**PSGS-1610GH**

**Quick Installation Guide**

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# Chapter 1 Introduction

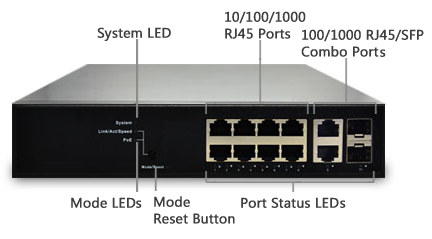
## Overview

PSGS-1610GH is a 10 ports PoE GbE Web Smart+ Switch. PSGS-1610GH provide high-performance, IEEE-compliant network solutions. They include powerful management features that you can use to boost performance, and increase productivity.

This guide describes hardware installation and basic troubleshooting for these managed switches.

## Front panel of the Switch

**Figure 1 Front panel of the switch**



**Table 1 Port Status LEDs**

|  |  |  |
| --- | --- | --- |
| **LED** | **Condition** | **Status** |
| TP (Link/Act/Speed) | Green/Blink | Lit Green when TP link on 1000Mbps  Amber when TP link on 10/100Mbps |
| TP (PoE) | Green/Off | Lit Green when PoE link good |
| SFP (Link/Act/Speed) | Green/Blink | Lit Green when SFP link good  Lit Green when SFP link on 1000Mbps.  Amber when SFP link on 100Mbps |

**Table 2 System Status LED**

|  |  |  |
| --- | --- | --- |
| **SYSTEM LED** | **Condition** | **status** |
| System | Green  OFF | Lit when power is coming up |

**Table 3 Mode Status LED**

|  |  |  |
| --- | --- | --- |
| **LED** | **Condition** | **Status** |
| Link/ACT/Speed | Green  Yellow  OFF | Green when the link on 1000Mbps  Yellow when the link on 100Mbps  Off when the link on 10Mbps |
| PoE | Green  OFF | Lit Green shows all LED of each port are in PoE Mode |

## Rear panel of the Switch

**Figure 2 Rear panel of the switch**

**AC Power Socket**

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# Chapter 2 Installing The Switch

|  |  |
| --- | --- |
| C:\Users\Jefferson\AppData\Local\Microsoft\Windows\INetCache\Content.Outlook\YPS5QSKC\QIG-icon4.png | **CAUTION:** Circuit devices are sensitive to static electricity, which can damage their delicate electronics. Dry weather conditions or walking across a carpeted floor may cause you to acquire a static electrical charge.  To protect your device, always:   * Touch the metal chassis of your computer to ground the static electrical charge before you pick up the circuit device. * Pick up the device by hold it on the left and right edges only. * If you use outdoor device connected to switch with cable then you need to install a surge arrester in between outdoor device and switch.   **Figure 3 Add a surge arrester between outdoor device and switch**  OUTDOOR |

|  |  |
| --- | --- |
| C:\Users\Jefferson\AppData\Local\Microsoft\Windows\INetCache\Content.Outlook\YPS5QSKC\QIG-icon3.png | **NOTE:** The switch is an indoor device; if it is to be used with outdoor devices such as outdoor IP camera or outdoor WiFi AP, then users must install a surge arrester to protect the switch |

|  |  |
| --- | --- |
| C:\Users\Jefferson\AppData\Local\Microsoft\Windows\INetCache\Content.Outlook\YPS5QSKC\QIG-icon2.png | **WARNING:**   * Self-demolition on Product is strictly prohibited. Damage caused by self-demolition will be charged for repairing fees. * Do not place the switch in outdoor environment. * Before installation, please make sure the input power source meeting the product specification * Before importing / exporting configuration file, please make sure the firmware version is always the same. |

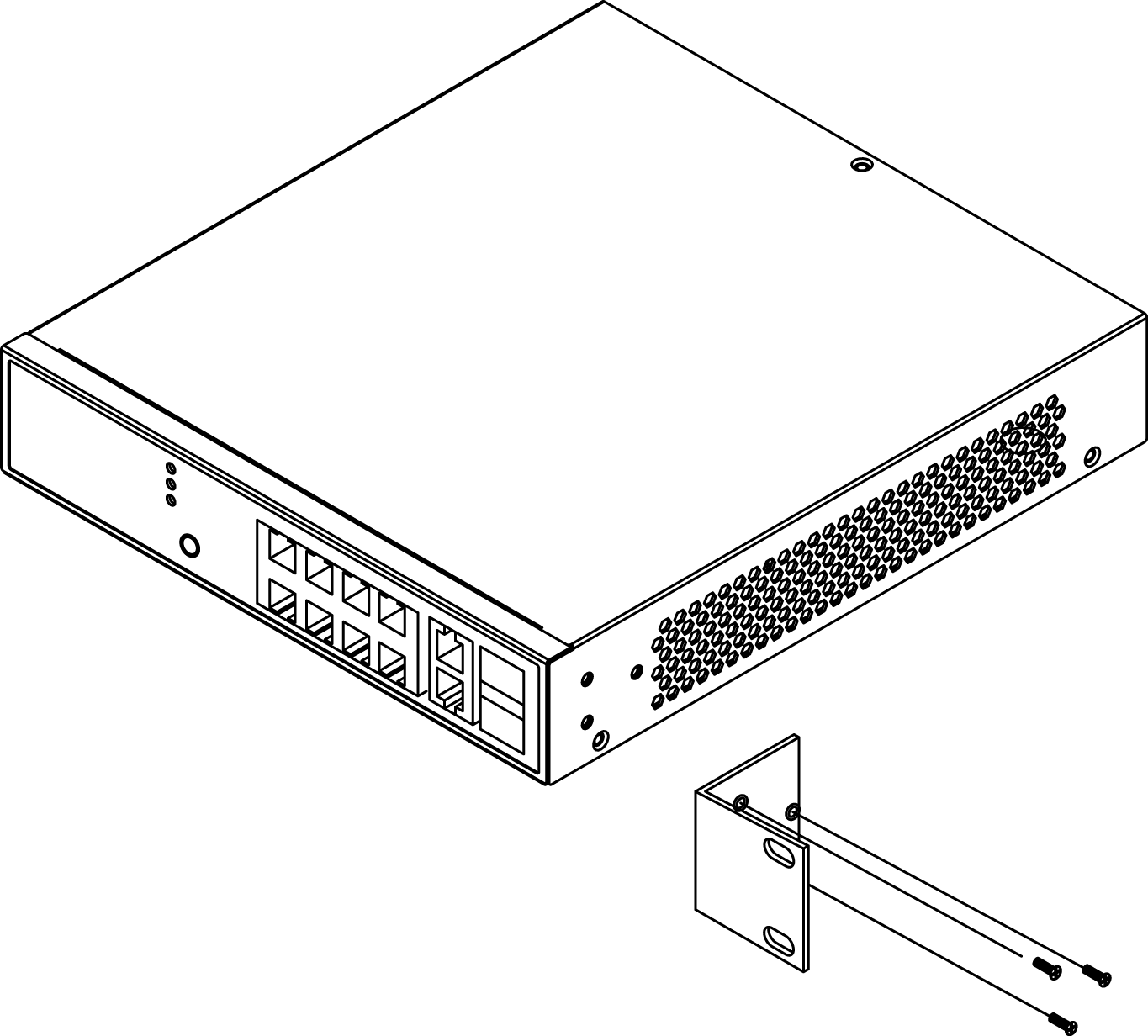
## Package Contents

* PSGS-1610GH GbE Management Switch
* Four adhesive rubber feet
* Mounting Accessory (for 19” Rack Shelf, Optional)
* Installation Guide
* AC Power cord

## Mounting the Switch in a 19-inch Rack

**Step1.** Attach the mounting brackets to both sides of the chassis with screws.

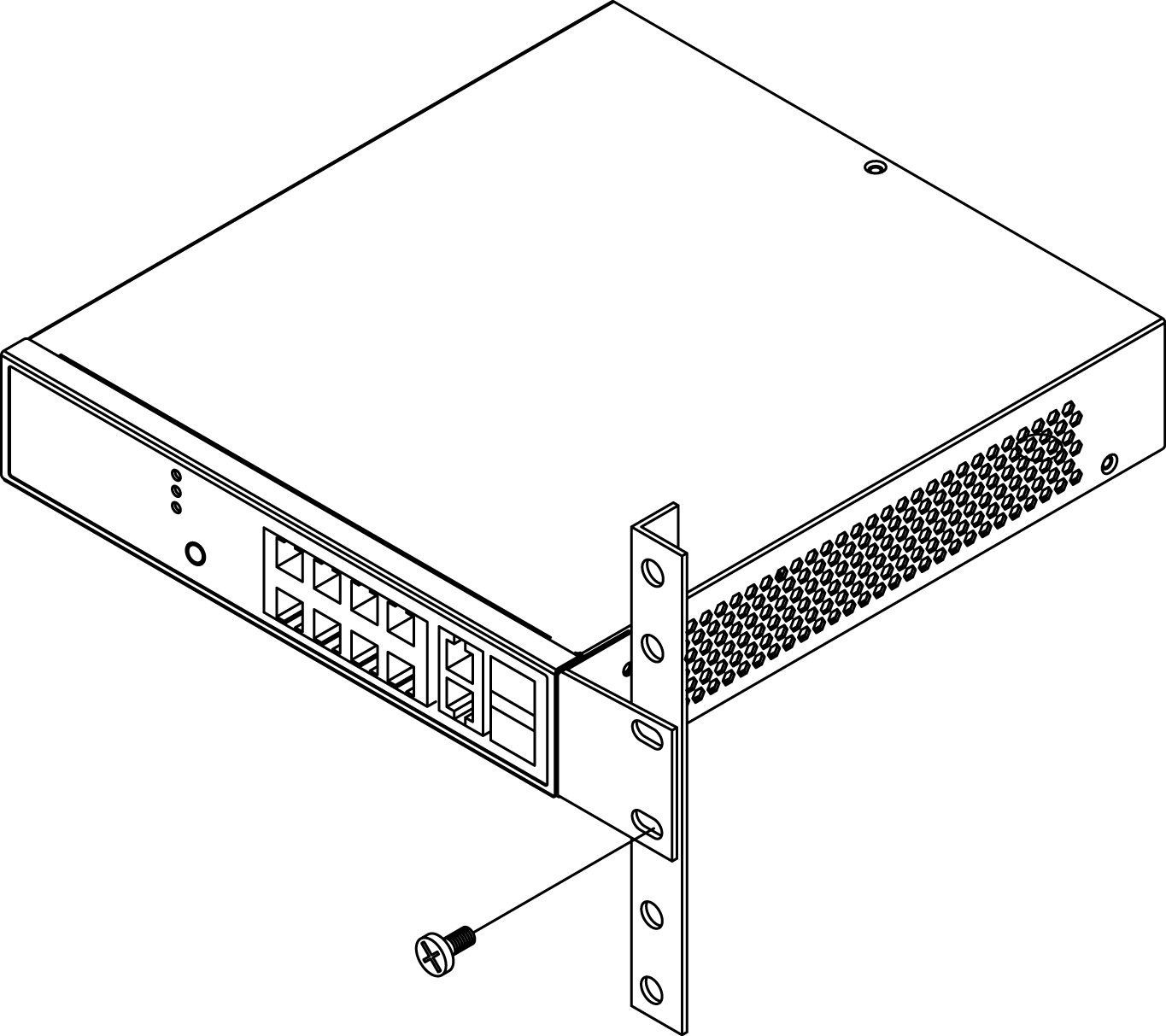
**Figure 4 Attaching mounting brackets to the switch**

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**Step2.** Place the switch on a rack shelf in the rack. Push the switch in until the oval holes in the brackets align with the mounting holes in the rack posts.

**Step3.** Attach the mounting brackets to the rack posts with screws.

**Figure 5 Attaching mounting brackets to the rack post**

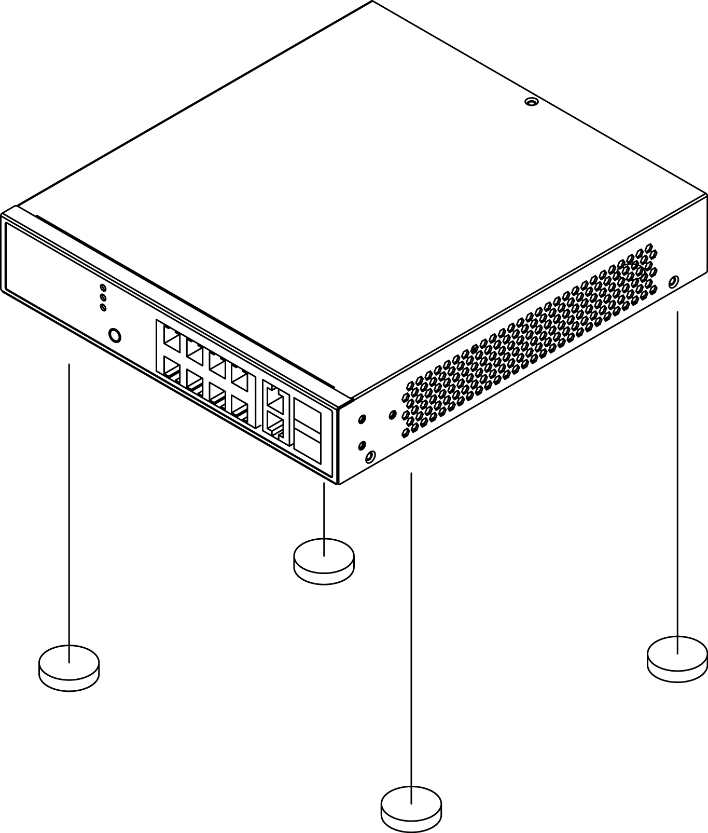


## Mounting the Switch on Desk or Shelf

**Step1.** Verify that the workbench is sturdy and reliably grounded.

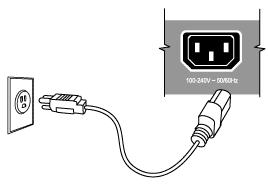
**Step2.** The rubber feet are included in the accessory kit. Attach the four adhesive rubber feet to the bottom of the switch.

**Figure 6 Attaching the Rubber Feet**

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## Connecting the AC Power Cord

**Figure 7 Connecting the AC power cord to the AC power receptacle**

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**Step1.** Connect one end of the AC power cord to the AC power receptacle on the switch.

**Step2.** Connect the other end of the AC power cord to the AC power outlet.

**Step3.** Examine the power LED. If it is ON, the power connection is correct.

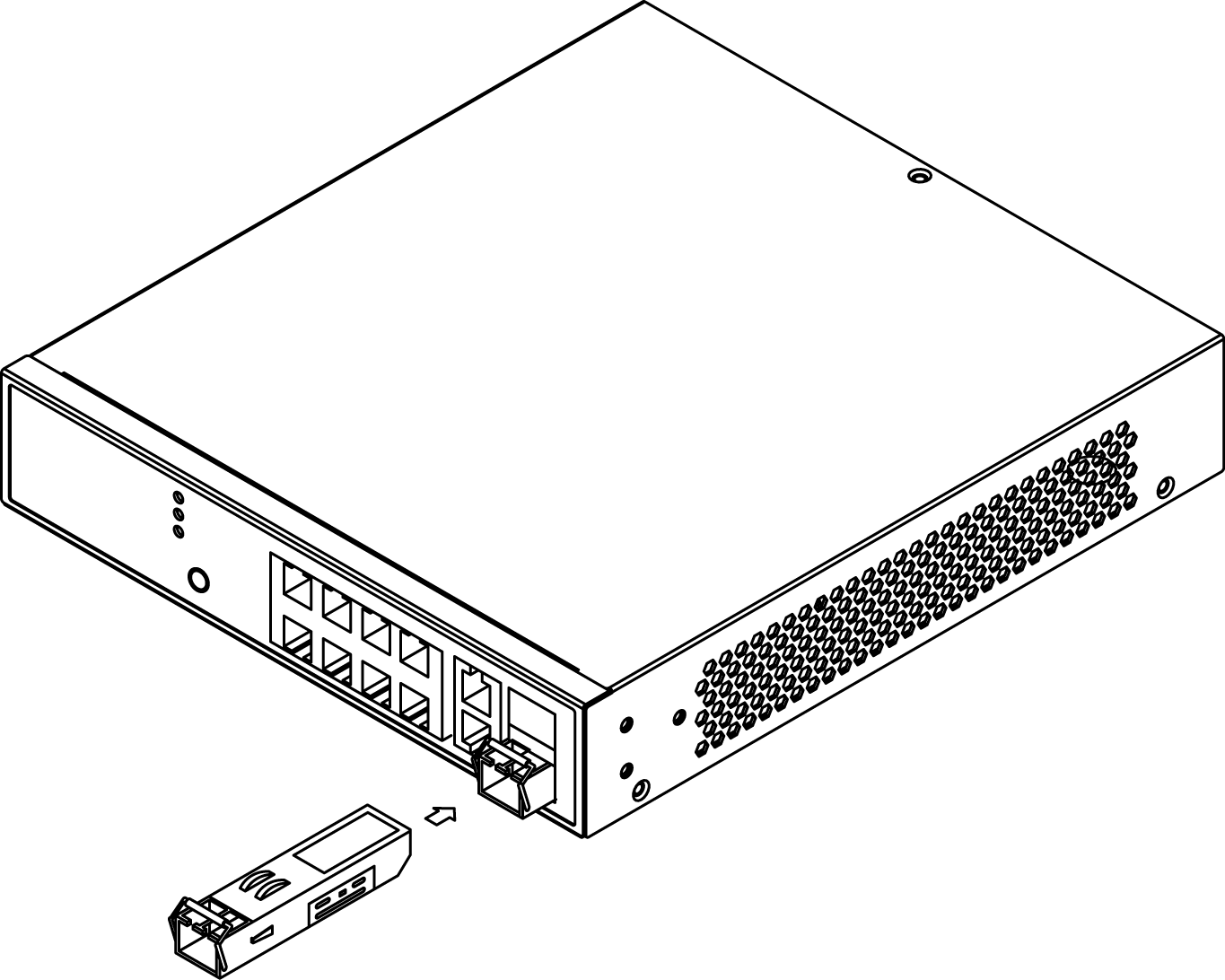
## Installing SFP Modules

You can install or remove a mini-GBIC SFP from a mini-GBIC slot without having to power off the switch. Use only Manufacture mini-GBIC:

**Step1.** Insert the module into the switch port.

**Step2.** Press firmly to ensure that the module seats into the connector.

**Figure 8 Installing a SFP Module into a SFP Module Slot**

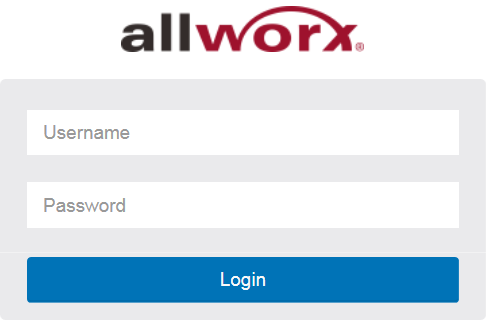


# Chapter 3 Managing Switch Using the Web Interface

## Manage the Switch Using Web Browser

After you power up the switch for the first time, you can configure the switch using a web browser. For more information about managing the switch, see the user interface manual.

**Figure 9 Web Interface login page**



**Step1.** Power on the computer and the switch.

**Step2.** Plug in the power cable.

**Step3.** Set the IP configuration on your computer.

|  |  |
| --- | --- |
| C:\Users\Jefferson\AppData\Local\Microsoft\Windows\INetCache\Content.Outlook\YPS5QSKC\QIG-icon3.png | **NOTE:**   1. If the switch is using the factory default IP address of 192.168.1.1, you must chose an IP address for the computer in the range of 192.168.1.1—192.168.1.253 that is not already in use. 2. If the IP addresses is assigned by a DHCP server, make sure the DHCP server is running and can be reached from the switch and the computer. It might be necessary to disconnect and reconnect the devices for them to discover their new IP addresses from the DHCP server. |

**Step4.** Enter the user name and password (The default username is “admin” and password is empty.), and then click “Login” to login to the switch configuration window.

# Chapter 4 Troubleshooting

**Troubleshooting Chart**

The following table lists Issues, Causes, and Action to possible problems.

**Table 4 Troubleshooting Chart**

|  |  |  |
| --- | --- | --- |
| **Issues** | **Cause** | **Action** |
| SYSTEM LED Off | No power is received. | Check the power cord connections for the switch at the switch and the connected device.  Make sure that all cables used are correct and comply with Ethernet specifications. |
| Link LED Off | Port connection is not working. | * Check the crimp on the connectors. Make sure that the plug is fully inserted and locked into the port at both the switch and the connecting device. * Make sure that all cables used are correct and comply with Ethernet specifications. * Check for a defective adapter card, cable, or port by testing it in an alternate environment where all products are functioning. |
| Slow file transfer or there is performance degradation. | Half- or full-duplex setting on the switch and the connected device are not the same. | * Make sure that the attached device is set to auto negotiate. * Check the system message log. |
| Device is not recognized as part of the network. | One or more devices are not properly connected, or cabling does not meet Ethernet guidelines. | Verify that the cabling is correct. Be sure that all connectors are securely positioned in the required ports. Equipment might have been accidentally disconnected. |

# Appendix A Technical Specifications

## Hardware Specification

**Table 5 Hardware Specification**

|  |  |
| --- | --- |
| **Port Configuration** | |
| 10M/100M/1G RJ45 Port | 8 |
| 100M/1G/2.5G RJ45 Port | -- |
| 100M/1G/10G RJ45 Port | -- |
| 100M/1G SFP Port | -- |
| 1G/2.5G SFP Port | -- |
| 1G/10G SFP+ Port | -- |
| GbE RJ45/SFP Combo Port | 2 |
| Console Port | -- |
| Total Ports | 10 |
| **PoE Function** | |
| IEEE802.3at (PoE+ 30W) | **Y** |
| IEEE802.3af (PoE 15.4W) | **Y** |
| UPoE(60W) | -- |
| PoE Port | 8 |
| Available PoE Power | 250W |
| **HW Performance** | |
| Switching Bandwidth | 20Gbps |
| Forwarding Performance | 14.9Mpps |
| MAC Address | 8K |
| Jumbo Frames | 9216 Bytes |
| **Environemental Specification** | |
| Operating Temperature | 0°C to 45°C |
| Operating Humidity | 10 to 90% RH |
| Storage Temperature | -20 to 70°C |
| Storage Humidity | 10 to 90% RH |
| **Mechanical Specification** | |
| Dimensions (H) x (W) x (D) mm | 44 x 220 x 242 |
| Weight | 2.1 Kg |
| FAN Less | **Y** |
| **Power Source** | |
| AC Input | 100V-240V |
| DC Input | -- |
| AC/DC Dual Input | -- |

## 1000 MBPS Gigabit Ethernet Collision Domain

**Table 6 Maximum 1000BASE-T Gigabit Ethernet Cable Length**

|  |  |  |
| --- | --- | --- |
| **Cable Type** | **Maximum Cable Length** | **Connector** |
| Category 5, 5e or 6 100-ohm UTP or STP | 100.m (328 ft) | RJ-45 |

**Table 7 Maximum 1000BASE-SX Gigabit Fiber Cable Length**

|  |  |  |  |
| --- | --- | --- | --- |
| **Fiber Size** | **Fiber Bandwidth** | **Maximum Cable Length** | **Connector** |
| 62.5/125 micron multimode fiber | 160 MHz/km  200 MHz/km | 220 m (722 ft)  275 m (902 ft) | LC  LC |
| 50/125 micron multimode fiber | 400 MHz/km  500 MHz/km | 500 m (1641 ft)  550 m (1805 ft) | LC  LC |

**Table 8 Maximum 1000BASE-LX/LHX/XD/ZX Gigabit Fiber Cable Length**

|  |  |  |  |
| --- | --- | --- | --- |
| **Fiber Size** | **Fiber Bandwidth** | **Maximum Cable Length** | **Connector** |
| 9/125 micron single-mode fiber 1310nm | N/A | 10km (6.2 miles) | LC |
| 9/125 micron single-mode fiber 1550nm | N/A | 30km (18.64 miles)  50km (31.06 miles) | LC  LC |

**Table 9 Maximum 1000BASE-LX Single Fiber Gigabit Fiber Cable Length**

|  |  |  |  |
| --- | --- | --- | --- |
| **Fiber Size** | **Fiber Bandwidth** | **Maximum Cable Length** | **Connector** |
| Single-mode  TX-1310nm  RX-1550nm | N/A | 20km (12.42miles) | BIDI  LC |
| Single-mode  TX-1550nm  RX-1310nm | N/A | 20km (12.42miles) | BIDI  LC |