

Grandstream GWN7811

Grandstream GWN7811 8-Port Gigabit Ethernet Layer 3 Managed Network Switch User Manual

Model: GWN7811

1. INTRODUCTION

This manual provides comprehensive instructions for the installation, configuration, and operation of the Grandstream GWN7811 8-Port Gigabit Ethernet Layer 3 Managed Network Switch. Please read this manual thoroughly before using the device to ensure proper setup and functionality.

2. SAFETY INFORMATION

Observe the following safety precautions to prevent damage to the device and ensure personal safety:

- Install the device in a well-ventilated area, away from direct sunlight, heat sources, and moisture.
- Use only the power adapter provided with the device.
- Do not open the device casing. Refer all servicing to qualified personnel.
- Ensure proper grounding to prevent electrical hazards.
- Avoid placing heavy objects on the device.

3. PRODUCT OVERVIEW

3.1 Package Contents

The GWN7811 package typically includes:

- Grandstream GWN7811 Managed Network Switch
- Power Adapter
- Quick Installation Guide
- Rack-mount Kit (if applicable)

Note: No additional components are included beyond the standard package.

3.2 Front Panel Layout



Figure 1: Front Panel of GWN7811 Switch. This image displays the front view of the Grandstream GWN7811 switch, highlighting its 8 Gigabit Ethernet RJ45 ports, 2 SFP+ ports for fiber connections, a Console port for command-line interface access, a Reset (RST) button, and a System (SYS) LED indicator. Each RJ45 port also has individual LED indicators.

The front panel of the GWN7811 switch features the following components:

- **8x GbE RJ45 Ports:** Standard Gigabit Ethernet ports for connecting network devices.
- **2x SFP+ Ports:** 10 Gigabit Small Form-Factor Pluggable Plus ports for high-speed fiber optic connections.
- **CONSOLE Port:** RJ45 console port for local management via a serial connection.
- **RST Button:** Reset button for factory default restoration or reboot.
- **SYS LED:** System status indicator LED.
- **Port LEDs:** Individual LEDs for each RJ45 port indicating link/activity status.

3.3 Rear Panel Layout



Figure 2: Rear Panel of GWN7811 Switch. This image shows the rear view of the Grandstream GWN7811 switch, primarily featuring the power input connector and ventilation slots. The device is fanless, relying on passive cooling.

The rear panel of the GWN7811 switch typically contains the power input connector and ventilation openings. This model is designed to be fanless for silent operation.

3.4 LED Indicators

Table 1: LED Status Indicators

LED	Status	Description
SYS	Solid Green	Device is powered on and operating normally.
SYS	Flashing Green	Device is booting up or performing a firmware upgrade.
SYS	Off	Device is powered off or experiencing a critical error.
Port (Green)	Solid Green	Link established at Gigabit speed.
Port (Green)	Flashing Green	Activity on the port at Gigabit speed.
Port (Amber)	Solid Amber	Link established at 10/100 Mbps speed.
Port (Amber)	Flashing Amber	Activity on the port at 10/100 Mbps speed.

LED	Status	Description
Port	Off	No link or port is disabled.

4. HARDWARE INSTALLATION

4.1 Mounting the Switch

The GWN7811 can be placed on a desktop or mounted in a standard 19-inch equipment rack. Ensure adequate ventilation around the device.

- **Desktop Placement:** Place the switch on a flat, stable surface.
- **Rack Mounting:** Attach the provided rack-mount brackets to the sides of the switch using the included screws. Secure the switch into the rack using appropriate rack screws.

4.2 Connecting Power

1. Connect the power adapter to the power input port on the rear panel of the GWN7811.
2. Plug the other end of the power adapter into a suitable electrical outlet.
3. Verify that the SYS LED on the front panel illuminates, indicating the device is receiving power.

4.3 Connecting Network Cables

- **RJ45 Ports:** Connect standard Ethernet cables from your network devices (computers, servers, other switches) to the 8x GbE RJ45 ports.
- **SFP+ Ports:** Insert compatible SFP+ transceivers into the 2x SFP+ ports, then connect fiber optic cables to the transceivers for high-speed uplinks or downlinks.
- **Console Port:** For initial configuration or advanced troubleshooting, connect a serial cable from your computer to the CONSOLE port.

5. INITIAL CONFIGURATION

5.1 Accessing the Web User Interface (Web UI)

The GWN7811 can be managed via a web-based graphical user interface (GUI).

1. Connect a computer directly to any of the GWN7811's RJ45 ports.
2. Ensure your computer's IP address is in the same subnet as the switch's default IP address (e.g., 192.168.1.x). The default IP address for the GWN7811 is typically **192.168.1.1**.
3. Open a web browser and enter the switch's default IP address (e.g., <http://192.168.1.1>) into the address bar.
4. Enter the default username and password (refer to the Quick Installation Guide or device label for default credentials).
5. Upon successful login, you will access the Web UI for further configuration.

5.2 Basic Network Settings

After logging in, it is recommended to configure basic network settings:

- **Change Default Password:** For security, immediately change the default administrator password.
- **IP Address Configuration:** Configure a static IP address for the switch that is suitable for your network environment, or enable DHCP client if applicable.

- **System Time:** Set the correct system time and configure NTP (Network Time Protocol) for accurate time synchronization.

6. OPERATING INSTRUCTIONS

The GWN7811 is a Layer 3 managed switch, offering advanced features for network control and optimization.

6.1 Layer 3 Features

- **Static Routing:** Configure static routes to direct traffic between different IP subnets.
- **Inter-VLAN Routing:** Enable routing between configured VLANs to allow communication across different broadcast domains.
- **DHCP Server/Relay:** The switch can act as a DHCP server for connected devices or relay DHCP requests to an external server.

6.2 VLAN Configuration

Virtual Local Area Networks (VLANs) segment your network into logical broadcast domains, improving security and performance.

1. Navigate to the VLAN section in the Web UI.
2. Create new VLANs by assigning a VLAN ID and name.
3. Assign ports to specific VLANs as either access ports (for end devices) or trunk ports (for connecting to other switches).

6.3 Quality of Service (QoS)

QoS allows you to prioritize network traffic, ensuring critical applications receive sufficient bandwidth.

- Configure QoS policies based on port, VLAN, IP address, or DSCP values.
- Apply bandwidth control to limit or guarantee bandwidth for specific traffic types.

7. MAINTENANCE

7.1 Firmware Upgrade

Regularly update the switch firmware to ensure optimal performance, security, and access to new features.

1. Download the latest firmware from the official Grandstream website.
2. Access the firmware upgrade section in the Web UI.
3. Upload the firmware file and follow the on-screen instructions. Do not power off the device during the upgrade process.

7.2 Configuration Backup and Restore

It is recommended to regularly back up your switch configuration to prevent data loss.

- **Backup:** In the Web UI, navigate to the maintenance section and download the current configuration file to your computer.
- **Restore:** To restore a configuration, upload a previously saved configuration file through the Web UI.

8. TROUBLESHOOTING

8.1 Common Issues and Solutions

- **No Power:**

- Ensure the power adapter is securely connected to both the switch and a working power outlet.
- Verify the power outlet is functional.

- **No Link on Port:**

- Check the Ethernet cable connection at both ends.
- Ensure the connected device is powered on and functioning correctly.
- Verify the port status in the Web UI; ensure it is not disabled.
- Try a different port or cable.

- **Cannot Access Web UI:**

- Verify your computer's IP address is in the same subnet as the switch.
- Ensure the switch is powered on and the SYS LED is solid green.
- Clear your browser's cache or try a different browser.
- If the IP address was changed and forgotten, a factory reset might be necessary (refer to the Reset button section).

8.2 Factory Reset

To restore the GWN7811 to its factory default settings:

1. With the device powered on, use a paperclip or a similar pointed object to press and hold the RST button on the front panel for approximately 10 seconds.
2. Release the button when the SYS LED starts flashing rapidly.
3. The device will reboot with factory default settings.

Warning: A factory reset will erase all custom configurations. Back up your configuration before performing a reset.

9. SPECIFICATIONS

Table 2: Grandstream GWN7811 Technical Specifications

Feature	Description
Model	GWN7811
Ports	8x GbE RJ45, 2x SFP+
Layer	Layer 3 Managed
Fanless Design	Yes
Case Material	Metal
Voltage	12 Volts (AC)
Upper Temperature Rating	60 Degrees Celsius
Item Weight	2.11 Kilograms (4.64 pounds)
Package Dimensions	16.57 x 10.39 x 2.17 inches

Feature	Description
Compatible Devices	Desktop (general networking devices)

10. WARRANTY AND SUPPORT

For warranty information, technical support, and additional resources, please refer to the official Grandstream website or contact your authorized reseller. Grandstream provides comprehensive support for its products, including firmware updates and technical assistance.

Official Website: www.grandstream.com