

ZYXEL GS1900-10HP

Zyxel GS1900-10HP 8-Port Smart-Managed PoE Gigabit Switch User Manual

Model: GS1900-10HP

1. INTRODUCTION

The Zyxel GS1900-10HP is an 8-port Smart-Managed Gigabit Ethernet switch with Power over Ethernet Plus (PoE+) capabilities and two SFP uplink ports. Designed for small to medium-sized businesses, this switch provides high-speed network connectivity and efficient power delivery to compatible devices such as IP cameras, wireless access points, and VoIP phones. Its smart management features allow for easy configuration and monitoring, ensuring reliable network performance.

2. PACKAGE CONTENTS

Verify that your package contains the following items:

- Zyxel GS1900-10HP Switch
- Power Adapter
- Wall Mounting Kit
- Quick Start Guide (not included in this manual)

3. PHYSICAL OVERVIEW

3.1 Front Panel

The front panel of the GS1900-10HP features eight Gigabit Ethernet ports with PoE+ support and two SFP ports for fiber uplinks. It also includes LED indicators for power, system status, and individual port activity/PoE status.



Figure 1: Front view of the Zyxel GS1900-10HP switch, highlighting the eight RJ-45 Gigabit Ethernet ports (1-8) with PoE+ capabilities and two SFP uplink ports (9-10). LED indicators for power, system, and port status are visible on the left.

LED Indicators:

- **PWR (Power):** Indicates the power status of the switch. Green for power on.
- **SYS (System):** Indicates the system status. Blinking for normal operation.
- **PoE (Ports 1-8):** Indicates PoE status for each port. Green for PoE enabled, blinking for PoE activity.
- **Link/ACT (Ports 1-10):** Indicates network link and activity. Green for Gigabit link, amber for 10/100Mbps link. Blinking indicates data activity.

3.2 Rear Panel

The rear panel contains the power input connector and a grounding screw.



Figure 2: Rear view of the Zyxel GS1900-10HP switch, showing the DC 54V power input connector on the right and a grounding screw in the center.

4. SETUP AND INSTALLATION

4.1 Physical Placement

The GS1900-10HP can be placed on a desktop or mounted on a wall using the included kit. Ensure adequate ventilation around the switch to prevent overheating.

- **Desktop Placement:** Place the switch on a flat, stable surface.
- **Wall Mounting:** Use the provided wall mounting kit to securely attach the switch to a wall. Refer to the Quick Start Guide for detailed instructions on wall mounting.

4.2 Power Connection

1. Connect the power adapter to the DC 54V power input on the rear panel of the switch.
2. Plug the power adapter into a suitable power outlet. The PWR LED on the front panel should illuminate green.

4.3 Network Connections

1. Connect your network devices (e.g., computers, servers, network storage) to the RJ-45 Gigabit Ethernet ports (1-8) using standard Ethernet cables.
2. For devices requiring Power over Ethernet, ensure they are PoE-compatible. The switch will automatically detect and provide power.

3. For fiber optic connections, insert compatible SFP transceivers into the SFP ports (9-10) and connect fiber optic cables.

4.4 Initial Web Management Access

The GS1900-10HP is a smart-managed switch, configurable via a web-based interface. To access it:

1. Ensure your computer is connected to one of the switch's RJ-45 ports.
2. By default, the switch may obtain an IP address via DHCP. If no DHCP server is present, it will use a fallback IP address (e.g., 192.168.1.1). Refer to the Quick Start Guide for the default IP address and login credentials.
3. Open a web browser and enter the switch's IP address.
4. Enter the default username and password (typically 'admin' and '1234' or similar, check documentation).
5. Follow the on-screen setup wizard for initial configuration.

5. OPERATING THE SWITCH

Once configured, the Zyxel GS1900-10HP operates as a high-performance network switch. Its smart management features allow for advanced network control.

5.1 Key Features and Management

The web-based management interface provides access to various Layer 2 features:

- **VLAN (Virtual Local Area Network):** Segment your network into smaller, isolated broadcast domains to improve security and performance.
- **QoS (Quality of Service):** Prioritize network traffic for critical applications (e.g., VoIP, video conferencing) to ensure consistent performance.
- **IGMP Snooping:** Optimize multicast traffic delivery, preventing unnecessary flooding of multicast packets to all ports.
- **Link Aggregation (LAG):** Combine multiple physical links into a single logical link to increase bandwidth and provide link redundancy.
- **IPv6 Support:** Ensures compatibility with next-generation internet protocols.
- **DoS Prevention:** Protects the network from Denial of Service attacks.

5.2 Smart Power (PoE+)

The switch supports Smart PoE+ (802.3af/802.3at) with a total power budget of 77W and a maximum of 30W per port. The "Consumption Mode" feature allows for efficient power allocation, enabling the switch to power more devices by dynamically adjusting power based on actual consumption rather than maximum theoretical draw.

6. MAINTENANCE

6.1 General Care

- Keep the switch in a clean, dry environment.
- Ensure proper ventilation and avoid blocking air vents.
- Clean the exterior with a soft, dry cloth. Do not use liquid cleaners.

6.2 Firmware Updates

Regularly check the Zyxel support website for the latest firmware updates. Firmware updates can provide new features, performance improvements, and security enhancements. The switch includes free firmware upgrade support.

7. TROUBLESHOOTING

This section addresses common issues you might encounter with your Zyxel GS1900-10HP switch.

7.1 No Power

- Ensure the power adapter is securely connected to both the switch and a working power outlet.
- Verify that the power outlet is supplying power.
- Check if the PWR LED on the front panel is illuminated green.

7.2 No Network Link

- Verify that the Ethernet cable is securely connected to both the switch port and the network device.
- Check the Link/ACT LED for the corresponding port. If it's off, try a different cable or port.
- Ensure the connected device is powered on and functioning correctly.

7.3 PoE Device Not Receiving Power

- Confirm that the connected device is PoE-compatible (802.3af/at standard).
- Check the PoE LED for the port. If it's off, the device may not be drawing power or there's an issue with the cable.
- Ensure the total PoE power budget (77W) is not exceeded by all connected devices.
- Try a different Ethernet cable.

7.4 Cannot Access Web Management Interface

- Ensure your computer's IP address is in the same subnet as the switch's IP address.
- Verify the switch's IP address. If unsure, consult the Quick Start Guide or use a network scanner tool.
- Clear your browser's cache or try a different browser.
- If you have forgotten the login credentials, a factory reset may be necessary (refer to the Quick Start Guide for reset procedures).

8. SPECIFICATIONS

Feature	Detail
Model Number	GS1900-10HP
Number of Ports	10 (8x Gigabit RJ-45 with PoE+, 2x SFP)
Interface Type	PoE+, SFP
Data Transfer Rate	16 Gigabits Per Second (Switching Capacity)
Maximum Power (PoE Budget)	77 Watts
Voltage	12 Volts (Input to power adapter)
Case Material	Metal
Product Dimensions	12 x 9 x 3 inches
Item Weight	3.3 pounds (1.5 Kilograms)
Upper Temperature Rating	122 Degrees Fahrenheit (50 Degrees Celsius)
Included Components	Switch, Wall mounting kit

9. WARRANTY AND SUPPORT

9.1 Warranty Information

The Zyxel GS1900-10HP switch comes with a Limited Lifetime Warranty. Please refer to the official Zyxel website or the warranty card included with your product for full terms and conditions.

9.2 Technical Support

For technical assistance, firmware downloads, or additional product information, please visit the official Zyxel support website. You can find contact information for customer service and support resources there.