

## ZYXEL GS2220-28HP

# ZYXEL GS2220-28HP 24 Port GB L2 POE+ Switch User Manual

Model: GS2220-28HP

## 1. INTRODUCTION

This manual provides detailed instructions for the installation, operation, and maintenance of the ZYXEL GS2220-28HP 24 Port GB L2 POE+ Switch. This device is designed to provide reliable and high-performance network connectivity with Power over Ethernet (PoE+) capabilities, suitable for various network environments.

## 2. SAFETY INFORMATION

- Ensure proper grounding to prevent electrical shock.
- Do not expose the device to water or excessive humidity.
- Operate the device within the specified temperature and humidity ranges.
- Use only the power adapter supplied with the device or an approved replacement.
- Do not open the device casing; refer all servicing to qualified personnel.
- Avoid blocking ventilation openings to prevent overheating.

## 3. PACKAGE CONTENTS

Verify that your package contains the following items:

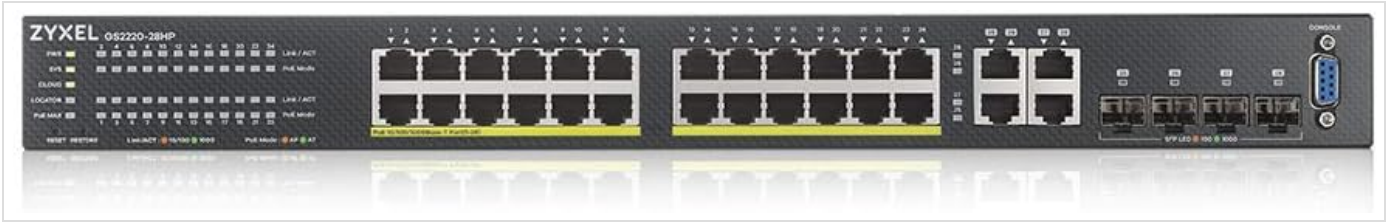
- ZYXEL GS2220-28HP 24 Port GB L2 POE+ Switch
- Power Cord
- Rack-mount Kit (brackets and screws)
- Console Cable (RJ45 to DB9)
- Quick Start Guide

## 4. PRODUCT OVERVIEW

The ZYXEL GS2220-28HP is a high-performance Layer 2 Gigabit PoE+ switch designed for robust network deployments. It

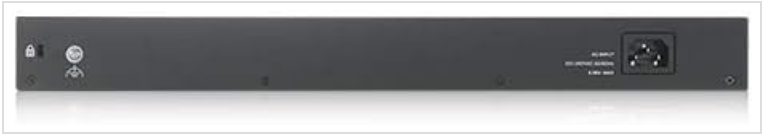
features 24 Gigabit Ethernet PoE+ ports and additional SFP ports for fiber uplinks.

### 4.1 Front Panel



The front panel of the GS2220-28HP switch displays the 24 Gigabit Ethernet ports, four combo RJ-45/SFP ports, and two additional SFP ports. It also includes various LED indicators for power, system status, link/activity, and PoE status for each port. A console port is located on the far right for direct management access.

### 4.2 Rear Panel



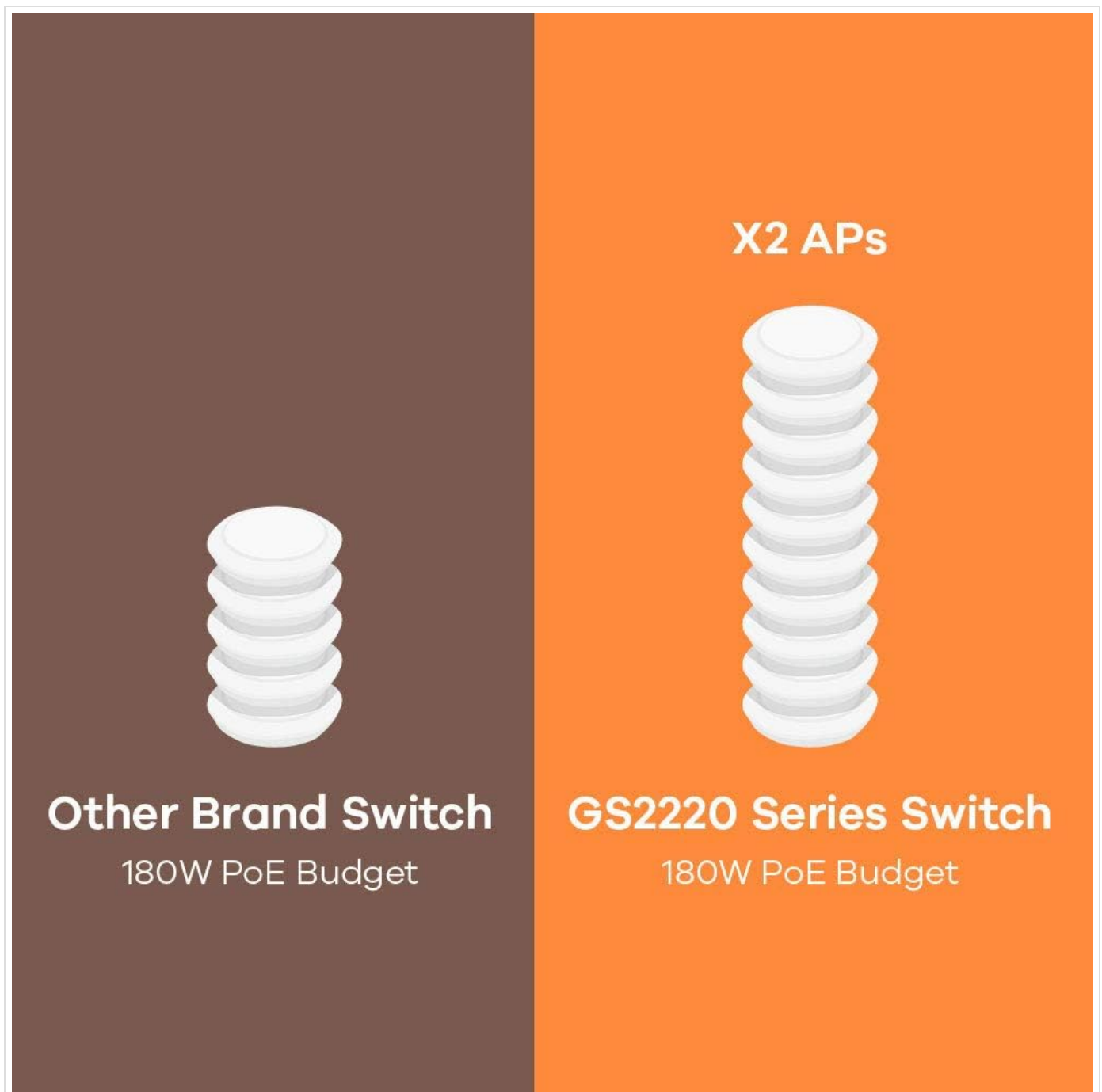
The rear panel of the GS2220-28HP switch features the AC power input connector and a grounding screw for electrical safety.

### 4.3 Management Options



The GS2220-28HP switch supports multiple management options including Cloud-based management, Standalone web interface, and SNMP for integration into network management systems.

#### 4.4 PoE Budget Efficiency



The ZYXEL GS2220 series switches are designed for efficient power delivery, allowing more Power over Ethernet (PoE) devices to be powered from the same PoE budget compared to other switches.

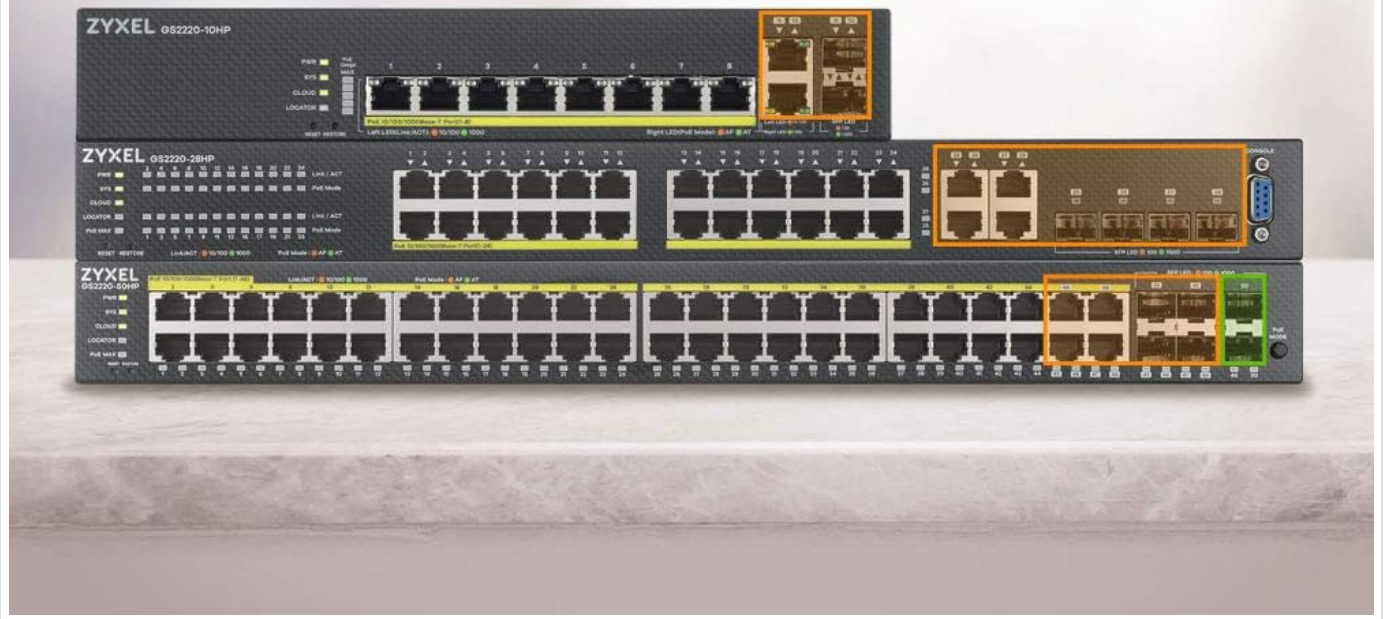
#### 4.5 Port Configuration



**Combo port (RJ-45/SFP)**



**Additional SFP port**



The switch features both Combo ports (RJ-45/SFP) which can operate as either copper or fiber, and dedicated Additional SFP ports for flexible uplink and fiber connectivity options.

## 5. SETUP

### 5.1 Rack Mounting

1. Attach the provided rack-mount brackets to the sides of the switch using the included screws.
2. Secure the switch into a standard 19-inch equipment rack using appropriate rack screws.

### 5.2 Connecting Power

1. Connect one end of the power cord to the AC power inlet on the rear panel of the switch.
2. Connect the other end of the power cord to a suitable AC power outlet.
3. Ensure the grounding screw on the rear panel is properly connected to an earth ground.

### 5.3 Connecting Network Devices

1. Connect network devices (e.g., computers, servers, access points, IP cameras) to the RJ-45 ports on the front panel using standard Ethernet cables.
2. For fiber optic connections, insert compatible SFP transceivers into the SFP ports and connect fiber optic cables.
3. For PoE-powered devices, ensure they are connected to PoE+ enabled ports. The switch will automatically detect and

provide power.

### 5.4 Initial Configuration

The switch can be configured via a web-based graphical user interface (GUI) or a command-line interface (CLI) through the console port.

- **Web GUI:** Connect a computer to any of the switch's data ports. Configure your computer's IP address to be in the same subnet as the switch's default IP (refer to the Quick Start Guide for default IP). Open a web browser and enter the switch's IP address.
- **CLI:** Connect the console cable from your computer's serial port to the switch's console port. Use a terminal emulation program (e.g., PuTTY, Tera Term) with the correct serial port settings (e.g., 115200 bps, 8 data bits, no parity, 1 stop bit, no flow control).

## 6. OPERATING

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### 6.1 Power On

After connecting the power, the switch will automatically power on. The system LED will indicate the boot status.

### 6.2 LED Indicators

LED	Status	Description
PWR	Green (Solid)	Device is powered on.
SYS	Green (Solid)	System is ready.
Link/Act	Green (Solid)	Port is linked.
Link/Act	Green (Blinking)	Port is transmitting/receiving data.
PoE	Green (Solid)	PoE power is supplied.
PoE	Amber (Solid)	PoE fault or overload.

### 6.3 PoE Functionality

The GS2220-28HP supports IEEE 802.3at PoE+ standard, providing up to 30W per port for compatible devices. The switch automatically detects PoE-capable devices and supplies power. You can monitor and manage PoE settings through the web GUI or CLI.

## 7. MAINTENANCE

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### 7.1 Firmware Updates

Regularly check the ZYXEL website for the latest firmware updates. Updating the firmware ensures optimal performance, security, and access to new features. Follow the instructions provided with the firmware download for the update process, typically performed via the web GUI.

### 7.2 Cleaning

Use a soft, dry cloth to clean the exterior of the switch. Do not use liquid or aerosol cleaners. Ensure ventilation openings are free from dust and obstructions.

### 7.3 Environmental Considerations

Maintain the operating environment within the specified temperature and humidity ranges to ensure long-term reliability of the

device.

## 8. TROUBLESHOOTING

- **No Power:** Ensure the power cord is securely connected to both the switch and a working power outlet. Check the power source.
- **No Link Light:** Verify that the Ethernet cable is properly connected at both ends. Check the connected device for power and proper operation. Try a different cable or port.
- **PoE Device Not Powering On:** Ensure the device is PoE-compatible and connected to a PoE+ port. Check the PoE LED status. Verify the switch's PoE budget is not exceeded.
- **Cannot Access Web GUI:** Confirm your computer's IP address is in the same subnet as the switch. Clear your browser's cache or try a different browser. Verify physical connectivity to the switch.
- **Slow Network Performance:** Check for network loops, excessive broadcast traffic, or faulty cables. Ensure duplex settings match between the switch and connected devices.

## 9. SPECIFICATIONS

Feature	Specification
Model Number	GS2220-28HP
Number of Ports	24 Gigabit Ethernet PoE+ ports, 4 Combo RJ-45/SFP, 2 SFP ports
Data Transfer Rate	1000 Megabits Per Second
Interface Type	PoE
Product Dimensions	10.63"L x 17.36"W x 1.73"H
Item Weight	8.36 pounds (3.8 Kilograms)
Voltage	220.0 V
Color	Black
Compatible Devices	Desktop

## 10. WARRANTY AND SUPPORT

For warranty information and technical support, please refer to the documentation included with your product or visit the official ZYXEL website. The website provides access to drivers, firmware, FAQs, and contact information for customer service.  
**ZYXEL Website:** [www.zyxel.com](http://www.zyxel.com)