D-Link DGS-1100-24PV2

D-Link DGS-1100-24PV2 24-Port Gigabit Smart Managed PoE+ Switch Instruction Manual

Model: DGS-1100-24PV2 | Brand: D-Link

1. Introduction

The D-Link DGS-1100-24PV2 is a 24-Port Gigabit Smart Managed PoE+ Switch designed to meet the demands of small to medium-sized businesses (SMBs). It offers a comprehensive suite of features for high performance, reliable connectivity, and efficient network management. This model includes 24 Gigabit Ethernet ports, with 12 of these ports supporting Power over Ethernet Plus (PoE+) with a total power budget of 100W. This allows for powering devices such as IP cameras, VoIP phones, and wireless access points directly through the Ethernet cable, simplifying network setup and reducing cabling complexity.

2. Key Features

- **24 Gigabit Ports for High-Speed Networking:** Delivers high-speed connectivity to devices across your network. Supports desktop or rackmount placement for flexible installation.
- **12x PoE+ Ports:** Power up to 12 devices directly over Ethernet, supporting up to 30W per port with a total power budget of 100W. Ideal for access points, IP cameras, VoIP phones, access controls, smart lighting solutions, and other PoE-enabled devices.
- **Advanced Traffic Management:** Offers bandwidth control, Quality of Service (QoS), VLAN support, and IGMP Snooping to optimize network performance and minimize congestion. Ensures smooth operation of critical voice and video applications.
- **Loopback Detection & Cable Diagnostics:** Quickly identify and resolve network issues to help maintain a reliable connection.
- **PD Alive for Enhanced Reliability:** Equipped with PD Alive to automatically reboot unresponsive PoE devices, minimizing downtime and ensuring continuous network availability without manual intervention.
- **Energy-Efficient and Silent Operation:** Fanless design for silent running, energy savings, and a longer lifespan. Complies with IEEE 802.3az for reduced power consumption.
- **Intuitive Web-Based Management:** Easy setup and management via a user-friendly web interface. Provides comprehensive tools for efficient remote or local switch management, streamlining network administration tasks.
- **NDAA Compliant:** Meets strict regulatory standards, suitable for government and enterprise projects.
- **35+ Years of Reliability:** Trust the brand that’s been building reliable networks for over 35 years. D-Link's Lifetime Warranty provides long-term confidence.

3. Package Contents

Verify the following items are included in your DGS-1100-24PV2 package:

- D-Link DGS-1100-24PV2 Switch
- Quick Installation Guide (QIG)
- Rackmount Kit
- US Power Cord
- Power Cord Retainer
- 4 Rubber Feet

Figure 1: D-Link DGS-1100-24PV2 Switch and included accessories.

4. Physical Overview

4.1 Front Panel

Figure 2: Front Panel of the DGS-1100-24PV2 Switch.

The front panel features 24 Gigabit Ethernet ports (RJ45). Ports 1-12 are PoE+ enabled, providing power to connected devices. LED indicators for each port display link/activity status (Link/Act) and speed (1000Mbps, 100Mbps, 10Mbps). Additional LEDs indicate PoE status (PoE, PoE Fail) and overall power status of the switch.

4.2 Rear Panel

Figure 3: Rear Panel of the DGS-1100-24PV2 Switch.

The rear panel includes the AC power input (100-240VAC, 50/60Hz, 1.4A Max) with a power cord retainer, and a switch ground connection for safety.

5. Setup Instructions

5.1 Placement

The DGS-1100-24PV2 switch can be deployed in various environments, supporting both desktop and rackmount installations. For desktop use, attach the provided rubber feet to the bottom of the switch. For rackmount installation, use the included rackmount kit to secure the switch in a standard 19-inch equipment rack.

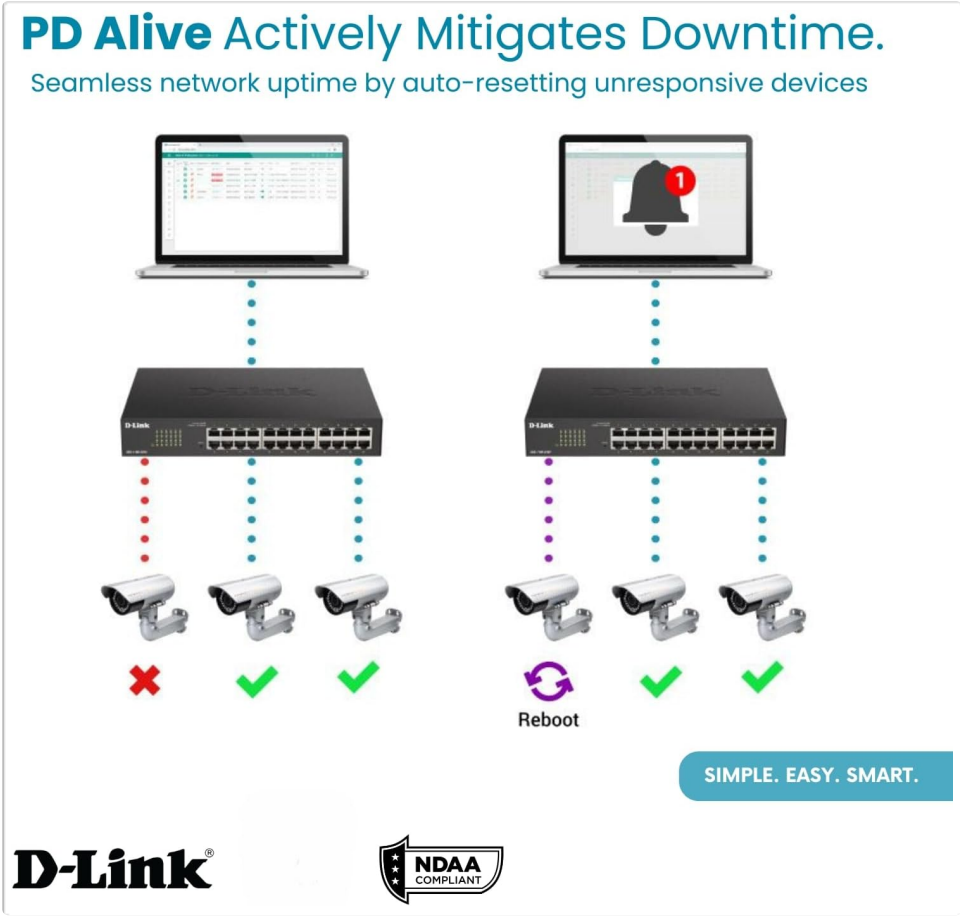

Figure 4: Desktop placement of the switch.

Figure 5: Rackmount installation of the switch.

5.2 Power Connection

Connect the provided AC power cord to the power input on the rear panel of the switch and then to a suitable power outlet. Use the power cord retainer to secure the connection.

5.3 Network Connection

Connect your network devices (e.g., computers, servers, network-attached storage) to any of the 24 Gigabit Ethernet ports using standard Ethernet cables. For Power over Ethernet (PoE) enabled devices, connect them to ports 1-12 to supply both data and power over a single cable.

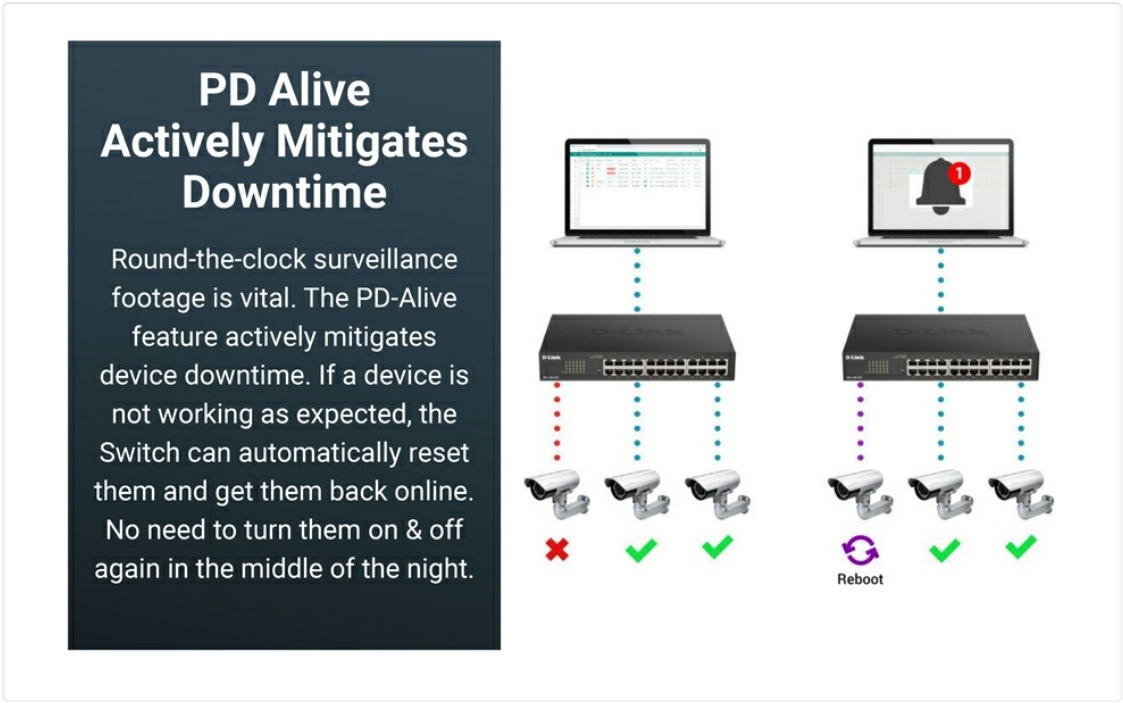

Figure 6: PoE power for essential devices.

Figure 7: PoE and PoE+ applications.

6. Operating the Switch

6.1 Web-Based Management

The DGS-1100-24PV2 is a Smart Managed switch, offering an intuitive web-based user interface for configuration and monitoring. Connect a computer to any port on the switch and access the management interface via a web browser. Refer to the Quick Installation Guide for initial access details, including the default IP address and login credentials.

Figure 8: Intuitive Web-Based Management Interface.

6.2 Advanced Traffic Management

Utilize the web interface to configure advanced features such as:

- **Bandwidth Control:** Manage network traffic flow to prevent congestion.
- **Quality of Service (QoS):** Prioritize critical network traffic (e.g., VoIP, video streaming) for optimal performance.
- **VLAN Support:** Segment your network into virtual local area networks for enhanced security and efficiency.
- **IGMP Snooping:** Optimize multicast traffic delivery, particularly useful for IP-based video applications.

7. Maintenance and Reliability

7.1 PD Alive

The PD Alive feature actively monitors PoE-powered devices. If a connected PoE device becomes unresponsive, the switch can automatically detect this and reboot the specific port, restoring functionality without manual intervention. This minimizes downtime and ensures continuous operation of critical devices like surveillance cameras.

Figure 9: PD Alive actively mitigates downtime.

7.2 Diagnostics

The switch includes built-in Loopback Detection and Cable Diagnostics tools. These features help administrators quickly identify and resolve common network issues, such as cable faults or network loops, ensuring stable and reliable connectivity.

7.3 Energy Efficiency

The DGS-1100-24PV2 features a fanless design, contributing to silent operation and reduced power consumption. It complies with IEEE 802.3az Energy Efficient Ethernet standards, further minimizing operational costs and extending the product's lifespan.

8. Troubleshooting

If you encounter issues with your DGS-1100-24PV2 switch, consider the following basic troubleshooting steps:

- **Check Power:** Ensure the power cord is securely connected and the power LED on the front panel is illuminated.
- **Verify Cable Connections:** Confirm that all Ethernet cables are properly seated in their respective ports and that the Link/Act LEDs are active.
- **Inspect PoE Status:** If a PoE device is not powering on, check the PoE status LEDs for the corresponding port. Utilize the PD Alive feature or manually power cycle the port via the web interface.
- **Consult LED Indicators:** The front panel LEDs provide visual cues for network status. Refer to the Quick Installation Guide for a detailed explanation of each LED's meaning.
- **Access Web Interface:** If network connectivity is an issue, try accessing the switch's web-based management interface to check port status, run diagnostics, or review system logs.
- **Reset to Factory Defaults:** As a last resort, if configuration issues persist, you may reset the switch to factory default settings. Refer to the user manual for the procedure.

9. Technical Specifications

Feature	Specification
Product Dimensions	11.02"L x 9.05"W x 1.75"H
Item Weight	4.6 Pounds (4.55 pounds)
Voltage	110 Volts (AC)
Case Material	Metal
Lower Temperature Rating	23 Degrees Fahrenheit
Upper Temperature Rating	122 Degrees Fahrenheit

Interface Type	RJ45
Data Transfer Rate	48 Gigabits Per Second
Current Rating	0.01 Amps
UPC	790069451782
Item Model Number	DGS-1100-24PV2
Number of Ports	24
Color	Black
Compatible Devices	Desktop

10. Warranty and Support

The D-Link DGS-1100-24PV2 switch comes with a Lifetime Warranty, reflecting D-Link's commitment to reliability and product quality. For technical assistance, troubleshooting, or warranty claims, please refer to the official D-Link support channels. D-Link Systems, Inc. has over 35 years of experience in building reliable networks.

11. Additional Product Views

Figure 10: Angled view of the DGS-1100-24PV2 Switch.

Figure 11: Top-down view of the DGS-1100-24PV2 Switch.

Figure 12: Side view of the DGS-1100-24PV2 Switch.

Figure 13: Another angled view of the DGS-1100-24PV2 Switch.

Figure 14: Stacked D-Link DGS-1100 series switches, showing the 24PV2 model.

12. Product Videos

12.1 Product Overview Video

Video 1: A concise product overview highlighting the key features and benefits of the D-Link DGS-1100-24PV2 switch. This video provides a visual summary of the switch's capabilities and design.