DIGITUS ®
Professional

24-Port 10/100/1000Mbps + 2 SFP
Green Ethernet Switch

Manual
DN-80110

Description

DN-80110 24port 10/100/1000M + 2SFP Slots Ethernet Switch provides the seamless network connection. This device integrates 1000Mbps Gigabit Ethernet, 100Mbps Fast Ethernet and 10Mbps Ethernet network capabilities in a highly flexible package. The Switch with a low-cost, easy-to-use, high performance upgrades your old network to a 1000Mbps Gigabit network. Based on Gigabit Ethernet Technology, It is essential to helping solve network bottlenecks that frequently develop as more advanced computer users and newer applications continue to demand greater network resources. Support IEEE802.3az energy efficient Ethernet (EEE), reduce power consumption by detection cable length and operating loading, auto adjust signal intensity, Reduce energy consumption, and protect the environment.

The switch is easy to install and use. It requires no configuration and installation. It is a great selection for expanding office network.

Features

➢ Comply with IEEE 802.3, IEEE 802.3u, IEEE802.3x, IEEE802.3ab, IEEE802.3az standards
➢ Supports up to 16K MAC address
➢ Supports IEEE802.3x flow control for Full-duplex Mode and backpressure for Half-duplex Mode
➢ Support packet length 9216 bytes jumbo frame packet forwarding at wire speed
➢ 24 x 10/100/1000Mbps Auto MDI/MDI-X Ethernet port
➢ Two 1000Mbps SFP Slots
➢ LED indicators for monitoring power, link/activity

Chapter 1 Product Introduction

Congratulations on your purchasing of the Gigabit Ethernet Switch. Before you install and use this product, please read this manual carefully for full exploiting the functions of this product.

1.1 Product Overview

The 24-port Gigabit + 2 SFP Slots Ethernet Switch provides the seamless network connection. This device integrates 1000Mbps Gigabit Ethernet, 100Mbps Fast Ethernet and 10Mbps Ethernet network capabilities in a highly flexible package. The Switch with a low-cost, easy-to-use, high performance upgrades your old network to a 1000Mbps Gigabit network. Based on Gigabit Ethernet Technology, It is essential to helping solve network bottlenecks that frequently develop as more advanced computer users and newer applications continue to demand greater network resources. Support IEEE802.3az energy efficient Ethernet (EEE), reduce power consumption by detection cable length and operating loading, auto adjust signal intensity, Reduce energy consumption, and protect the environment.

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1.2 Features

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1.3 Package Contents

➢ One 24 port Gigabit + 2 SFP Slots Ethernet Switch
➢ Four rubber feet, two mounting ears and eights screws
➢ One AC power cord
➢ One User Manual

Chapter 2 External Component Description

2.1 Front Panel

The front panel of the Switch consists of series of LED indicators, 24 10/100/1000Mbps RJ-45 ports and 2 SFP ports a shown as below.
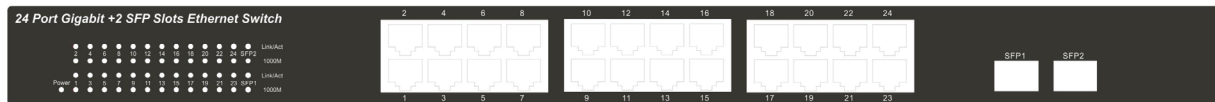

Figure 1 - Front Panel

10/100/1000Mbps RJ-45 ports (1~24):
Designed to connect to the device with a bandwidth of 10Mbps,100Mbps or 1000Mbps. Each has a corresponding 10/100/1000Mbps LED.

SFP ports (SFP1, SFP2):
The interface card provides an interface so that you can insert a transceiver module (SFP) into the interface and connect it to the interface of another switch with cables.

LED indicators:
The LED Indicators will allow you to monitor, diagnose and troubleshoot any potential problem with the Switch, connection or attached devices.
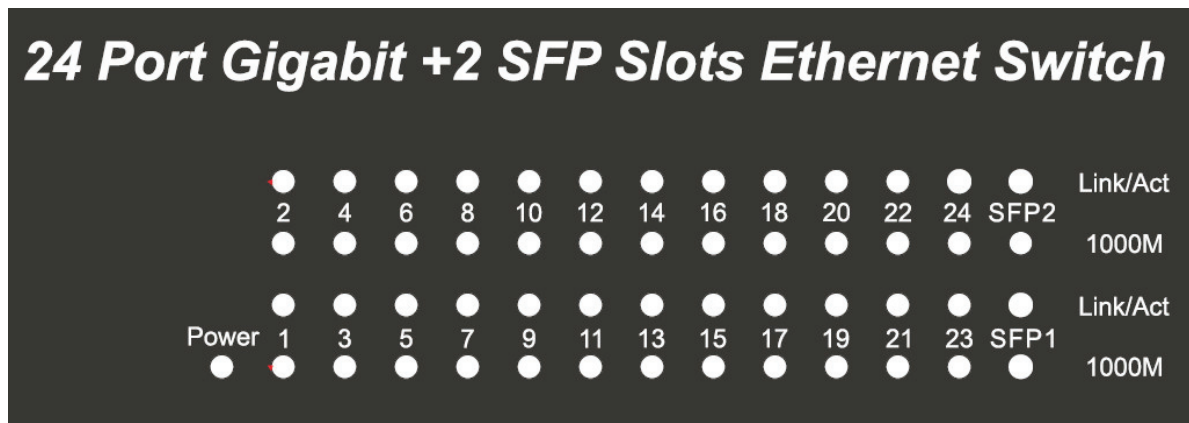

Figure 2 - LED Indicators

The following chart shows the LED indicators of the Switch along with explanation of each indicator.

2.2 Rear Panel

The rear panel of the Switch contains AC power connector

LED	COLOR	STATUS	STATUS DESCRIPTION
Power	Green	On	Power On
		Off	Power off
Link/Act	Green	On	Connect to the port
		Off	Disconnect to the port
		Flashing	Sending or receiving data
1000M	Green	On	A 1000Mbps device is connected to the port
		Off	A 10/100Mbps device is connected to the port or no device is connected to the port
SFP	Green	On	Connect to the port
		Off	Disconnect to the port
		Flashing	Sending or receiving data

For shown as below:

Figure 3 - Rear Panel

AC Power Connector: It supports AC 100~240V, 50~60Hz.

Chapter 3 Installing and Connecting the Switch

This part describes how to install your Ethernet Switch and make connections to it. Please read the following topics and perform the procedures in the order being presented.
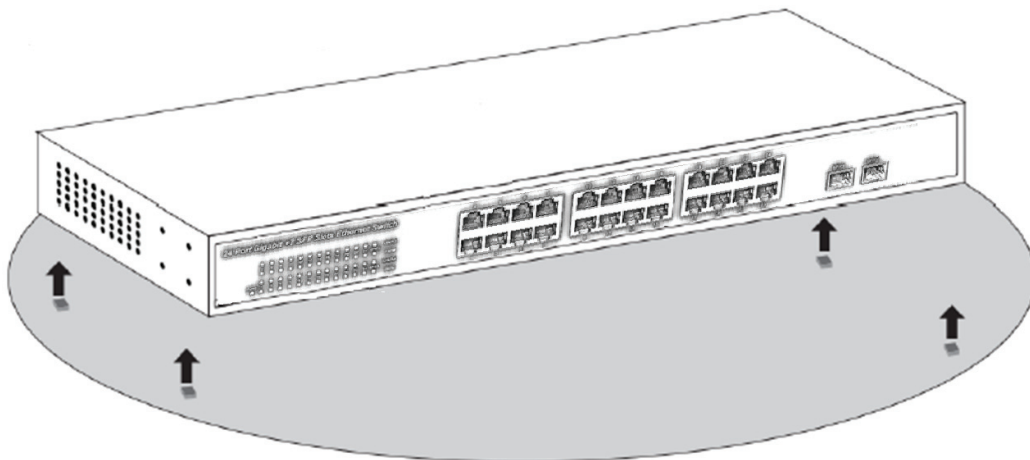
3.1 Installation

Please follow the following instructions in avoid of incorrect installation causing device damage and security threat.

➢ Put the Switch on stable place or desktop in case of falling damage.
➢ Make sure the Switch works in the proper AC input range and matches the voltage labeled on the Switch.
➢ To keep the Switch free from lightning, do not open the Switch's shell even in power failure.
➢ Make sure that there is proper heat dissipation from and adequate ventilation around the Switch.
➢ Make sure the cabinet to enough back up the weight of the Switch and its accessories.

3.1.1 Desktop Installation

Sometimes users are not equipped with the 19-inch standard cabinet. So when installing the Switch on a desktop, please attach these cushioning rubber feet provided on the bottom at each corner of the Switch in case of the external vibration. Allow adequate space for ventilation between the device and the objects around it.

3.1.2 Rack-mountable Installation in 19-inch Cabinet

The Switch can be mounted in an EIA standard-sized, 19-inch rack, which can be placed in a wiring closet with other equipment. To install the Switch, please follow these steps:

a. Attach the mounting brackets on the Switch's side panels (one on each side) and secure them with the screws provided.
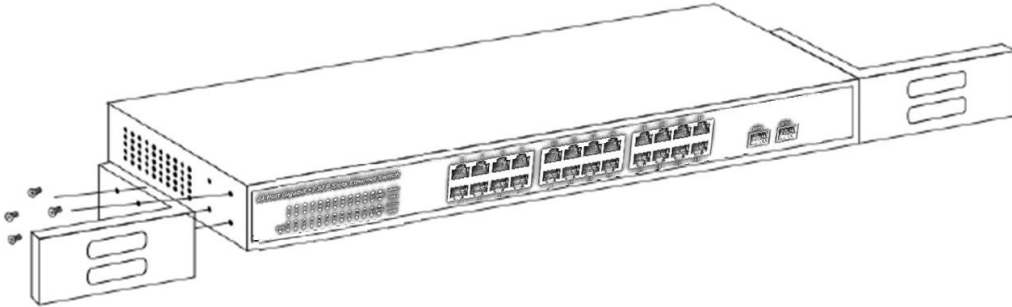
b. Use the screws provided with the equipment rack to mount the Switch on the rack and tighten it.
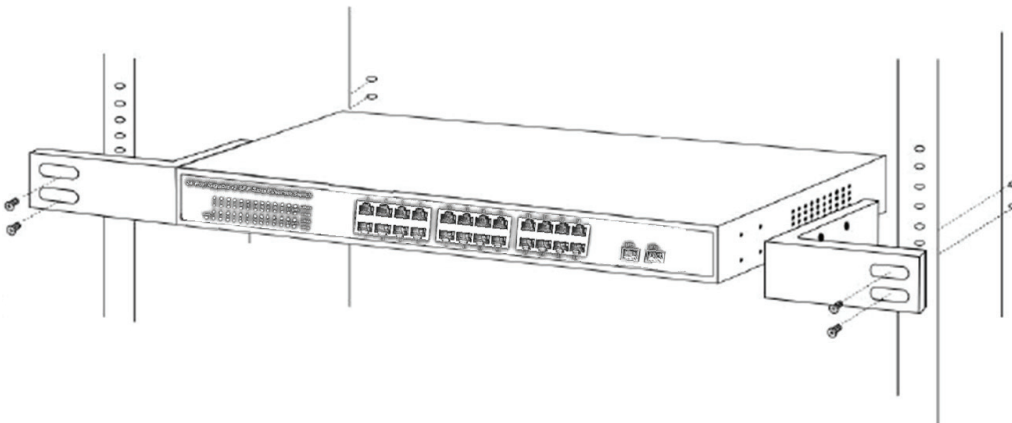
3.1.3 Power on the Switch

The Switch is powered on by the AC 100-240V 50/60Hz internal high-performance power supply. Please follow the next tips to connect:

AC Electrical Outlet: It is recommended to use single-phase three-wire receptacle with neutral outlet or multifunctional computer professional receptacle. Please make sure to connect the metal ground connector to the grounding source on the outlet.
AC Power Cord Connection: Connect the AC power connector in the back panel of the Switch to external receptacle with the included power cord, and check the power indicator is ON or not. When it is ON, it indicates the power connection is OK.

3.2 Connect Computer (NIC) to the Switch

Please insert the NIC into the computer, after installing network card driver, please connect one end of the twisted pair to RJ-45 jack of your computer, the other end will be connected to any RJ-45 port of the Switch, the distance between Switch and computer is around 100 meters. Once the connection is OK and the devices are power on normally, the Link/ACT status indicator lights corresponding ports of the Switch.

Specification

Model		DN-80110
Chipset		RTL8382L+RTL8218
Standards		IEEE 802.3, IEEE 802.3u, IEEE802.3ab, IEEE802.3x, IEEE802.3az
Network Media (Cable)		10Base-T: UTP category 3, 4, 5 cable (maximum 100m) EIA/TIA-568 100Ù STP (maximum 100m) 100Base-Tx: UTP category 5, 5e cable (maximum 100m) EIA/TIA-568 100Ù STP (maximum 100m) 1000Base-T: UTP category 5e, 6 cable (maximum 100m)
Number of Ports		24 x 10/100/1000Mbps Auto-Negotiation ports
LED indicators	Link/Act/speed	Link/Act: Green, 1000M: Green, SFP: Green
	Other	Power: Green
Transfer Method		Store-and-Forward
Switching Capacity		52G
MAC Address Learning		Automatically learning, automatically Update 16K Table
Frame Filtering and Forward Rate		10Mbps: 14880pps, 100Mbps:148800pps, 1000Mbps: 1488000pps
Dimensions (W × D × H)		440x205x44mm (19" metal case)
Environment		Operating Temperature: 0℃ - 40℃ Storage Temperature: -40℃ - 70℃ Operating Humidity: 10%~90% non-condensing Storage humidity: 5%~90% non-condensing
Power Supply		AC 100V~240V 50/60HZ (Internal Power supply)
Power consumption		Max 20(watts)