**D-Link DGS-1210-20**

# D-Link DGS-1210-20 20-Port Gigabit Web Smart Switch User Manual

Model: DGS-1210-20

## 1. Product Overview

The D-Link DGS-1210-20 is a 20-Port Gigabit Web Smart Switch, part of the DGS-1210 Series, designed for small and medium-sized businesses. It features 16 Gigabit Ethernet ports and 4 Gigabit SFP ports, offering high-speed connectivity and fiber uplink capabilities. This switch incorporates D-Link Green 3.0 technology for energy efficiency and supports IPv6 management, ensuring network protection and future compatibility. It provides various management options for quick deployment, infrastructure expansion, and seamless upgrades, delivering functionality, security, and manageability.

### 1.1. Key Features

- **20 Ports:** 16 Gigabit Ethernet ports and 4 Gigabit SFP ports for flexible connectivity.
- **Web Smart Management:** Intuitive web-based interface for easy setup, monitoring, and management.
- **Energy Efficient Ethernet (IEEE 802.3az):** Reduces power consumption during periods of low data utilization.
- **IPv6 Support:** Ensures compatibility with next-generation networks.
- **Advanced Traffic Management:** Includes bandwidth control, QoS, VLAN support, Port Mirroring, Link Aggregation, Spanning Tree, IGMP Snooping, and static routing.
- **Comprehensive Security:** Features Access Control List (ACL), 802.1X/RADIUS, ARP Spoofing Prevention, and D-Link Safeguard Engine.
- **Surveillance Mode:** Optimizes video traffic and automatically detects ONVIF-compliant devices for surveillance networks.
- **Loopback Detection & Cable Diagnostics:** Tools for identifying and resolving network issues.

### 1.2. Front Panel

The front panel of the DGS-1210-20 switch features 16 RJ45 Gigabit Ethernet ports and 4 SFP ports, along with LED indicators for status and activity. A power LED and a reset button are also present.

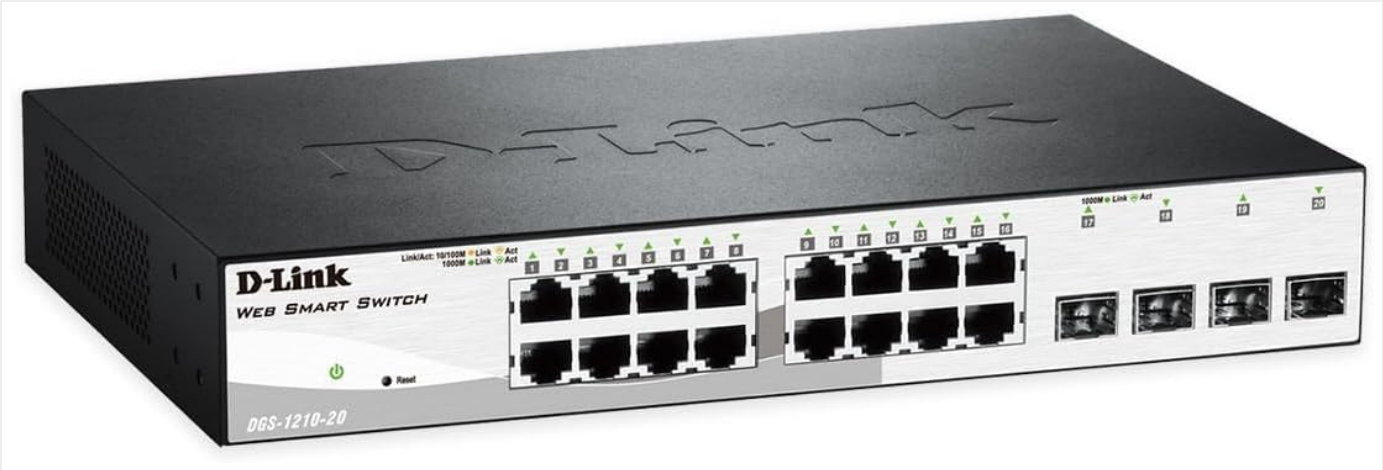


Figure 1: Front Panel of DGS-1210-20 Switch. Shows 16 RJ45 ports, 4 SFP ports, and status LEDs.

### 1.3. Rear Panel

The rear panel includes the AC power input and a grounding screw for electrical safety.

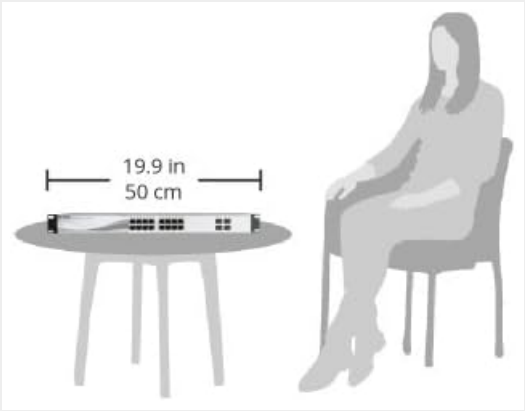


Figure 2: Rear Panel of DGS-1210-20 Switch. Displays the AC power inlet and a grounding point.

## 2. Setup and Installation

### 2.1. Package Contents

Verify the package contains the DGS-1210-20 switch, a power cord, and any included accessories such as rack-mount brackets or rubber feet.

### 2.2. Physical Installation

The DGS-1210-20 can be installed on a desktop or mounted in a standard 19-inch equipment rack.

- **Desktop Installation:** Attach the included rubber feet to the bottom of the switch to prevent scratching and provide stability. Place the switch on a flat, stable surface.
- **Rack Installation:** Secure the provided rack-mount brackets to the sides of the switch using the screws. Mount the switch into an open slot in a standard 19-inch equipment rack.

Ensure adequate ventilation around the switch to prevent overheating. Maintain at least 10 cm (4 inches) of clear space around the ventilation openings.

### 2.3. Connecting Power

1. Connect one end of the AC power cord to the power inlet on the rear panel of the switch.
2. Connect the other end of the AC power cord to a suitable power outlet.
3. The Power LED on the front panel will illuminate, indicating the switch is receiving power.

### 2.4. Connecting Network Devices

Use standard Ethernet cables (Cat5e or higher) to connect network devices (e.g., computers, servers, other switches) to the RJ45 ports on the front panel. For fiber optic connections, insert compatible SFP transceivers into the SFP ports and connect fiber optic cables.

- Connect devices to any of the 16 Gigabit RJ45 ports.
- For fiber uplinks or long-distance connections, use the 4 Gigabit SFP ports with appropriate SFP modules and fiber cables.

### 2.5. Initial Configuration Access

The DGS-1210-20 switch can be managed via a web-based graphical user interface (GUI). By default, the switch obtains an IP address via DHCP. If no DHCP server is available, it will use a default static IP address (e.g., 10.90.90.90).

1. Connect a computer to any of the switch's RJ45 ports.
2. Ensure your computer's IP address is in the same subnet as the switch (e.g., if the switch is 10.90.90.90, set your computer to 10.90.90.100).
3. Open a web browser and enter the switch's IP address (e.g.,http://10.90.90.90).
4. Log in using the default credentials (refer to the product documentation for specific default username and password).

Figure 3: Intuitive Web Management Interface. Displays options for Standard Mode and Surveillance Mode.

## 3. Operating the Switch

### 3.1. Basic Operation

Once powered on and connected, the DGS-1210-20 switch automatically begins forwarding Ethernet frames between connected devices. The Link/Act LEDs for each port indicate connection status and activity.

- **Green LED (Solid):** Indicates a valid network link.
- **Green LED (Flashing):** Indicates network activity (data transmission).
- **Off:** No link or connection.

### 3.2. Web-Based Management

The web-based management interface allows for comprehensive configuration and monitoring of the switch. Key functions include:

- **VLAN Configuration:** Create and manage Virtual Local Area Networks to segment network traffic.
- **Quality of Service (QoS):** Prioritize critical network traffic (e.g., voice, video) to ensure optimal performance.
- **Link Aggregation:** Combine multiple physical links into a single logical link for increased bandwidth and redundancy.
- **Security Features:** Configure Access Control Lists (ACLs), 802.1X authentication, and ARP Spoofing Prevention.
- **System Monitoring:** View port status, traffic statistics, and system logs.

### 3.3. Surveillance Mode

The DGS-1210-20 series supports a dedicated Surveillance Mode, which simplifies the deployment and management of IP surveillance networks. This mode automatically detects ONVIF-compliant devices and optimizes video traffic, enhancing security and efficient handling of surveillance data through automatic detection and segmentation.

Figure 4: Surveillance Mode Interface. Displays network topology and device details for surveillance management.

# 4. Maintenance

## 4.1. General Care

- Keep the switch in a cool, dry environment, away from direct sunlight and heat sources.
- Ensure proper ventilation and keep the ventilation openings clear of obstructions.
- Clean the exterior of the switch with a soft, dry cloth. Do not use liquid or aerosol cleaners.

## 4.2. Firmware Updates

Periodically check the D-Link support website for firmware updates. Firmware updates can provide new features, performance improvements, and security enhancements. Follow the instructions provided with the firmware update package carefully.

## 4.3. Loopback Detection and Cable Diagnostics

The DGS-1210-20 includes built-in tools for network maintenance:

- **Loopback Detection:** Automatically detects and disables ports that are causing network loops, preventing broadcast storms and network instability.
- **Cable Diagnostics:** Allows administrators to test the integrity of connected Ethernet cables, identifying issues such as opens, shorts, or incorrect wiring.

These features are accessible through the web management interface and are crucial for maintaining a stable and reliable network connection.

# 5. Troubleshooting

## 5.1. Power Issues

- **No Power LED:** Ensure the power cord is securely connected to both the switch and the power outlet. Verify the power outlet is functional.

## 5.2. Network Connectivity Issues

- **No Link/Act LED:** Check the Ethernet cable connection between the switch port and the connected device. Try a different cable or port. Ensure the connected device is powered on and functioning correctly.
- **Slow Performance:** Check for network loops using Loopback Detection. Utilize Cable Diagnostics to verify cable integrity. Ensure proper QoS settings are configured if prioritizing traffic.

## 5.3. Accessing Web Management Interface

- **Cannot access GUI:** Verify your computer's IP address is in the same subnet as the switch. Ensure there are no IP address conflicts on the network. Try clearing your browser's cache.
- **Forgot Password:** Refer to the D-Link support documentation for password recovery procedures or the factory reset process.

## 5.4. Factory Reset

If the switch is unresponsive or you need to restore it to its default settings, use the reset button on the front panel. This will erase all custom configurations.

1. With the switch powered on, use a paperclip or similar pointed object to press and hold the reset button for approximately 5-10 seconds.
2. Release the button when the LEDs indicate a reset (e.g., all LEDs flash).
3. The switch will reboot with factory default settings.

## 6. Specifications

The following table outlines the technical specifications for the D-Link DGS-1210-20 Web Smart Switch.

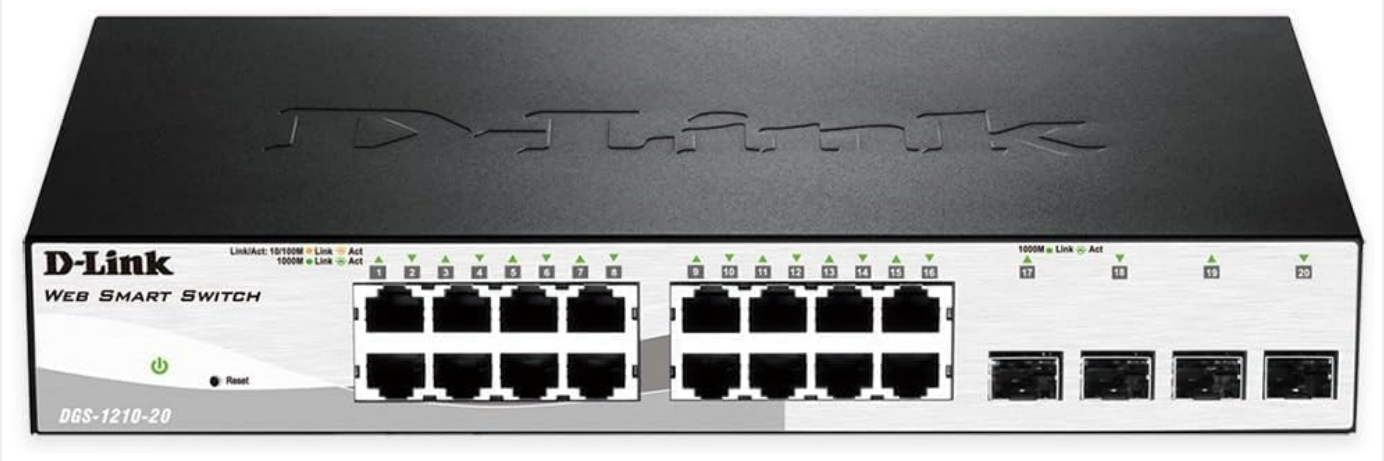


Figure 5: DGS-1210-20 Dimensions. Illustrates the physical size of the switch.

| Feature | Specification |
|---|---|
| Model Number | DGS-1210-20 |
| Brand | D-Link |
| Number of Ports | 16 x Gigabit RJ45, 4 x Gigabit SFP |
| Data Transfer Rate | 1 Gigabits Per Second |
| Interface Type | RJ45 and SFP |
| Dimensions (LxWxH) | 7.08 x 11.02 x 1.73 inches (17.98 x 27.99 x 4.39 cm) |
| Item Weight | 0.32 ounces (approx. 9.07 grams) |
| Voltage | 100-240 Volts AC |
| Case Material | Metal |
| Operating Temperature | Up to 40 Degrees Celsius |
| UPC | 790069373213 |

## 7. Warranty and Support

### 7.1. Product Warranty

D-Link products typically come with a limited warranty. For specific warranty terms and conditions applicable to your DGS-1210-20 switch, please refer to the warranty card included with your product or visit the official D-Link website. Keep your purchase receipt as proof of purchase.

## 7.2. Technical Support

For technical assistance, product documentation, firmware updates, and FAQs, please visit the official D-Link support website. You can typically find support resources by navigating to the support section and searching for your product model (DGS-1210-20).

- **D-Link Support Website:** https://www.dlink.com/support (Example link, verify actual URL)
- **Contact Information:** Refer to the D-Link website for regional contact numbers and support hours.