is used to discover switches which are in the same Layer 2 network segment as your PC. You can download the DNA App from the Chrome web store and install it in a Chrome web browser.

1. Go to the Chrome web store at: **https://chrome.google.com/webstore**, and search the store for Network Assistant.

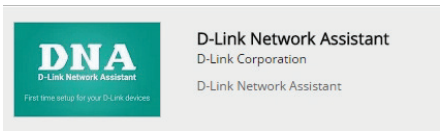


Figure 3.4 – D-LINK Network Assistant

2. Click 'ADD TO CHROME' button on the right hand side of the search results.
3. Click 'Add app' button in the pop-up window to install the D-Link Network Assistant in Chrome.
4. When the installation process has finished:
   (Option 1) Click the 'LAUNCH APP' button in the upper-right corner of the window to start DNA.

   (Option 2) Click the 'Apps' icon in the upper-left corner of the Chrome browser and click the DNA icon to start the app.

4 Configuration

The features and functions of the D-Link Smart Managed Switch can be configured through the web-based management interface.

Web-based Management

After a successful login you will see the screen below:

Figure 4.1 – Web-based Management

The three main areas are the **Tool Bar** on top, the **Function Tree** on the left, and the **Main Configuration Screen**.

The **Tool Bar** provides a quick and convenient way for accessing essential functions such as firmware upgrades and basic settings.

Clicking on a section or subsection in the function tree will display all the settings of that section in the main configuration screen. The main configuration screen will show the current status of your Switch by clicking the model name on top of the function tree.

In the upper-right corner of the screen the username and current IP address will be displayed.

Under the username is the **Logout** button. Click this to end this session.

NOTE: If you close the web browser without clicking the **Logout** button first, then it will be seen as an abnormal exit and the login session will still be occupied.

By clicking on the D-Link logo in the upper-left corner of the screen you will be redirected to the local D-Link website.

Tool Bar > Save Menu

The Save Menu provides Save Configuration and Save Log functions.

Figure 4.2 – Save Menu

Save Configuration

By clicking **Apply**, the current device configuration will be saved on the device's flash memory.

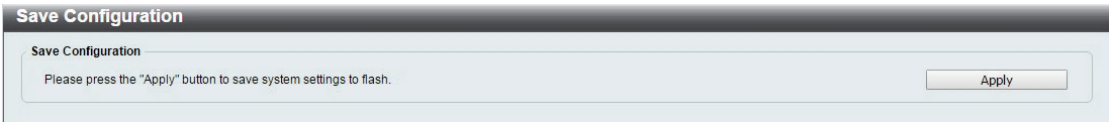


Figure 4.3 – Save Configuration

Tool Bar > Tool Menu

The Tool Menu provides basic functions such as Reset, Reset System, Reboot Device, Configuration Backup and Restore, Firmware Backup and Upgrade.

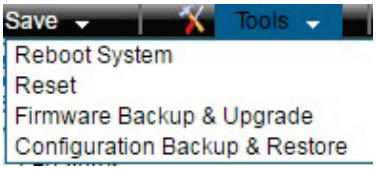


Figure 4.4 – Tool Menu

Reboot System

This option provides a safe way to reboot the system. Click **Yes** or **No** to decide to save the settings does this really reset to factory default settings or does it just discard the most recent unsaved changes. Click **Reboot** to restart the switch.

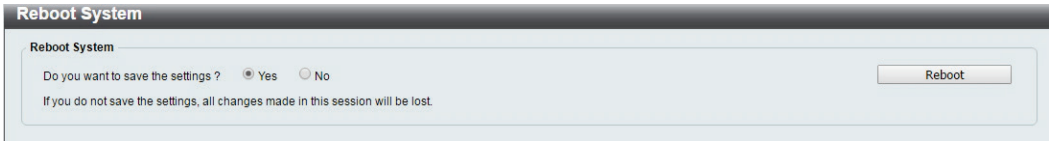


Figure 4.5 – Tool Menu > Reboot System

Reset

Provide a safe reset option for the Switch. Depending on the chosen reset option, some or all configuration settings stored in the device's flash memory will be reset to factory default.

Figure 4.6 – Tool Menu > Reset

Select a suitable reset option and click **Apply** to make the configurations take effect.

Firmware Backup and Upgrade

This functions allows you to create a backup of the device's current firmware, or upgrade the firmware using a compatible firmware file.

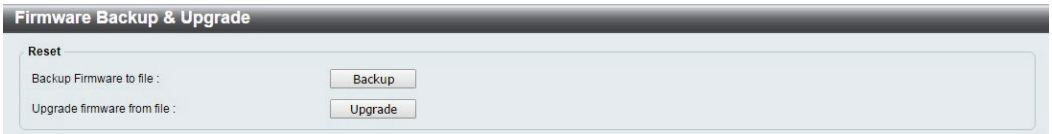


Figure 4.7 – Tool Menu > Firmware Backup and Upgrade

Click **Backup** to save the firmware to your disk.

Click **Upgrade** to upgrade the firmware. After clicking, the device will enter boot-loader mode and the following page will be displayed:

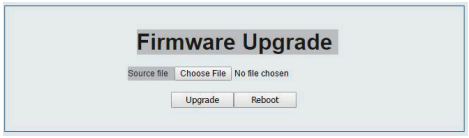


Figure 4.8 – Tool Menu > Firmware Backup and Upgrade - Upgrade

Click **Choose File** to browse for a compatible firmware file on your hard drive.

Click **Upgrade** to update the device's firmware using the selected firmware file.

Click **Reboot** to cancel the firmware upgrade and reboot the device.

CAUTION: Do not disconnect the PC or remove the power cord from device until the upgrade completes. The Switch may crash if the firmware update is interrupted.

Configuration Backup and Restore

Allow the current configuration settings to be saved to a file, and if necessary, you can restore the configuration settings from this file.

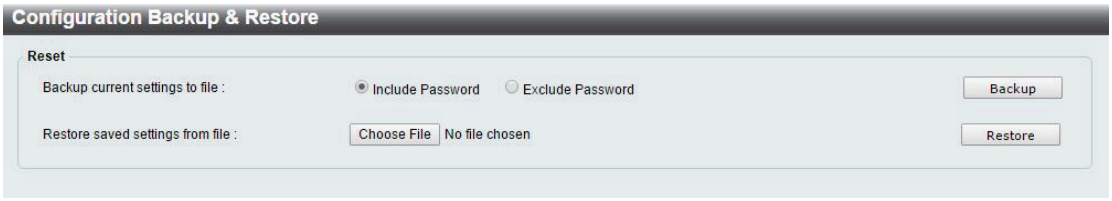


Figure 4.9 – Tool Menu > Configure Backup and Restore

Backup current settings to file: Specify to back up the current settings of the Swtich with or without the password, and click **Backup**.

Restore saved settings from file: Click **Choose File** to browse your inventories for a saved backup settings file. And click **Restore** to backup settings file you want to restore.

Note: Switch will reboot after restore, and all current configurations will be overwritten.

Tool Bar > Online Help

The Online Help provides two ways of online support: **D-Link Support Site** will lead you to the D-Link website where you can find online resources such as updated firmware images; **User Guide** can offer an immediate reference for the feature definition or configuration guide.

Figure 4.10 – Online Help

Function Tree

All configuration options of the switch are accessed through the function menu on the left side of the screen. Click on the setup item that you want to configure. The following sections provide a more detailed description of each feature and function.

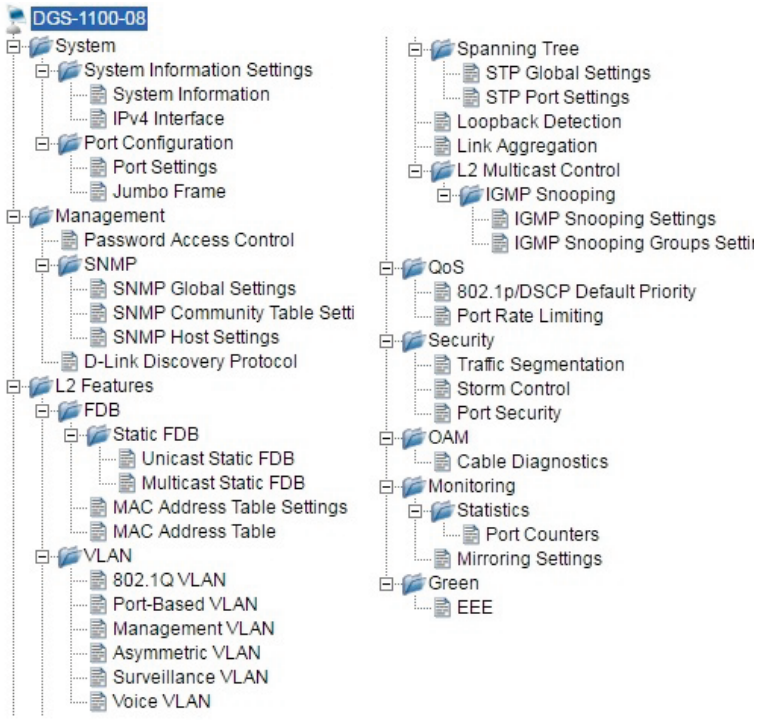


Figure 4.11 –Function Tree

Device Information

The Device Information provides an overview of the Switch, including essential information such as firmware and hardware information, and IP address.

Figure 4.12 – Device Information

System > System Information Settings > System Information

The System Information allows the user to configure the basic system information of the Switch. By entering the system information, the device can more easily be recognized from other Smart Managed devices on the network.

Figure 4.13 – System > System Information Settings > System Information

The fields that can be configured for **System Information** are described below:

Item	Description
System name	Specify the system name of the Switch.
System Location	Specify the system location of the Switch.

System Contact	Specify the system contact of the Switch.
Web Session Timeout (60-36000)	The Web Session Timeout controls the idle time-out period for security purposes, when there is no activity in the web interface within the specified time-out period. If the current session times out (expires), the user is required to log into the web management interface again. Selective range is from *60* to *36000* seconds, and the default setting is *180* seconds.

Table 4.1

Click **Apply** to make the configurations take effect.

System > System Information Settings > IPv4 Interface

The IPv4 Interface allows the user to configure the IP address and the basic system information of the Switch.

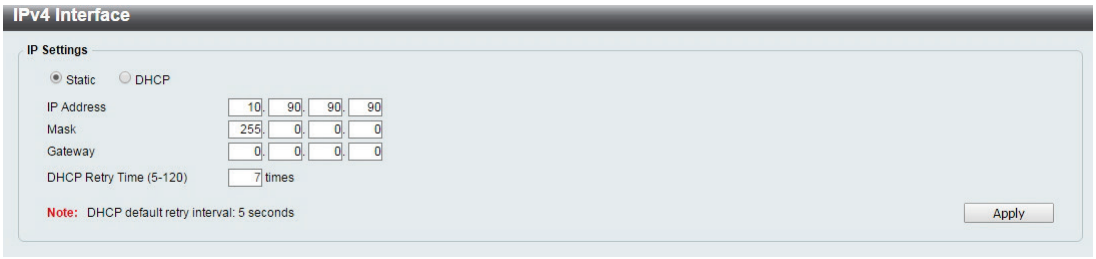


Figure 4.14 – System > System Information Settings > IPv4 Interface

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

Item	Description
IP Settings	There are two ways for the Switch to obtain an IP address: Static and DHCP (Dynamic Host Configuration Protocol). When using static mode, the **IP Address**, **Mask, Gateway** and **DHCP Retry Time** can be manually configured. When using DHCP mode, the Switch will first look for a DHCP server to provide it with an IP address (including network mask and default gateway) before using the default or previously entered settings.
IP Address	Specify the IPv4 address. By default, the IP address is *10.90.90.90*
Mask	Specify the subnet mask of IP address. By default, the subnet mask is *255.0.0.0*
Gateway	Specify the gateway of IP address. By default, the gateway is *0.0.0.0*
DHCP Retry Time (5-120)	Specify the number of attempts to assign an IP address through a DHCP server. Selective range is from *5* to *120* times, and the default setting is *7* times.

Table 4.2

Click **Apply** to make the configurations take effect.

System > Port configuration > Port Settings

In the Port Setting page, the status of all ports can be monitored and configured.

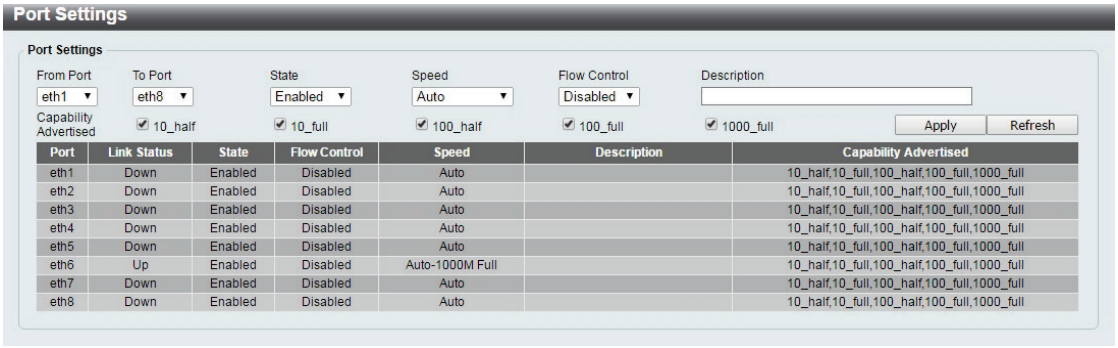


Figure 4.15 – System > Port Configuration > Port Settings

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

Item	Description
From Port / To Port	Select a range of ports to be configured.
State	Enable or disable the specified ports.
Speed	Copper connections can operate in Forced Mode settings 1000 Mbps (full-duplex), 100 Mbps (full/half-duplex), 10 Mbps (full/half-duplex), Auto, or Disabled. The default setting for all ports is *Auto*.
Flow control	You can enable this function to mitigate traffic congestion. Ports configured for full-duplex use 802.3x flow control, half-duplex ports use backpressure flow control. The default setting is *Disabled*.
Description	Specify a description for the chosen ports
Capability Advertised	When the **Speed** is set to **Auto**, these capabilities are advertised during auto-negotiation.

Table 4.3

Click **Apply** to make the configurations take effect.

Click **Refresh** button to update the port status information.

NOTE: Be sure to adjust port speed settings appropriately after changing the connected cable media types.

System > Port Configuration > Jumbo Frame

D-Link Smart Managed Switches support jumbo frames (frames larger than the Ethernet frame size of 1536 bytes) of up to 9216 bytes (tagged). This function is disabled by default. Select **Enabled** then click **Apply** to turn on the jumbo frame support.

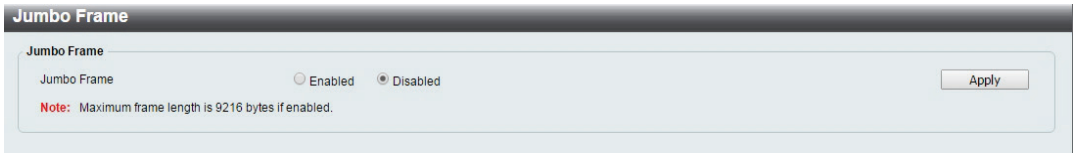


Figure 4.16 – System > Port Configuration > Jumbo Frame

System > PoE > PoE System (DGS-1100-05PD/08P only)

The PoE System page will display the PoE status including System Budget Power, Support Total Power, Remainder Power, and the ratio of system power supply.

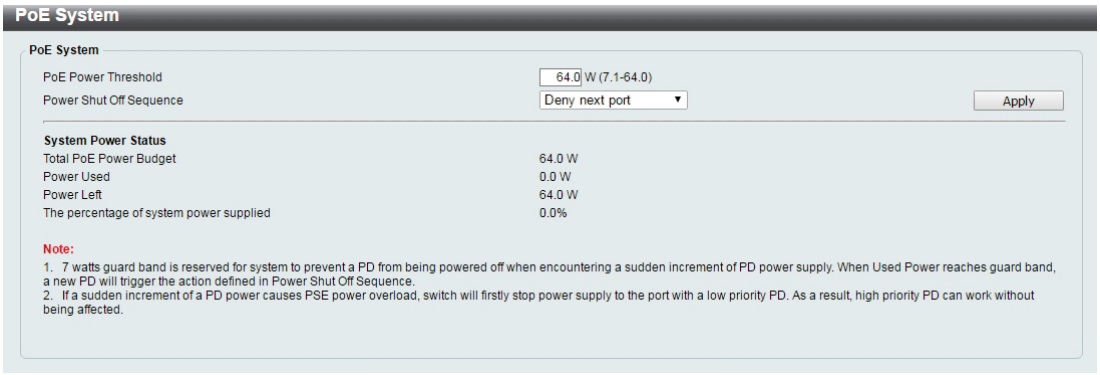


Figure 4.17 – System > PoE > PoE System

The fields that can be configured for **PoE System** are described below:

Item	Description
PoE System	
PoE Power Threshold. **(Only for DGS-1100-08P)**	Manually configure the system power budget. The power budget range is between *7.1* and *64* Watts.
Power shut Off Sequence	Defines the method used to deny power to a port once the threshold is reached. The possible fields are: · *Deny next port:* When the power budget is exceeded, the next port attempting to power up is denied, regardless of the port priority. · *Deny low priority port:* The port with the lower priority will be shut down to allow the higher priority port to power up.
System Power Status	
Total PoE Power Budget	Displays the total PoE power budget of this switch.
Power Used	Displays the current used power of the switch.
Power Left	Displays the spare power of the switch.
The percentage of system supplied	Displays the percentage of system power supplied of the switch.

Table 4.4

Click **Apply** to make the configurations take effect.

System > PoE > PoE Configuration (DGS-1100-05PD/08P only)

The DGS-1100-05PD/08P support Power over Ethernet (PoE) as defined by the IEEE specification. The PoE port specification is listed in the table below:

Model Name	PoE Capable Ports	Power Budget
DGS-1100-05PD	Port 1 ~ Port 2: Max. PoE Output 15.4 Watts	18 Watts
DGS-1100-08P	Port 1 ~ Port 8: Max. PoE Output 30 Watts	64 Watts

The DGS-1100-05PD/08P work with D-Link 802.3af or 802.3at capable devices.

IEEE 802.3at defined that the PSE provides power according to the following classification:

Class	Usage	Output power limit by PSE

0	Default	15.4W
1	Optional	4.0W
2	Optional	7.0W
3	Optional	15.4W
4	Optional	30W

The PoE port table will display the PoE status including, Port Enable, Power Limit, Power (W), Voltage (V), Current (mA), Classification, Port Status. You can select **From Port** / **To Port** to control the PoE functions of a port. The DGS-1100-05PD/08P will auto disable the ports if port current is over 375mA in 802.3af mode or 625mA in pre-802.3at mode.

Note: Maximum time(interval) that Ping can respond, when wire-rate and PoE-compatible two ports are used at the same time

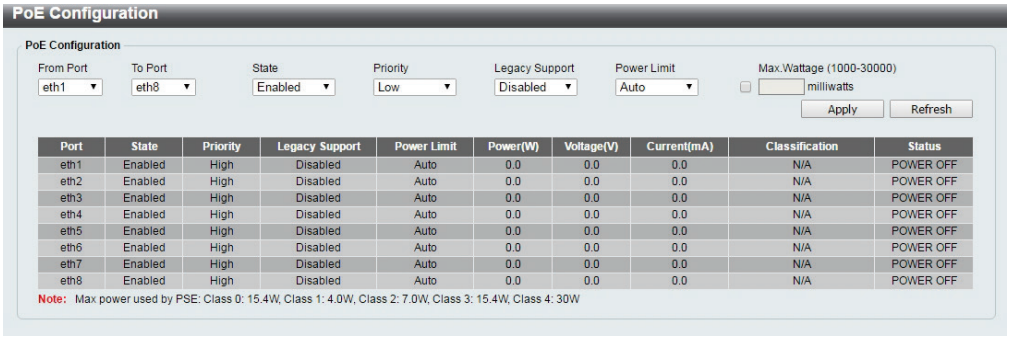


Figure 4.18 – System > PoE > PoE Configuration

The fields that can be configured for **PoE Configuration** are described below:

Item	Description
From Port / To Port	Specifies the PoE function of a port or ports.
State	Select enable or disable to configure PoE function for designated port(s). Default is *Enabled.*
Priority	Configure the power supply priority as “Low”, “Normal”, or “High” on designated port(s). Default is *Normal*.
Legacy Support	Specify to enable or disable detecting legacy PDs signal
Power Limit	This function allows you to manually set the port power current limitation to be given to the PD. To protect the DGS-1100-05PD/08P and connected devices, the power limit function will disable the PoE function of the port when the power is overloaded. Select from "**Class 1**", "**Class 2**", "**Class 3**", **“Class 4”** and "**Auto**" for the power limit. "**Auto**" will negotiate and follow the classification from the PD power current based on the 802.3at standard.
Max. Wattage	Check the box and input the power budget (from 1000 to 8000 milliwatts for DGS-1100-05PD and 1000 to 30000 milliwatts for DGS-1100-08P) to manually assign an upper limit of port power budget on designated port(s).

Table 4.5

Click **Apply** to make the configurations take effect.

Click **Refresh** button to update the port PoE status information.

Note: For the PoE Port Settings table, if the classification was shown as “Legacy PD”, it will be classified to non-AF PD or Legacy PD.

Note: This switch conforms to IEEE 802.3af and 802.3at standards. The IEEE PoE standard requires a switch to shut off power to a port if the power draw is less than 10mA within a 400ms time interval. To support some non-standard devices that may take longer, you may enable this feature to extend the time interval to 500ms. If the PD is still not powering on, please contact the vendor of your device for support.

Management > Password Access Control

The Password Access Control page allows the user to configure the access password of the Switch.

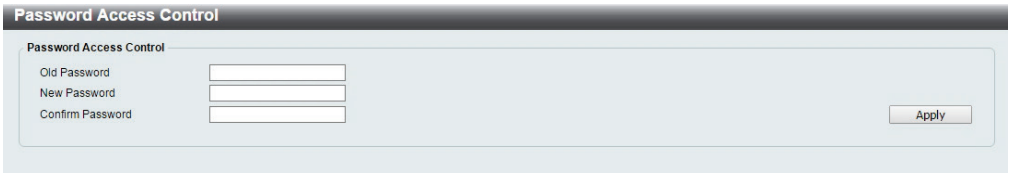


Figure 4.19 – Management > Password Access Control

The fields that can be configured for **Password Access Control** are described below:

Item	Description
Old Password	Enter the old password of the Switch.
New Password	Enter the new password of the Switch.
Confirm Password	Enter the new password of the Switch again.

Table 4.6

Click **Apply** to make the configurations take effect.

Management > SNMP > SNMP Global Settings

Simple Network Management Protocol (SNMP) is an OSI Layer 7 (Application Layer) protocol designed specifically for managing and monitoring network devices. SNMP enables network management stations to read and modify the settings of gateways, routers, switches, and other networks. Use SNMP to configure system features for proper operation, monitor performance and detect potential problems in the Switch or LAN.

This panel allows the user to configure the SNMP settings, used for managing and monitor devices on the network.

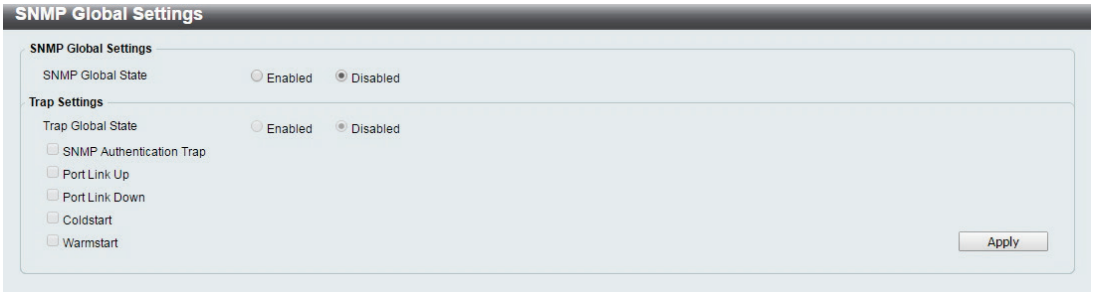


Figure 4.20 – Management > SNMP > SNMP Global Settings

The fields that can be configured are described below:

Item	Description

SNMP Global Settings	
SNMP Global State	Specify to enable or disable the SNMP feature. The default setting is *Disabled*.
Trap Settings	
Trap Global State	Enable or disable SNMP trap notifications from client devices. Disabling this option means no trap signals will be sent. When enabling this option, you may choose the type of SNMP traps to enable.
SNMP Authentication Trap	Check this feature to enable authentication traps. When a client device fails to authenticate with the SNMP server, and authentication trap will be sent to the management station.
Port Link Up	Check this feature to enable Link Up traps. Whenever a device changes status from 'link down' to 'link up', it will send a Link Up trap to the management station.
Port Link Down	Check this feature to enable Link Down traps. Whenever a device changes status from 'link up' to 'link down', it will send a Link Down trap to the management station.
Coldstart	Check this feature to have client devices send an SNMP notification to the management station when performing a cold start.
Warmstart	Check this feature to have client devices send an SNMP notification to the management station when performing a warm start.

Table 4.7

Click **Apply** to make the configurations take effect.

Management > SNMP > SNMP Community Table Settings

This SNMP Community Table Settings page is used to create an SNMP community string to define the relationship between the SNMP manager and an agent. The community string acts like a password to permit access to the agent on the Switch.

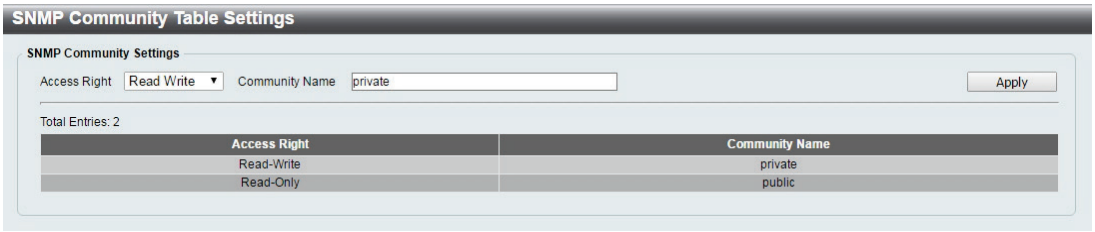


Figure 4.21 –Management > SNMP > SNMP Community Table Settings

The fields that can be configured for **SNMP Community Settings** are described below:

Item	Description
Access Right	Select the access right here. Options to choose from are Read Only, and Read Write. *Read Only* - SNMP community members can only read the contents of the MIBs on the Switch. *Read Write* - SNMP community members can read from, and write to the contents of the MIBs on the Switch.
Community Name	Enter an alphanumeric string of up to 16 characters that is used to identify members of an SNMP community. This string is used like a password to give remote SNMP managers

	access to MIB objects in the Switch's SNMP agent.

Table 4.8

Click **Apply** to create a new SNMP community.

Management > SNMP > SNMP Host Settings

This SNMP Host Settings page is used to configure the recipients of the SNMP notifications.

Figure 4.22 – Management > SNMP > SNMP Host Settings

The fields that can be configured for **SNMP Host Settings** are described below:

Item	Description
Host IPv4 Address	Specify the IPv4 address of the SNMP management host.
User-based Security Model	Specify the security model. The options to choose from are *SNMPv1* and *SNMPv2c*.
Community String	Specify the community string for the management host.

Table 4.9

Click **Apply** to make the configurations take effect.

Management > D-Link Discovery Protocol

For devices that support the D-Link Discovery Protocol (DDP), this page allows users to enable or disable DDP, and configure the DDP packet report timer.

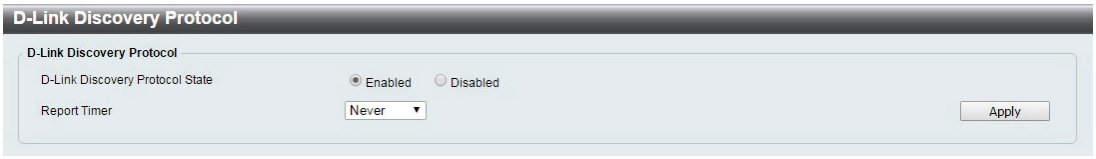


Figure 4.23 – Management > D-Link Discovery Protocol

The fields that can be configured for **D-Link Discovery Protocol** are described below:

Item	Description
D-Link discovery Protocol State	Specify to enable or disable the D-Link discovery protocol feature of the Switch.
Report Timer	Configure the report timer of the D-Link Discover Protocol in seconds. The values are 30, 60, 90, 120 or Never. The default is *30* seconds.

Table 4.10

Click **Apply** to make the configurations take effect.

L2 Features > FDB > Static FDB > Unicast Static FDB

The Unicast Static FDB page allows user to view and configure the static unicast forwarding settings on the Switch.

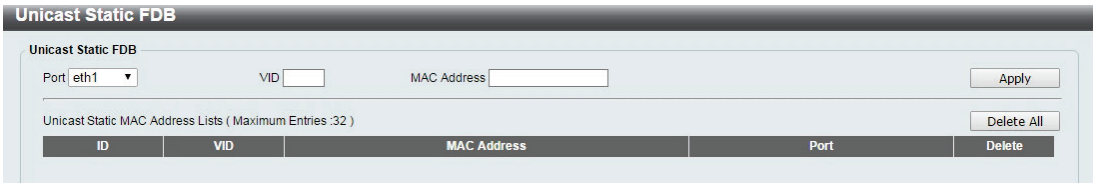


Figure 4.24 – L2 Features > FDB > Static FDB > Unicast Static FDB

The fields that can be configured for **Unicast Static FDB** are described below:

Item	Description
Port	Allows the selection of the port number on which the MAC address entered resides.
VID	Enter the VLAN ID of the VLAN which the corresponding MAC address belongs to.
MAC Address	Enter the MAC address to which packets will be statically forwarded or dropped. This must be a unicast MAC address.

Table 4.11

Click **Apply** to make the configurations take effect.
Click **Delete All** to delete all the entries found in the display table.

L2 Features > FDB > Static FDB > Multicast Static FDB

The Multicast Static FDB page allows user to view and configure the static multicast forwarding settings on the Switch.

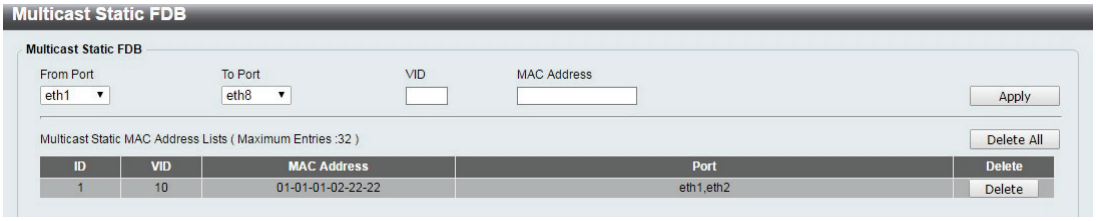


Figure 4.25 – L2 Features > FDB > Static FDB > Multicast Static FDB

The fields that can be configured for **Multicast Static FDB** are described below:

Item	Description
From Port / To Port	Enter the appropriate port range used for the configuration.
VID	Enter the VLAN ID of the VLAN the corresponding MAC address belongs to.
MAC Address	Enter the static destination MAC address of the multicast packets. This must be a multicast MAC address. The format of the destination MAC address is 01-XX-XX-XX-XX-XX.

Table 4.12

Click **Apply** to make the configurations take effect.
Click **Delete All** to delete all the entries found in the display table.
Click **Delete** to remove a specific entry.

L2 Features > FDB > MAC Address Table Settings

The **MAC Address Table Settings** page allows user to view and configure the MAC address table's global settings.

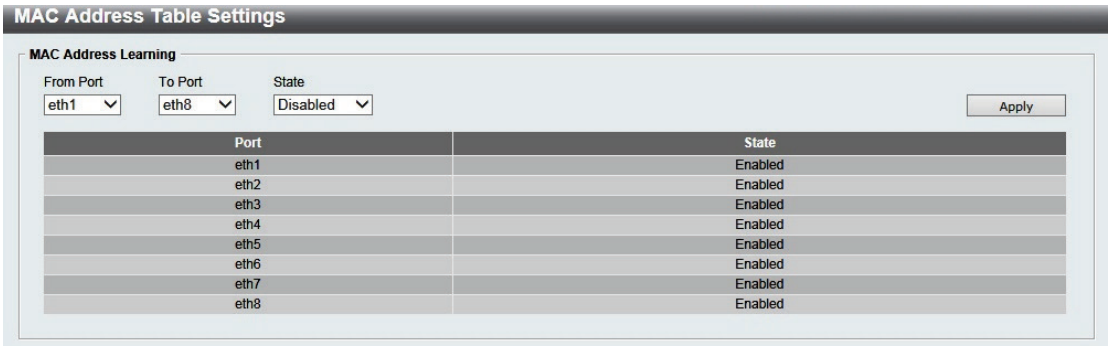


Figure 4.26 – L2 Features > FDB > MAC Address Table Settings

The fields that can be configured for **MAC Address Learning** are described below:

Item	Description
From Port / To Port	Enter the appropriate port range used for the configuration.
State	Use the drop-down menu to toggle between **Enabled** and **Disabled**. Default is *Disabled*.

Table 4.13

Click **Apply** to make the configurations take effect.

L2 Features > FDB > MAC Address Table

The **MAC Address Table** page allows user to view the entries listed in the MAC address table.

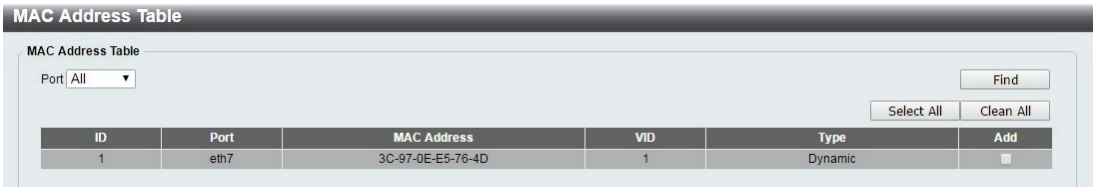


Figure 4.27 – L2 Features > FDB > MAC Address Table

The fields that can be configured for **MAC Address Table** are described below:

Item	Description
Port	Select a single port or all ports. The information for the port(s) will be displayed in the information table.

Table 4.14

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

Click **Select All** to select all dynamic MAC addresses.

Click **Clear All** to clear all dynamic MAC addresses.

NOTE: When viewing the different FDB pages, the device will take a moment to refresh the UI.

L2 Features > VLAN > 802.1Q VLAN

A Virtual Local Area Network (LAN) is a group of ports that can be anywhere in the network, but communicate as though they were in the same area.

VLANs can be easily organized to reflect department groups (such as R&D, Marketing), usage groups (such as e-mail), or multicast groups (multimedia applications such as video conferencing), and therefore help to simplify network management by allowing users to move devices to a new VLAN without having to change any physical connections.

The IEEE 802.1Q VLAN Configuration page provides powerful VID management functions. The original settings have the VID as 1, no default name, and all ports as “Untagged”

Figure 4.28 – L2 Features > VLAN > 802.1Q VLAN

Click **Rename** to rename the VLAN group.
Click **Delete** to remove the VLAN group.

To create a new VID group, click **Add VID** and the following will be displayed:

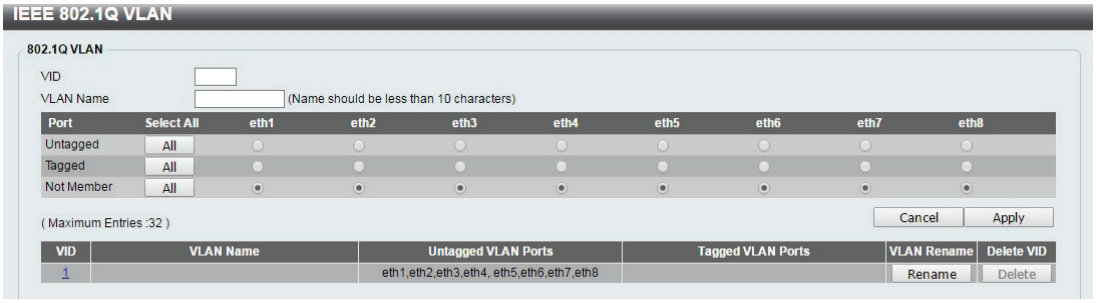


Figure 4.29 – L2 Features > VLAN > 802.1Q VLAN – Add VID

The fields that can be configured for **802.1Q VLAN** are described below:

Item	Description
VID	Enter the VID to be created.
VLAN Name	Enter the VLAN name for the VID to be created.
Port	Assign ports as **Untag**, **Tag** or **Not Member**. Click **All** to select all ports.

Table 4.15

Click **Apply** to create a new VID group.

To configure the PVID settings, click **PVID Settings** and the following will be displayed:

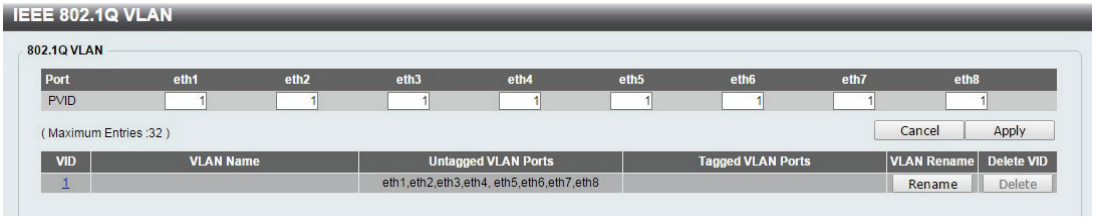


Figure 4.30 – L2 Features > VLAN > 802.1Q VLAN – PVID Settings

Click **Apply** to make the configurations take effect.
Click **Cancel** to discard any changed made and return to the previous page.

L2 Features > VLAN > Port-Based VLAN

Port-Based VLANs are the simplest and most common form of VLAN. It assigns physical LAN ports to VLANs, effectively broadening their application. You can assign multiple ports to the same VLAN, or each port to a separate VLAN. The default is *disabled*.

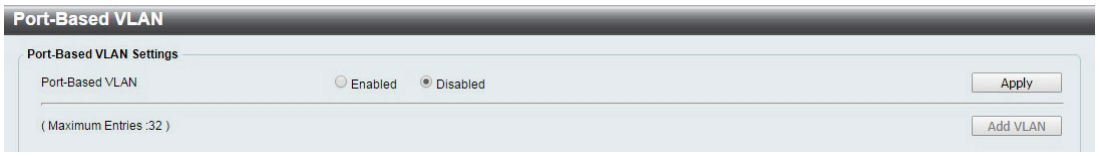


Figure 4.31 – L2 Features > VLAN > Port-Based VLAN

Select **Enabled** and click **Apply** to enable the Port-Based VLAN function and the following will be displayed:

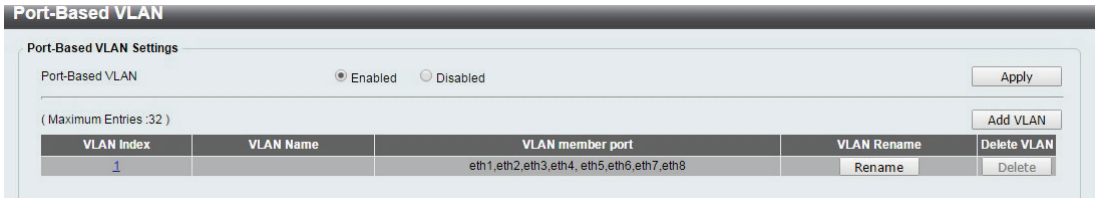


Figure 4.32 – L2 Features > VLAN > Port-Based VLAN - Enabled

Click **Rename** to rename the VLAN group.

Click **Delete** to remove the VLAN group.

NOTE: When **Port-Based VLAN** is enabled, the 802.1Q VLAN settings and 802.1Q management VLAN settings will be set to Disabled by default. By default, all ports are untagged.

To create a new Port-Based VLAN group, click **Add VLAN** and the following will be displayed:

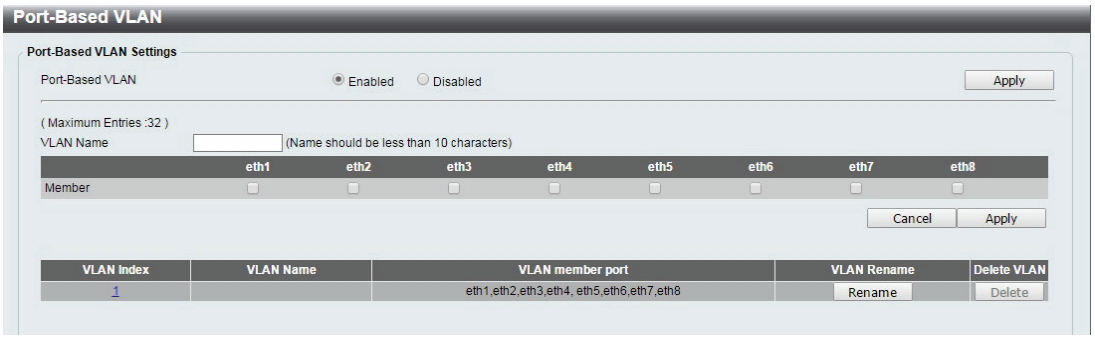


Figure 4.33 – L2 Features > VLAN > Port-Based VLAN - Enabled

Enter the **VLAN Name** and select the M**ember** port to be created.

Click **Apply** to make the configurations take effect.

Click **Cancel** to discard any changed made and return to the previous page.

L2 Features > VLAN > Management VLAN

The 802.1Q Management VLAN setting allows user to transfer management authority of the switch from the default VLAN to another VLAN. This allows for more flexible network management. By default, the Management VLAN is disabled. You can select any existing VLAN as the management VLAN when this function is enabled. There can only be one management VLAN at a time.

Figure 4.34 – L2 Features > VLAN > Management VLAN

The fields that can be configured for **Management VLAN** are described below:

Item	Description
Management VLAN	Select to enable or disable the Management VLAN function.
VID	Select the VID to act as the managing VLAN.

Table 4.16

Click **Apply** to make the configurations take effect.

NOTE: When 802.1Q Management VLAN is enabled, the 802.1Q VLAN should be enabled first.

L2 Features > VLAN > Asymmetric VLAN

The Asymmetric VLAN allows for a more efficient use of shared resources, such as server or gateway devices.

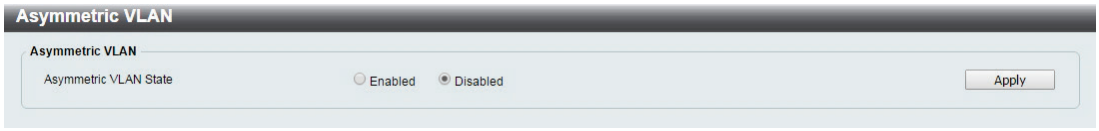


Figure 4.35 – L2 Features > VLAN > Asymmetric VLAN

The fields that can be configured for **Asymmetric VLAN** are described below:

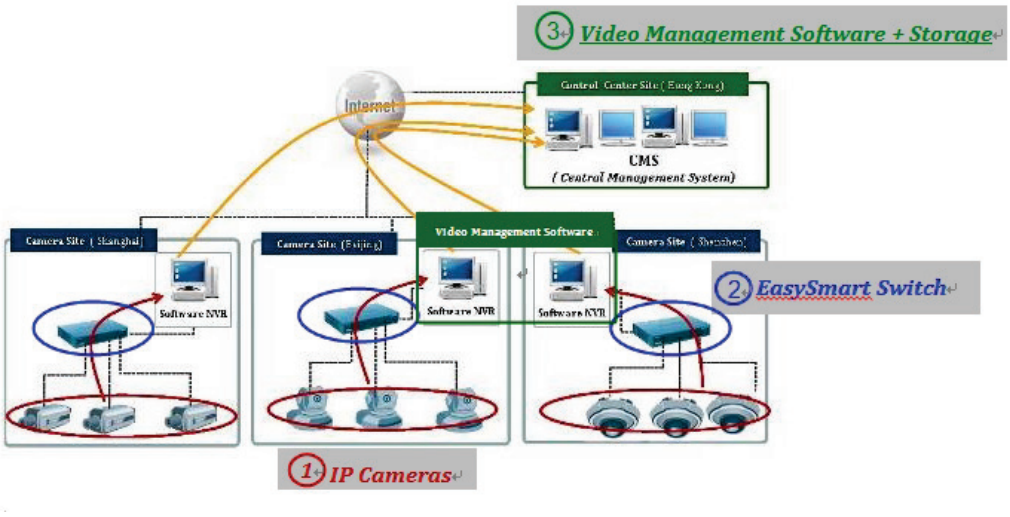
Item	Description
Asymmetric VLAN State	Specify to enable or disable the Asymmetric VLAN of the Switch. The default value is *disabled*.

Table 4.17

Click **Apply** to make the configurations take effect.

L2 Features > VLAN > Surveillance VLAN

Surveillance VLAN is a feature that allows you to place the video traffic from D-Link IP cameras to an assigned VLAN to enhance the IP surveillance service. With a higher priority and individual VLAN, the quality and the security of surveillance traffic are guaranteed. The Surveillance VLAN function will check the source MAC address and VLAN ID on the incoming packets. If it matches the specified MAC address / VLAN ID, the packets will pass through with desired priority



The Surveillance VLAN settings that can be configured are as follows:

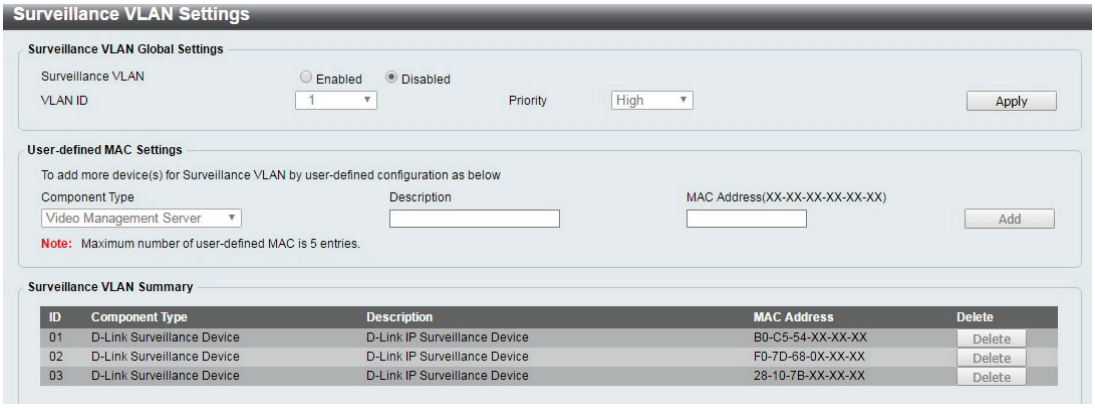


Figure 4.36 – L2 Features > VLAN > Surveillance VLAN

The fields that can be configured for **Surveillance VLAN** are described below:

Item	Description
Surveillance VLAN Global Settings	
Surveillance VLAN	Specify to enable or disable the Surveillance VLAN function.
VLAN ID	Specify the VLAN ID to act as the Surveillance VLAN.
Priority	Specify the priority level. The levels of priority are High, Medium and Low. The default priority is *High*.
User-defined MAC Settings	
Component Type	Surveillance VLAN will automatically detect D-Link surveillance devices by default. There are another five surveillance components that can be configured for surveillance VLAN. These five components are Video Management Server (VMS), VMS Client, Video Encoder, Network Storage, and Other IP brand's Surveillance Devices. Usually, VMS and VMS Clients are necessary components for an IP surveillance service.
Description	Enter a description for the component.
MAC-Address	Enter a MAC address of the component.

Table 4.18

Click **Apply** to make the configurations take effect.
Click **Delete** to remove the Surveillance VLAN entry.

L2 Features > VLAN > Voice VLAN

Voice VLAN is a feature that allows you to place the voice traffic from D-Link IP phones to an assigned VLAN to enhance the IP voice service. With a higher priority and individual VLAN, the quality and the security of voice traffic are guaranteed. The Voice VLAN function will check the source MAC address / VLAN ID on the incoming packets. If it matches the specified MAC address / VLAN ID, the packets will pass through with desired priority.

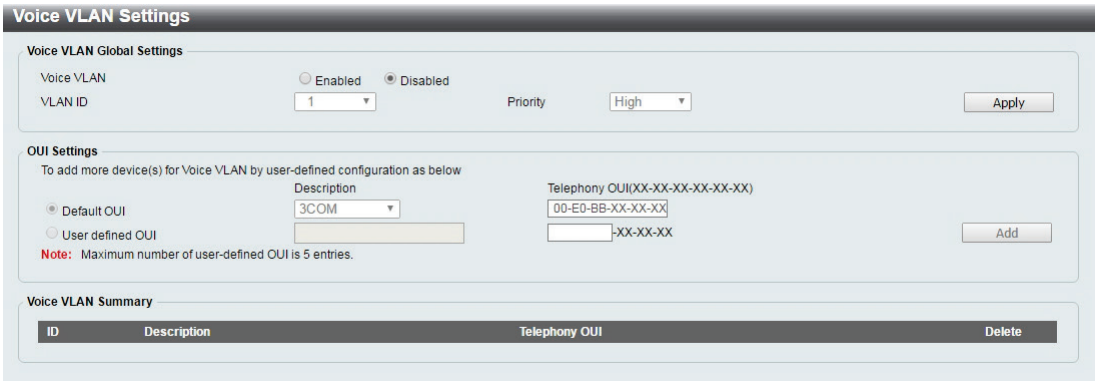


Figure 4.37 – L2 Features > VLAN > Voice VLAN

The fields that can be configured for **Voice VLAN** are described below:

Item	Description
Voice VLAN Global Settings	
Voice VLAN	Specify to enable or disable the Voice VLAN function.
VLAN ID	Specify the VLAN ID to act as a Voice VLAN.
Priority	Specify the priority level. The levels of priority are High, Medium and Low. The default priority is *High*.
OUI Settings	
Default OUI	Pre-defined Organizationally Unique Identifier (OUI) values, including 3COM, Cisco, Veritel, Pingtel, Siemens, NEC/Phillips, Huawei3COM, and Avaya.
User defined OUI	The user can manually create a Telephony OUI with a description. The maximum number of user defined OUIs is 5. It will occupy one ACL rule when selecting user defined OUI by default, and to configure one user-defined OUI will take extra one ACL rule. System will auto-generate an ACL profile for all the Voice VLAN rules.

Table 4.19

Below is a list of the pre-defined voice OUI's. These cannot be used as a user defined OUI.

OUI	Vendor	Mnemonic Name
00:E0:BB	3COM	3com
00:03:6B	Cisco	cisco
00:E0:75	Veritel	veritel
00:D0:1E	Pingtel	pingtel
00:01:E3	Siemens	siemens

00:60:B9	NEC / Philips	nec&Philips
00:0F:E2	Huawei-3COM	Huawei&3com
00:09:6E	Avaya	avaya

Table 4.20

Click **Apply** to make the configurations take effect.

Click **Add** to create a new Voice VLAN.

L2 Features > Spanning Tree > STP Global Settings

The Switch implements two versions of the Spanning Tree Protocol: Rapid Spanning Tree Protocol (RSTP) as defined by IEEE 802.1w, a version compatible with the IEEE 802.1D STP. RSTP can operate with legacy equipment implementing IEEE 802.1D, however the advantages of using RSTP will be lost.

By default, Rapid Spanning Tree is disabled. If enabled, the Switch will listen for Bridge Protocol Data Unit (BPDU) packets and their accompanying Hello Packets. The BPDU packets are sent even if a BPDU packet is not received. Therefore, each connection between bridges is sensitive to the status of the link. Ultimately this difference results in faster detection of failed links, and therefore faster topology adjustment.

Figure 4.38 – L2 Features > Spanning Tree > STP Global Settings

The fields that can be configured are described below:

Item	Description
Spanning Tree State	
Spanning Tree State	Select to enable or disable the Spanning Tree Protocol.
Spanning Tree Mode	
Spanning Tree Mode	Select the STP mode. The options to choose from are RSTP and STP.
STP Traps	
STP New Root Trap	Select to enable or disable the STP new root trap option.
STP Topology Change Traps	Select to enable or disable the STP topology change trap option.
Root Bridge Information	
Root Bridge	Display the root bridge information.
Root Cost	Display the root cost information.
Root Maximum Age	Display the root maximum age in seconds.
Root Forward Delay	Display the root forward delay in seconds.

Root Port	Display the root port.

Table 4.21

Click **Apply** to make the configurations take effect.

L2 Features > Spanning Tree > STP Port Settings

STP can be set up per port. In addition to setting Spanning Tree parameters for use on the switch level, the Switch allows configuration of a spanning tree setup for a group of ports. Each port group spanning tree will require separate configuration.

An STP Group spanning tree works in the same way as the switch-level spanning tree, but the root bridge concept is replaced with a root port concept. The root port is selected based on the priority of and path cost to the port. Redundant links will be blocked, just as redundant links are blocked on the switch level.

The STP on the switch level blocks redundant links between switches (and similar network devices). The port level STP will block redundant links within an STP Group

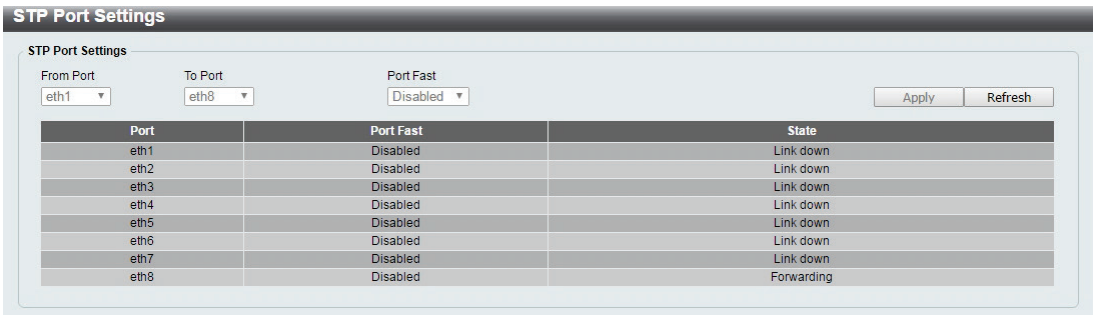


Figure 4.39 – L2 Features > Spanning Tree > STP Port Settings

The fields that can be configured are described below:

Item	Description
From Port / To Port	Select the range of ports to be included in the spanning tree port group.
Port Fast	Select the Port Fast option here. Options to choose from are Network, Disabled, and Edge. · In the Network mode the port will remain in the non-port-fast state for three seconds. The port will change to the port-fast state if no BPDU is received and changes to the forwarding state. If the port received the BPDU later, it will change to the non-port-fast state. · In the Disable mode, the port will always be in the non-port-fast state. It will always wait for the forward-time delay to change to the forwarding state. · In the Edge mode, the port will directly change to the spanning-tree forwarding state when a link-up occurs without waiting for the forward-time delay. If the interface receives a BPDU later, its operation state changes to the non-port-fast state. By default, this option is Network.

Table 4.22

Click **Apply** to make the configurations take effect.
Click **Refresh** to renew the page.

L2 Features > Loopback Detection

The Loopback Detection function is used to detect loops created by a specific port while Spanning Tree Protocol (STP) is not enabled in the network, especially when the down links are hubs or unmanaged switches. The Switch will automatically shut down the port and send a log to the administrator. The looping port will be unlocked when the Loopback Detection **Recover Time** times out. Loopback Detection can also be enabled or disabled for a specified range of ports simultaneously.

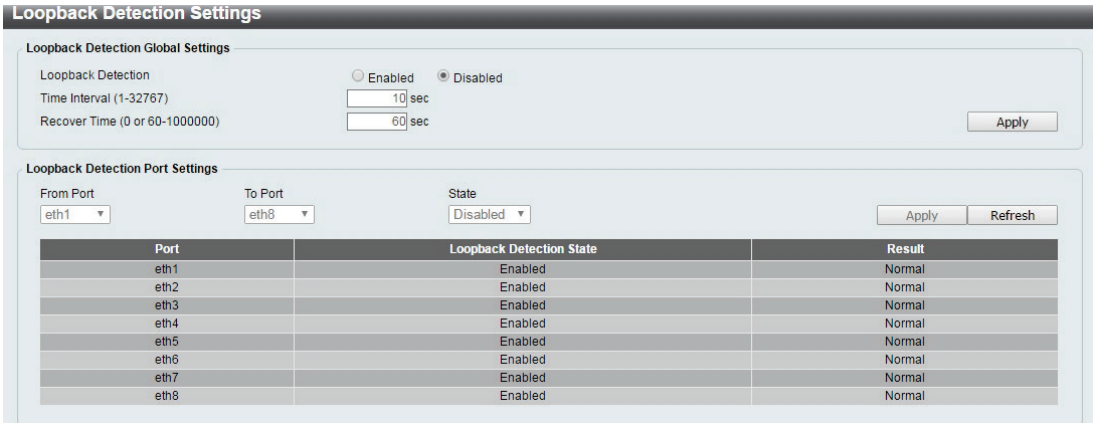


Figure 4.40 – L2 Features > Loopback Detection

The fields that can be configured are described below:

Item	Description
Loopback Detection Global Settings	
Loopback Detection	Specify to enable or disable loopback detection function. The default is *Disabled.*
Time Interval (1-32767)	Set a Loop detection Interval between *1* and *32767* seconds. The default is *10* seconds.
Recover Time (0 or 60-1000000)	Time allowed (in seconds) for recovery when a Loopback is detected. The Loop Detection Recover Time can be set at *0* seconds, or *60* to *1000000* seconds. Entering *0* will disable the Loop Detection Recover Time. The default is *60* seconds
Loopback Detection Port Settings	
From Port / To Port	Select the range of ports to enable or disable Loopback Detection for.
State	Enable or disable Loopback Detection for the specified range of ports.

Table 4.23

Click **Apply** to make the configurations take effect.

Click **Refresh** to renew the Loopback Detection table.

L2 Features > Link Aggregation

The Link Aggregation function enables the combining of two or more ports together to increase bandwidth. Each Link Aggregation group supports a maximum of four ports.

Figure 4.41 – L2 Features > Link Aggregation

The fields that can be configured for **Link Aggregation** are described below:

Item	Description
Link Aggregation Global Settings	
Link Aggregation	Specify to enable or disable the Link Aggregation function.
Channel Group Information	
ID	Use the drop-down menu to select a link aggregation group.
Port	Select the ports to assign to the aggregation group.

Table 4.24

Click **Apply** to make the configurations take effect.

Click **Delete** to remove the Link Aggregation group.

NOTE: Maximum number of ports in a Link Aggregation group is 4. DGS-1100-05 only supports 1 Link Aggregation group, and DGS-1100-08 supports up to 2 Link Aggregation groups.

NOTE: Each combined port must be connected to devices within the same VLAN group.

L2 Features > L2 Multicast Control > IGMP Snooping > IGMP Snooping Settings

With Internet Group Management Protocol (IGMP) snooping, the Smart Managed Switch can make intelligent multicast forwarding decisions by examining the contents of each frame's Layer 2 MAC header.

By default, IGMP is disabled. If enabled, the Smart Managed Switch can recognize IGMP queries and reports sent between network stations or devices and an IGMP host. With IGMP snooping enabled, the Smart Managed Switch will forward multicast traffic only to the connections that requested it.

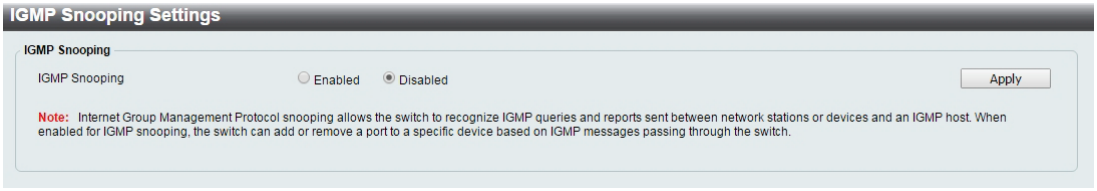


Figure 4.42 – L2 Features > L2 Multicast Control > IGMP Snooping > IGMP Snooping Settings

The fields that can be configured for are described below:

Item	Description
IGMP Snooping	Specify to enable or disable the IGMP Snooping function of the Switch.

Table 4.25

Click **Apply** to make the configuration take effect.

L2 Features > L2 Multicast Control > IGMP Snooping > IGMP Snooping Group Settings

The IGMP Snooping Group Settings page allows user to configure static IGMP Snooping groups on the Switch.

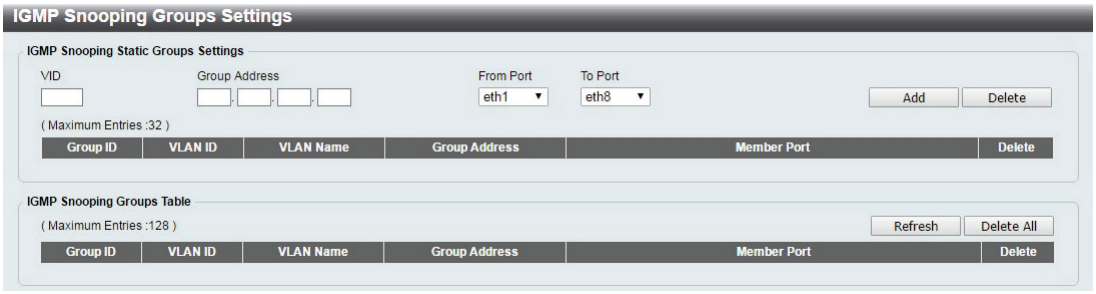


Figure 4.43 – L2 Features > L2 Multicast Control > IGMP Snooping > IGMP Snooping Group Settings

The fields that can be configured for are described below:

Item	Description
IGMP Snooping Static Group Settings	
VID	Specify the VLAN ID to create the IGMP group.
Group Address	Specify the group IP address for the IGMP Snooping group.
From Port / To Port	Specify a range of ports to be included in the IGMP Snooping group.

Table 4.26

Click **Add** to create a new IGMP Snooping group.

Click **Delete** to remove the corresponding IGMP Snooping group.

Click **Delete All** to remove all IGMP Snooping groups.

Click **Refresh** to renew the IGMP Snooping Groups Table information.

QoS > 802.1p/DSCP Default Priority

Quality of Service (QoS) is an implementation of the IEEE 802.1p standard that allows network administrators to manage traffic for important functions that require more bandwidth or have a higher priority, such as VoIP (voice-over Internet Protocol), web browsing applications, file server applications, or video conferencing. Thus with larger bandwidth, less critical traffic is limited, and therefore excessive bandwidth can be saved.

The following figure displays the status of Quality of Service priority levels of each port. This means that the Switch will handle traffic from higher priority ports first. For packets that are untagged, the Switch will assign the priority depending on your configuration.

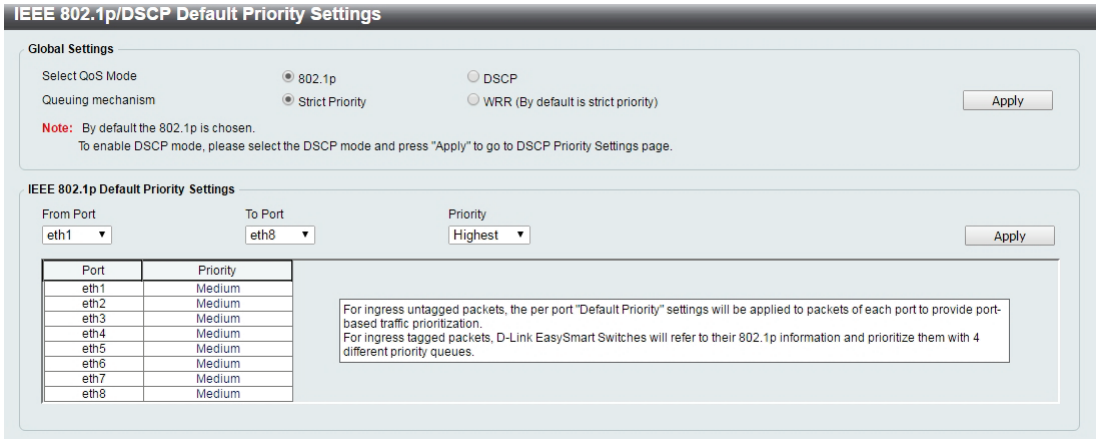


Figure 4.44 – QoS > 802.1p/DSCP Default Priority

The fields that can be configured are described below:

Item	Description
Global Settings	
Select QoS mode	D-Link Smart Managed Switch allows the user to prioritize the traffic based on the 802.1p priority in the VLAN tag or the DSCP (Differentiated Services Code Point) priority in the IP header. Only one mechanism is selected to prioritize the packets at a time.
Queuing mechanism	Specify the queuing mechanism, the option are: · **Strict Priority:** Denoting a Strict scheduling will set the highest queue to be emptied first while the other queues will follow the weighted round-robin scheduling scheme. · **WRR:** Use the weighted round-robin (WRR) algorithm to handle packets in an even distribution among priority classes.
IEEE 802.1p Default Priority Settings	
From Port / To Port	Specify a range of ports to be configured.
Priority	Defines the priority level for the corresponding port. The priority range is between 0 and 7 with 0 being assigned to the lowest priority and 7 assigned to the highest.

Table 4.27

Click **Apply** to make the configurations take effect.

QoS > Port Rate Limiting

The Port Rate Limiting page allows users to configure the transfer speed limit for a selection of ports.

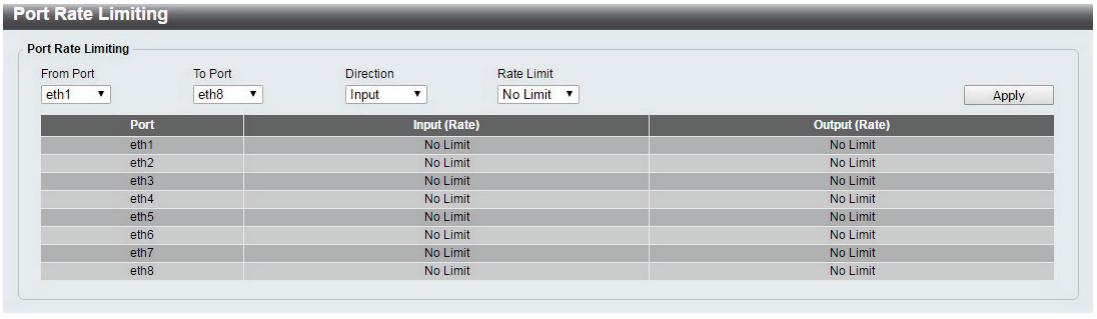


Figure 4.45 – QoS > Port Rate Limiting

The fields that can be configured for **Port Rate Limiting** are described below:

Item	Description
From Port / To Port	Specify a range of ports to be configured.
Direction	Select the direction option. Options to choose from are: · **Input:** This configures the transfer speed limit for ingress traffic. · **Output:** This configures the transfer speed limit for egress traffic. · **Both:** This configures the transfer speed limit for both ingress and egress traffic.
Rate Limit	Specify the rate limit in kbps or Mbps. Or specify **No Limit** to remove the rate limit.

Table 4.28

Click **Apply** to make the configurations take effect.

Security > Traffic Segmentation

This feature allows administrators to distribute traffic flow from a single port to a group of ports on a single Switch. This method of segmenting the flow of traffic is similar to using VLANs to limit traffic, but is more restrictive.

Figure 4.46 – Security > Traffic Segmentation

The fields that can be configured for **Traffic Segmentation Settings** are described below:

Item	Description
From Port / To Port	Specify a range of ports to be configured as sources ports.
From Forward Port / To Forward Port	Specify a range of ports to be configured as forwarding ports.

Table 4.29

Click the **Add** button to add a new entry.

Click the **Delete** button to remove an entry based on the information entered.

Security > Storm Control

The Storm Control feature provides the ability to control the receive rate of broadcast, multicast, and unknown unicast packets. Once a packet storm has been detected, the Switch will drop incoming packets until the storm has subsided.

Figure 4.47 – Security > Storm Control

The fields that can be configured for **Storm Control Settings** are described below:

Item	Description
Storm Control Status	Specify to enable or disable the storm control function.
Storm Control	Specify the type of controlled packets, Options are Broadcast Only, Multicast & Broadcast, and Multicast & Broadcast & Unknown Unicast.
Threshold (8-1000000)	If Storm Control is enabled, the Switch will start dropping packets of the specified type when exceeding this threshold. The threshold ranges from 8 to 1,000,000 kbps.

Table 4.30

Click **Apply** to make the configurations take effect.

Security > Port Security

Port Security improves network security by restricting access on a specific port only to users with a specific MAC address.

Ports can be locked to prevent users from modifying the MAC address forwarding table. Locking ports also prevents additional MAC addresses from being learned.

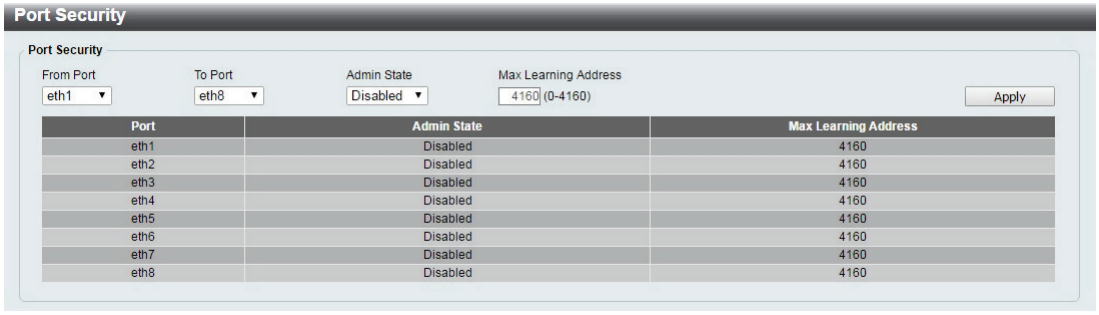


Figure 4.48 – Security > Port Security

The fields that can be configured for **Port Security** are described below:

Item	Description
From Port / To Port	Specify a range of ports to be configured.
Admin State	Select Enable to lock down the port and the associated MAC address table. Select Disable to disable Port Security on the corresponding port(s).
Max Learning Address	Define the maximum number of MAC addresses that can be associated with the corresponding port. This ranges from 0 to 4160.

Table 4.31

Click **Apply** to make the configurations take effect.

OAM > Cable Diagnostics

The Cable Diagnostics is designed primarily for administrators and customer service representatives to quickly examine the quality of copper cables, recognize the cable type, and detect cable errors.

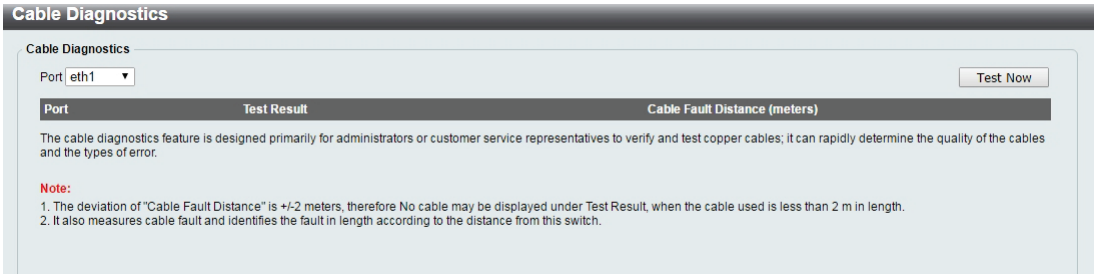


Figure 4.49 - OAM > Cable Diagnostics

Select a port and then click the **Test Now** button to start the diagnosis. The results will be displayed below:

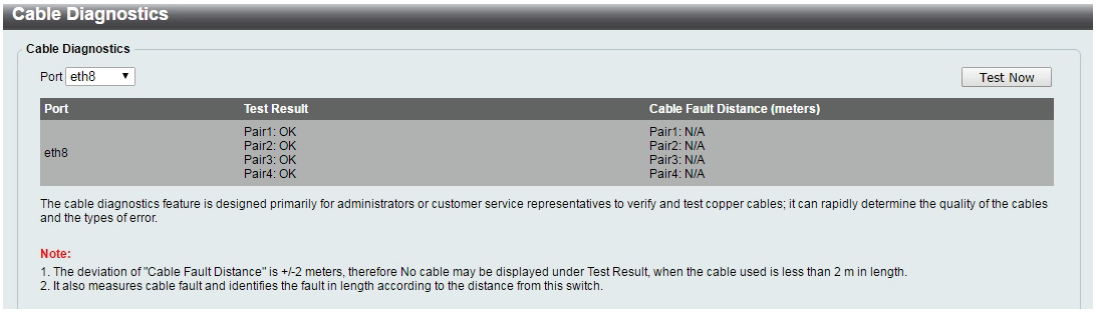


Figure 4.50 - OAM > Cable Diagnostics - results

The information that can be viewed is described below:

Item	Description
Test Result	The description of the cable diagnostic results. · **OK** means the cable is in good condition. · **Short in Cable** means there is an unintended connection between two or more conductors in the Ethernet cable. · **Open in Cable** means the wires of RJ45 cable may be broken or the other end of the cable is simply disconnected. · **Test Failed** means and error occurred during the cable test. Please select the same port and test again.
Cable Fault Distance (meters)	Indicates the distance of the cable fault from the Switch port. If the cable is less than 2 meters, it will show “No Cable”, whether the cable is connected to the port or not.

Table 4.32

Monitoring > Statistics > Port Counters

The Port Counters page displays the status of each port’s packet count.

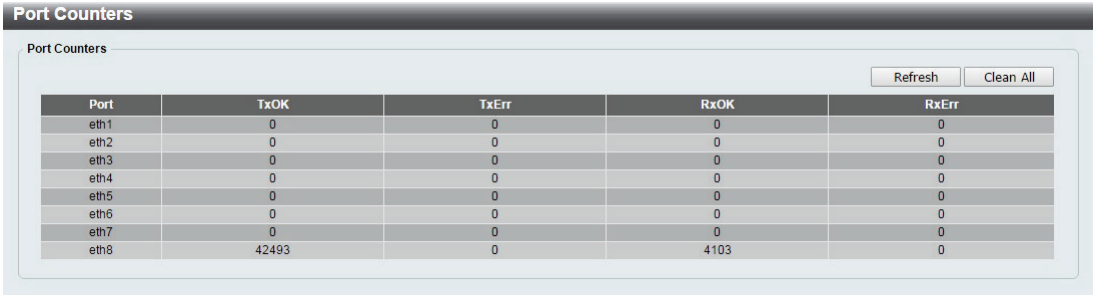


Figure 4.51 – Monitoring > Statistics > Port Counters

Click **Refresh** to renew the port counters statistics table.

Click **Clean All** to delete all port counter statistics.

Monitoring > Mirroring Settings

Port Mirroring is a method of monitoring network traffic that forwards a copy of each incoming and/or outgoing packet from one port of the Switch to another port, where the packet can be studied. This enables network managers to better monitor network performances.

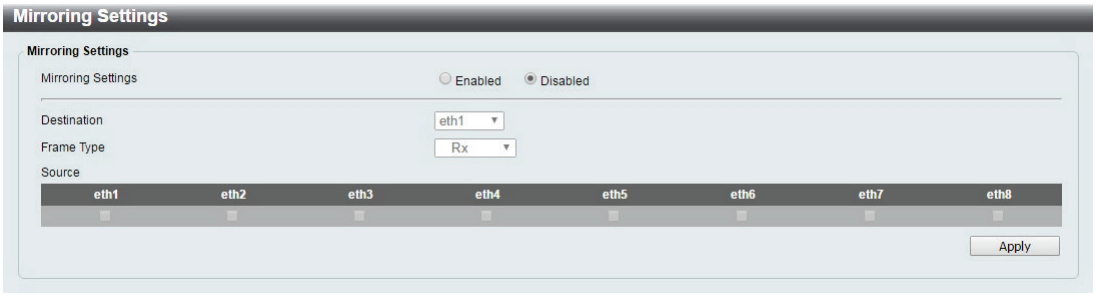


Figure 4.52 – Monitoring > Mirroring Settings

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

Item	Description
Mirroring Settings	Specify to enable or disable the mirroring function of the Switch.
Destination	Specify the destination where the data will be mirrored too. This cannot be any of the designated source ports from the data will be mirrored.
Frame Type	**Specify the frame type for mirroring:** · **Rx:** Duplicates the data that is received on the source port(s) and forwards it to the Target Port. Click “all” to include all ports into port mirroring. · **Tx:** Duplicates the data transmitted from the source port and forwards it to the Target Port. Click “all” to include all ports into port mirroring. · **Both:** Duplicate both the data transmitted from and data sent to the source port(s), and forwards all the data to the assigned Target Port.
Source	Select the range of ports to be the source port and Frame Type to be mirrored.

Table 4.33

Click **Apply** to add the newly configured mirror entry based on the information entered.

Green > EEE

The Energy Efficient Ethernet (EEE) is defined in IEEE 802.3az. It is designed to reduce the energy consumption of an inactive link by putting it in a sleep mode.

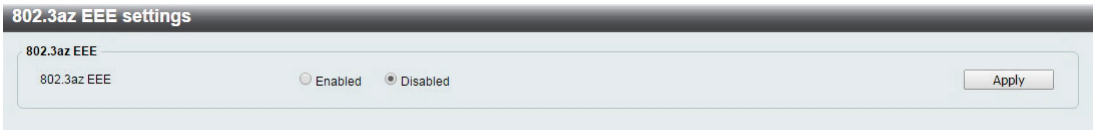


Figure 4.53 – Green > EEE

The fields that can be configured for **Energy Efficient Ethernet** are described below:

Item	Description
802.3az EEE	Specify to enable or disable the EEE function of the Switch.

Table 4.34

Click **Apply** to make the configurations take effect.

Ethernet Technology

This chapter will describe the features of the D-Link Smart Managed Switch and provide some background information about Ethernet/Fast Ethernet/Gigabit Ethernet switching technology.

Gigabit Ethernet Technology

Gigabit Ethernet is an extension of IEEE 802.3 Ethernet utilizing the same packet structure, format, and support for CSMA/CD protocol, full duplex, and management objects, but with a tenfold increase in theoretical throughput of over 100-Mbps Fast Ethernet and a hundredfold increase over 10-Mbps Ethernet. Since it is compatible with all 10-Mbps and 100-Mbps Ethernet environments, Gigabit Ethernet provides a straightforward upgrade without wasting existing investments in hardware, software, or trained personnel.

The increased speed and extra bandwidth offered by Gigabit Ethernet is essential in solving network bottlenecks, which frequently develops as more advanced computer users and newer applications continue to demand greater network resources. Upgrading key components, such as backbone connections and servers to Gigabit Ethernet technology, can greatly improve network response times as well as significantly speed up the traffic between subnets.

Gigabit Ethernet enables fast optical fiber connections to support video conferencing, complex imaging, and similar data-intensive applications. Likewise, since data transfers occur 10 times faster than Fast Ethernet, servers outfitted with Gigabit Ethernet NIC's are able to perform 10 times the number of operations in the same amount of time.

In addition, the phenomenal bandwidth delivered by Gigabit Ethernet is the most cost-effective method to take advantage of today and tomorrow's rapidly improving switching and routing internetworking technologies. With expected advances in the coming years in silicon technology and digital signal processing, which will enable Gigabit Ethernet to eventually operate over unshielded twisted-pair (UTP) cabling, a flexible foundation for the next generation of network technology products will be created. This will outfit your network with a powerful 1000-Mbps-capable backbone/server connection.

Fast Ethernet Technology

The growing importance of LANs, and the increasing complexity of desktop computing applications are fueling the need for high performance networks. A number of high-speed LAN technologies have been proposed to provide greater bandwidth and improve client/server response times. Among them, 100BASE-T (Fast Ethernet) provides a non-disruptive, smooth evolution from the current 10BASE-T technology. The non-disruptive and smooth evolution nature, and the dominating potential market base, virtually guarantees cost-effective and high performance Fast Ethernet solutions.

100Mbps Fast Ethernet is a standard specified by the IEEE 802.3 LAN committee. It is an extension of the 10Mbps Ethernet standard with the ability to transmit and receive data at 100Mbps, while maintaining the CSMA/CD Ethernet protocol. Since the 100Mbps Fast Ethernet is compatible with all other 10Mbps Ethernet environments, it provides a straightforward upgrade and utilizes existing investments in hardware, software, and personnel training.

Switching Technology

Another approach to push beyond the limits of Ethernet technology is the development of switching technology. A switch bridges Ethernet packets at the MAC address level of the Ethernet protocol transmitting among connected Ethernet or Fast Ethernet LAN segments.

Switching is a cost-effective way of increasing the total network capacity available to users on a local area network. A switch increases capacity and decreases network loading by dividing a local area network into different segments, which won't compete with each other for network transmission capacity.

The switch acts as a high-speed selective bridge between the individual segments. The switch, without interfering with any other segments, automatically forwards traffic that needs to go from one segment to another. By doing this the total network capacity is multiplied, while still maintaining the same network cabling and adapter cards.

PoE Passthrough

The DGS-1100-05PD is a PoE passthrough switch that is powered through a Powered Device (PD) port (Port 5) and can also provide PoE power (Port 1~2) to connected devices. This means that power cords will become a thing of the past with the flexibility to place the switch on the ceiling, wall, or other places where power outlets may not be available.

The behavior of DGS-1100-05PD PoE Passthrough as following

PD Port	**PSE Port**		**Note**
Port 5 Connected Device Type	Port 1 PD Class Type Support	Port 2 PD Class Type Support	
IEEE802.3af PoE Switch or Injector	Class1 or 2	NA	Only Port 1 connected to link partner
IEEE802.3af PoE Switch or Injector	NA	Class1 or 2	Only Port 2 connected to link partner
IEEE802.3at PoE Switch or Injector	Class0 or 3	NA	Only Port 1 connected to link partner
IEEE802.3at PoE Switch or Injector	NA	Class0 or 3	Only Port 2 connected to link partner
IEEE802.3at PoE Switch or Injector	Class1 or 2	Class1 or 2	Port 1 and Port 2 connected to link partner

Appendix A - Technical Specifications

Key Components / Performance	
Switching Capacity	DGS-1100-05/05PD: 10 Gbps DGS-1100-08/08P: 16 Gbps
Max. Forwarding Rate	DGS-1100-05/05PD: 7.4 Mpps DGS-1100-08/08P: 11.9 Mpps
Forwarding Mode	Store and Forward
Packet Buffer memory	DGS-1100-05/05PD: 1 Mb DGS-1100-08/08P: 1.5 Mb
DRAM Size	48 KB
Flash Memory	2 MB
Port Functions	
10/100/1000BASE-T ports	5/8 10/100/1000Base-T ports compliant with the following standards: - IEEE 802.3 - IEEE 802.3u - IEEE 802.3ab Support Half/Full-Duplex operations - IEEE 802.3x Flow control support for Full-Duplex mode - Back Pressure for Half-Duplex mode - Head-of-line blocking prevention Support manual/auto-MDI/MDIX configuration. Support auto-negotiation for each port
Physical & Environment	
Dimensions	DGS-1100-05: 100.5 x 82 x 28 mm DGS-1100-05PD: 150 x 97 x 28 mm DGS-1100-08: 145 x 82 x 28 mm DGS-1100-08P: 171 x 97.8 x 28.6 mm
Weights	DGS-1100-05: 0.23 kg DGS-1100-05PD: 0.38 kg DGS-1100-08: 0.34 kg DGS-1100-08P: 0.433 kg
Power Supply	DGS-1100-05/08/08P: AC：100 ~ 240 V DGS-1100-05PD: NO external power supply, PoE input only
Power Consumption	DGS-1100-05: Maximum – AC 3.42 W Standby – AC 1.39 W DGS-1100-05PD: Maximum – AC 23.922 W Standby – 1.458 W DGS-1100-08: Maximum – AC 4.94 W Standby – AC 1.93 W DGS-1100-08P: Maximum – AC 77.9 W Standby – 2.0 W

Operation Temperature	0 ~ 40 °C
Storage Temperature	- 40 ~ 70 °C
Operation Humidity	0%~90% RH
Storage Humidity	0%~95% RH
EMI Certifications	CE, FCC, ITE, RCM, VCCI, BSMI, CCC
Safety Certifications	cUL, CB, CCC, BSMI

Appendix B - Regulatory Statements

CE Mark Warning:

This is a Class B product. In a domestic environment, this product may cause radio interference, in which case the user may be required to take adequate measures.

Power Usage (for DGS-1100-08P only)

This device is an Energy Related Product (ErP) with High Network Availability (HiNA), and automatically switches to a power-saving Network Standby mode within 1 minute of no packets being transmitted. If it is not needed during certain periods of time, it can be unplugged to save energy.

Network Standby: 2.27 watts

Federal Communication Commission Interference Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Non-modification Statement

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Caution

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Innovation, Science and Economic Development Canada (ISED) Statement

This Class B digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

Japan Voluntary Control Council for Interference Statement

この装置は、クラス B 情報技術装置です。この装置は、家庭環境で使用することを目的としていますが、この装置がラジオやテレビジョン受信機に近接して使用されると、受信障害を引き起こすことがあります。

取扱説明書に従って正しい取り扱いをして下さい。 VCCI-B

Japan Voluntary Control Council for Interference Statement

This is a Class B product based on the standard of the VCCI Council. If this is used near a radio or television receiver in a domestic environment, it may cause radio interference. Install and use the equipment according to the instruction manual.

SAFETY INSTRUCTIONS

The following general safety guidelines are provided to help ensure your own personal safety and protect your product from potential damage. Remember to consult the product user instructions for more details.

- Static electricity can be harmful to electronic components. Discharge static electricity from your body (i.e. touching grounded bare metal) before touching the product.
- Do not attempt to service the product and never disassemble the product. For some products with a user replaceable battery, please read and follow the instructions in the user manual.
- Do not spill food or liquid on your product and never push any objects into the openings of your product.
- Do not use this product near water, areas with high humidity, or condensation unless the product is specifically rated for outdoor application.
- Keep the product away from radiators and other heat sources.
- Always unplug the product from mains power before cleaning and use a dry lint free cloth only.

SICHERHEITSVORSCHRIFTEN

Die folgenden allgemeinen Sicherheitsvorschriften dienen als Hilfe zur Gewährleistung Ihrer eigenen Sicherheit und zum Schutz Ihres Produkts. Weitere Details finden Sie in den Benutzeranleitungen zum Produkt.

- Statische Elektrizität kann elektronischen Komponenten schaden. Um Schäden durch statische Aufladung zu vermeiden, leiten Sie elektrostatische Ladungen von Ihrem Körper ab,
- (z. B. durch Berühren eines geerdeten blanken Metallteils), bevor Sie das Produkt berühren.
- Unterlassen Sie jeden Versuch, das Produkt zu warten, und versuchen Sie nicht, es in seine Bestandteile zu zerlegen. Für einige Produkte mit austauschbaren Akkus lesen Sie bitte das Benutzerhandbuch und befolgen Sie die dort beschriebenen Anleitungen.
- Vermeiden Sie, dass Speisen oder Flüssigkeiten auf Ihr Produkt gelangen, und stecken Sie keine Gegenstände in die Gehäuseschlitze oder -öffnungen Ihres Produkts.
- Verwenden Sie dieses Produkt nicht in unmittelbarer Nähe von Wasser und nicht in Bereichen mit hoher Luftfeuchtigkeit oder Kondensation, es sei denn, es ist speziell zur Nutzung in
- Außenbereichen vorgesehen und eingestuft.
- Halten Sie das Produkt von Heizkörpern und anderen Quellen fern, die Wärme erzeugen.
- Trennen Sie das Produkt immer von der Stromzufuhr, bevor Sie es reinigen und verwenden Sie dazu ausschließlich ein trockenes fusselfreies Tuch.

CONSIGNES DE SÉCURITÉ

Les consignes générales de sécurité ci-après sont fournies afin d'assurer votre sécurité personnelle et de protéger le produit d'éventuels dommages. Veuillez consulter les consignes d'utilisation du produit pour plus de détails.

- L'électricité statique peut endommager les composants électroniques. Déchargez l'électricité statique de votre corps (en touchant un objet en métal relié à la terre par exemple) avant de toucher le produit.
- N'essayez pas d'intervenir sur le produit et ne le démontez jamais. Pour certains produits contenant une batterie remplaçable par l'utilisateur, veuillez lire et suivre les consignes
- contenues dans le manuel d'utilisation.
- Ne renversez pas d'aliments ou de liquide sur le produit et n'insérez jamais d'objets dans les orifices.
- N'utilisez pas ce produit à proximité d'un point d'eau, de zones très humides ou de condensation sauf si le produit a été spécifiquement conçu pour une application extérieure.
- Éloignez le produit des radiateurs et autres sources de chaleur.
- Débranchez toujours le produit de l'alimentation avant de le nettoyer et utilisez uniquement un chiffon sec non pelucheux.

INSTRUCCIONES DE SEGURIDAD

Las siguientes directrices de seguridad general se facilitan para ayudarle a garantizar su propia seguridad personal y para proteger el producto frente a posibles daños. No olvide consultar las instrucciones del usuario del producto para obtener más información.

- La electricidad estática puede resultar nociva para los componentes electrónicos. Descargue la electricidad estática de su cuerpo (p. ej., tocando algún metal sin revestimiento conectado a tierra) antes de tocar el producto.
- No intente realizar el mantenimiento del producto ni lo desmonte nunca. Para algunos productos con batería reemplazable por el usuario, lea y siga las instrucciones del manual de usuario.
- No derrame comida o líquidos sobre el producto y nunca deje que caigan objetos en las aberturas del mismo.
- No utilice este producto cerca del agua, en zonas con humedad o condensación elevadas a menos que el producto esté clasificado específicamente para aplicación en exteriores.
- Mantenga el producto alejado de los radiadores y de otras fuentes de calor.
- Desenchufe siempre el producto de la alimentación de red antes de limpiarlo y utilice solo un paño seco sin pelusa

ISTRUZIONI PER LA SICUREZZA

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- Desenchufe siempre el producto de la alimentación de red antes de limpiarlo y utilice solo un paño seco sin pelusa

VEILIGHEIDSINFORMATIE

De volgende algemene veiligheidsinformatie werd verstrekt om uw eigen persoonlijke veiligheid te waarborgen en uw product te beschermen tegen mogelijke schade. Denk eraan om de gebruikersinstructies van het product te raadplegen voor meer informatie.

- Statische elektriciteit kan schadelijk zijn voor elektronische componenten. Ontlaad de statische elektriciteit van uw lichaam (d.w.z. het aanraken van geaard bloot metaal) voordat u
- het product aanraakt.
- U mag nooit proberen het product te onderhouden en u mag het product nooit demonteren. Voor sommige producten met door de gebruiker te vervangen batterij, dient u de instructies in de gebruikershandleiding te lezen en te volgen.
- Mors geen voedsel of vloeistof op uw product en u mag nooit voorwerpen in de openingen van uw product duwen.
- Gebruik dit product niet in de buurt van water, gebieden met hoge vochtigheid of condensatie, tenzij het product specifiek geclassificeerd is voor gebruik buitenshuis.
- Houd het product uit de buurt van radiators en andere warmtebronnen.
- U dient het product steeds los te koppelen van de stroom voordat u het reinigt en gebruik uitsluitend een droge pluisvrije doek

DISPOSING AND RECYCLING YOUR PRODUCT

ENGLISH EN

This symbol on the product or packaging means that according to local laws and regulations this product should be not be disposed of in the household waste but sent for recycling. Please take it to a collection point designated by your local authorities once it has reached the end of its life, some will accept products for free. By recycling the product and its packaging in this manner you help to conserve the environment and protect human health.

D-Link and the environment

At D-Link, we understand and are committed to reducing any impact our operations and products may have on the environment. To minimise this impact D-Link designs and builds its products to be as environmentally friendly as possible, by using recyclable, low toxic materials in both products and packaging.

D-Link recommends that you always switch off or unplug your D-Link products when they are not in use. By doing so you will help to save energy and reduce CO2 emissions.

To learn more about our environmentally responsible products and packaging please visit www.dlinkgreen.com.

DEUTSCH DE

Dieses Symbol auf dem Produkt oder der Verpackung weist darauf hin, dass dieses Produkt gemäß bestehender örtlicher Gesetze und Vorschriften nicht über den normalen Hausmüll entsorgt werden sollte, sondern einer Wiederverwertung zuzuführen ist. Bringen Sie es bitte zu einer von Ihrer Kommunalbehörde entsprechend amtlich ausgewiesenen Sammelstelle, sobald das Produkt das Ende seiner Nutzungsdauer erreicht hat. Für die Annahme solcher Produkte erheben einige dieser Stellen keine Gebühren Durch ein auf diese Weise durchgeführtes Recycling des Produkts und seiner Verpackung helfen Sie, die Umwelt zu schonen und die menschliche Gesundheit zu schützen.

D-Link und die Umwelt

D-Link ist sich den möglichen Auswirkungen seiner Geschäftstätigkeiten und seiner Produkte auf die Umwelt bewusst und fühlt sich verpflichtet, diese entsprechend zu mindern. Zu diesem Zweck entwickelt und stellt D-Link seine Produkte mit dem Ziel größtmöglicher Umweltfreundlichkeit her und verwendet wiederverwertbare, schadstoffarme Materialien bei ProduktherstellungD-Link empfiehlt, Ihre Produkte von D-Link, wenn ni

cht in Gebrauch, immer auszuschalten oder vom Netz zu nehmen. Auf diese Weise helfen Sie, Energie zu sparen und

CO2-Emissionen zu reduzieren.

Wenn Sie mehr über unsere umweltgerechten Produkte und Verpackungen wissen möchten, finden Sie entsprechende Informationen im Internet unter www.dlinkgreen.com.

FRANÇAIS FR

Ce symbole apposé sur le produit ou son emballage signifie que, conformément aux lois et règlementations locales, ce produit ne doit pas être éliminé avec les déchets domestiques mais recyclé. Veuillez le rapporter à un point de collecte prévu à cet effet par les autorités locales; certains accepteront vos produits gratuitement. En recyclant le produit et son emballage de cette manière, vous aidez à préserver l'environnement et à protéger la santé de l'homme.

D-Link et l'environnement

Chez D-Link, nous sommes conscients de l'impact de nos opérations et produits sur l'environnement et nous engageons à le réduire. Pour limiter cet impact, D-Link conçoit et fabrique ses produits de manière aussi écologique que possible, en utilisant des matériaux recyclables et faiblement toxiques, tant dans ses produits que ses emballages.

D-Link recommande de toujours éteindre ou débrancher vos produits D-Link lorsque vous ne les utilisez pas. Vous réaliserez ainsi des économies d'énergie et réduirez vos émissions de CO2.

Pour en savoir plus sur les produits et emballages respectueux de l'environnement, veuillez consulter le www.dlinkgreen.com.

ESPAÑOL ES

Este símbolo en el producto o el embalaje significa que, de acuerdo con la legislación y la normativa local, este producto no se debe desechar en la basura doméstica sino que se debe reciclar. Llévelo a un punto de recogida designado por las autoridades locales una vez que ha llegado al fin de su vida útil; algunos de ellos aceptan recogerlos de forma gratuita. Al reciclar el producto y su embalaje de esta forma, contribuye a preservar el medio ambiente y a proteger la salud de los seres humanos.

D-Link y el medio ambiente

En D-Link, comprendemos y estamos comprometidos con la reducción del impacto que puedan tener nuestras actividades y nuestros productos en el medio ambiente. Para reducir este impacto, D-Link diseña y fabrica sus productos para que sean lo más ecológicos posible, utilizando materiales reciclables y de baja toxicidad tanto en los productos como en el embalaje.

D-Link recomienda apagar o desenchufar los productos D-Link cuando no se estén utilizando. Al hacerlo, contribuirá a ahorrar energía y a reducir las emisiones de CO2.

Para obtener más información acerca de nuestros productos y embalajes ecológicos, visite el sitio www.dlinkgreen.com.

ITALIANO IT

La presenza di questo simbolo sul prodotto o sulla confezione del prodotto indica che, in conformità alle leggi e alle normative locali, questo prodotto non deve essere smaltito nei rifiuti domestici, ma avviato al riciclo. Una volta terminato il ciclo di vita utile, portare il prodotto presso un punto di raccolta indicato dalle autorità locali. Alcuni questi punti di raccolta accettano gratuitamente i prodotti da riciclare. Scegliendo di riciclare il prodotto e il relativo imballaggio, si contribuirà a preservare l'ambiente e a salvaguardare la salute umana.

D-Link e l'ambiente

D-Link cerca da sempre di ridurre l'impatto ambientale dei propri stabilimenti e dei propri prodotti. Allo scopo di ridurre al minimo tale impatto, D-Link progetta e realizza i propri prodotti in modo che rispettino il più possibile l'ambiente, utilizzando materiali riciclabili a basso tasso di tossicità sia per i prodotti che per gli imballaggi.

D-Link raccomanda di spegnere sempre i prodotti D-Link o di scollegarne la spina quando non vengono utilizzati. In questo modo si contribuirà a risparmiare energia e a ridurre le emissioni di anidride carbonica.

Per ulteriori informazioni sui prodotti e sugli imballaggi D-Link a ridotto impatto ambientale, visitate il sito all'indirizzo www.dlinkgreen.com

NEDERLANDS NL

Dit symbool op het product of de verpakking betekent dat dit product volgens de plaatselijke wetgeving niet mag worden weggegooid met het huishoudelijk afval, maar voor recyclage moeten worden ingeleverd. Zodra het product het einde van de levensduur heeft bereikt, dient u het naar een inzamelpunt te brengen dat hiertoe werd aangeduid door uw plaatselijke autoriteiten, sommige autoriteiten accepteren producten zonder dat u hiervoor dient te betalen.

Door het product en de verpakking op deze manier te recyclen helpt u het milieu en de gezondheid van de mens te beschermen.

D-Link en het milieu

Bij D-Link spannen we ons in om de impact van onze handelingen en producten op het milieu te beperken. Om deze impact te beperken, ontwerpt en bouwt D-Link zijn producten zo milieuvriendelijk mogelijk, door het gebruik van recycleerbare producten met lage toxiciteit in product en verpakking.

D-Link raadt aan om steeds uw D-Link producten uit te schakelen of uit de stekker te halen wanneer u ze niet gebruikt. Door dit te doen bespaart u energie en beperkt u de CO2-emissies.

Breng een bezoek aan www.dlinkgreen.com voor meer informatie over onze milieuverantwoorde producten en verpakkingen.

POLSKI PL

Ten symbol umieszczony na produkcie lub opakowaniu oznacza, że zgodnie z miejscowym prawem i lokalnymi przepisami niniejszego produktu nie wolno wyrzucać jak odpady czy śmieci z gospodarstwa domowego, lecz należy go poddać procesowi recyklingu. Po zakończeniu użytkowania produktu, niektóre odpowiednie do tego celu podmioty przyjmą takie produkty nieodpłatnie, dlatego prosimy dostarczyć go do punktu zbiórki wskazanego przez lokalne władze.

Poprzez proces recyklingu i dzięki takiemu postępowaniu z produktem oraz jego opakowaniem, pomogą Państwo chronić środowisko naturalne i dbać o ludzkie zdrowie.

D-Link i środowisko

W D-Link podchodzimy w sposób świadomy do ochrony otoczenia oraz jesteśmy zaangażowani w zmniejszanie wpływu naszych działań i produktów na środowisko naturalne. W celu zminimalizowania takiego wpływu firma D-Link konstruuje i wytwarza swoje produkty w taki sposób, aby były one jak najbardziej przyjazne środowisku, stosując do tych celów materiały nadające się do powtórnego wykorzystania, charakteryzujące się małą toksycznością zarówno w przypadku samych produktów jak i opakowań.

Firma D-Link zaleca, aby Państwo zawsze prawidłowo wyłączali z użytku swoje produkty D-Link, gdy nie są one wykorzystywane. Postępując w ten sposób pozwalają Państwo oszczędzać energię i zmniejszać emisje CO2.

Aby dowiedzieć się więcej na temat produktów i opakowań mających wpływ na środowisko prosimy zapoznać się ze stroną internetową www.dlinkgreen.com.

ČESKY CZ

Tento symbol na výrobku nebo jeho obalu znamená, že podle místně platných předpisů se výrobek nesmí vyhazovat do komunálního odpadu, ale odeslat k recyklaci. Až výrobek dosloužíodneste jej prosím na sběrné místo určené místními úřady k tomuto účelu. Některá sběrná místa přijímají výrobky zdarma. Recyklací výrobku i obalu pomáháte chránit životní prostředí i lidské zdraví.

D-Link a životní prostředí

Ve společnosti D-Link jsme si vědomi vlivu našich provozů a výrobků na životní prostředí a snažíme se o minimalizaci těchto vlivů. Proto své výrobky navrhujeme a vyrábíme tak, aby byly co nejekologičtější, a ve výrobcích i obalech používáme recyklovatelné a nízkotoxické materiály.

Společnost D-Link doporučuje, abyste své výrobky značky D-Link vypnuli nebo vytáhli ze zásuvky vždy, když je nepoužíváte. Pomůžete tak šetřit energii a snížit emise CO2.

Více informací o našich ekologických výrobcích a obalech najdete na adrese www.dlinkgreen.com.

MAGYAR HU

Ez a szimbólum a terméken vagy a csomagoláson azt jelenti, hogy a helyi törvényeknek és szabályoknak megfelelően ez a termék nem semmisíthető meg a háztartási hulladékkal együtt, hanem újrahasznosításra kell küldeni. Kérjük, hogy a termék élettartamának elteltét követően vigye azt a helyi hatóság által kijelölt gyűjtőhelyre. A termékek egyes helyeken ingyen elhelyezhetők. A termék és a csomagolás újrahasznosításával segíti védeni a környezetet és az emberek egészségét.

A D-Link és a környezet

A D-Linknél megértjük és elkötelezettek vagyunk a műveleteink és termékeink környezetre gyakorolt hatásainak csökkentésére. Az ezen hatás csökkentése érdekében a D-Link a lehető leginkább környezetbarát termékeket tervez és gyárt azáltal, hogy újrahasznosítható, alacsony károsanyag-tartalmú termékeket gyárt és csomagolásokat alkalmaz.

A D-Link azt javasolja, hogy mindig kapcsolja ki vagy húzza ki a D-Link termékeket a tápforrásból, ha nem használja azokat. Ezzel segít az energia megtakarításában és a széndioxid kibocsátásának csökkentésében.

Környezetbarát termékeinkről és csomagolásainkról további információkat a www.dlinkgreen.com weboldalon tudhat meg.

NORSK NO

Dette symbolet på produktet eller forpakningen betyr at dette produktet ifølge lokale lover og forskrifter ikke skal kastes sammen med husholdningsavfall, men leveres inn til gjenvinning.

Vennligst ta det til et innsamlingssted anvist av lokale myndigheter når det er kommet til slutten av levetiden. Noen steder aksepteres produkter uten avgift. Ved på denne måten å gjenvinne produktet og forpakningen hjelper du å verne miljøet og beskytte folks helse.

D-Link og miljøet

Hos D-Link forstår vi oss på og er forpliktet til å minske innvirkningen som vår drift og våre produkter kan ha på miljøet. For å minimalisere denne innvirkningen designer og lager D-Link produkter som er så miljøvennlig som mulig, ved å bruke resirkulerbare, lav-toksiske materialer både i produktene og forpakningen.

D-Link anbefaler at du alltid slår av eller frakobler D-Link-produkter når de ikke er i bruk. Ved å gjøre dette hjelper du å spare energi og å redusere CO2-utslipp.

For mer informasjon angående våre miljøansvarlige produkter og forpakninger kan du gå til www.dlinkgreen.com.

DANSK DK

Dette symbol på produktet eller emballagen betyder, at dette produkt i henhold til lokale love og regler ikke må bortskaffes som husholdningsaffald, mens skal sendes til genbrug. Indlever produktet til et indsamlingssted som angivet af de lokale myndigheder, når det er nået til slutningen af dets levetid. I nogle tilfælde vil produktet blive modtaget gratis. Ved at indlevere produktet og dets emballage til genbrug på denne måde bidrager du til at beskytte miljøet og den menneskelige sundhed.

D-Link og miljøet

Hos D-Link forstår vi og bestræber os på at reducere enhver indvirkning, som vores aktiviteter og produkter kan have på miljøet. For at minimere denne indvirkning designer og producerer D-Link sine produkter, så de er så miljøvenlige som muligt, ved at bruge genanvendelige materialer med lavt giftighedsniveau i både produkter og emballage.

D-Link anbefaler, at du altid slukker eller frakobler dine D-Link-produkter, når de ikke er i brug. Ved at gøre det bidrager du til at spare energi og reducere CO2-udledningerne.

Du kan finde flere oplysninger om vores miljømæssigt ansvarlige produkter og emballage på www.dlinkgreen.com.

SUOMI FI

Tämä symboli tuotteen pakkauksessa tarkoittaa, että paikallisten lakien ja säännösten mukaisesti tätä tuotetta ei pidä hävittää yleisen kotitalousjätteen seassa vaan se tulee toimittaa kierrätettäväksi. Kun tuote on elinkaarensa päässä, toimita se lähimpään viranomaisten hyväksymään kierrätyspisteeseen. Kierrättämällä käytetyn tuotteen ja sen pakkauksen autat tukemaan sekä ympäristön että ihmisten terveyttä ja hyvinvointia.

D-Link ja ympäristö

D-Link ymmärtää ympäristönsuojelun tärkeyden ja on sitoutunut vähentämään tuotteistaan ja niiden valmistuksesta ympäristölle mahdollisesti aiheutuvia haittavaikutuksia. Nämä negatiiviset vaikutukset minimoidakseen D-Link suunnittelee ja valmistaa tuotteensa mahdollisimman ympäristöystävällisiksi käyttämällä kierrätettäviä, alhaisia pitoisuuksia haitallisia aineita sisältäviä materiaaleja sekä tuotteissaan että niiden pakkauksissa.

Suosittelemme, että irrotat D-Link-tuotteesi virtalähteestä tai sammutat ne aina, kun ne eivät ole käytössä. Toimimalla näin autat säästämään energiaa ja vähentämään hiilidioksiidipäästöjä.

Lue lisää ympäristöystävällisistä D-Link-tuotteista ja pakkauksistamme osoitteesta www.dlinkgreen.com.

SVENSKA SE

Den här symbolen på produkten eller förpackningen betyder att produkten enligt lokala lagar och föreskrifter inte skall kastas i hushållssoporna utan i stället återvinnas. Ta den vid slutet av dess livslängd till en av din lokala myndighet utsedd uppsamlingsplats, vissa accepterar produkter utan kostnad. Genom att på detta sätt återvinna produkten och förpackningen hjälper du till att bevara miljön och skydda människors hälsa.

D-Link och miljön

På D-Link förstår vi och är fast beslutna att minska den påverkan våra verksamheter och produkter kan ha på miljön. För att minska denna påverkan utformar och bygger D-Link sina produkter för att de ska vara så miljövänliga som möjligt, genom att använda återvinningsbara material med låg gifthalt i både produkter och förpackningar.

D-Link rekommenderar att du alltid stänger av eller kopplar ur dina D-Link produkter när du inte använder dem. Genom att göra detta hjälper du till att spara energi och minska utsläpp av koldioxid.

För mer information om våra miljöansvariga produkter och förpackningar www.dlinkgreen.com.

PORTUGUÊS PT

Este símbolo no produto ou embalagem significa que, de acordo com as leis e regulamentações locais, este produto não deverá ser eliminado juntamente com o lixo doméstico mas enviado para a reciclagem. Transporte-o para um ponto de recolha designado pelas suas autoridades locais quando este tiver atingido o fim da sua vida útil, alguns destes pontos aceitam produtos gratuitamente. Ao reciclar o produto e respectiva embalagem desta forma, ajuda a preservar o ambiente e protege a saúde humana.

A D-Link e o ambiente

Na D-Link compreendemos e comprometemo-nos com a redução do impacto que as nossas operações e produtos possam ter no ambiente. Para minimizar este impacto a D-Link concebe e constrói os seus produtos para que estes sejam o mais inofensivos para o ambiente possível, utilizando meteriais recicláveis e não tóxicos tanto nos produtos como nas embalagens.

A D-Link recomenda que desligue os seus produtos D-Link quando estes não se encontrarem em utilização. Com esta acção ajudará a poupar energia e reduzir as emissões de CO2.

Para saber mais sobre os nossos produtos e embalagens responsáveis a nível ambiental visite www.dlinkgreen.com.


D-Link
Building Networks for People