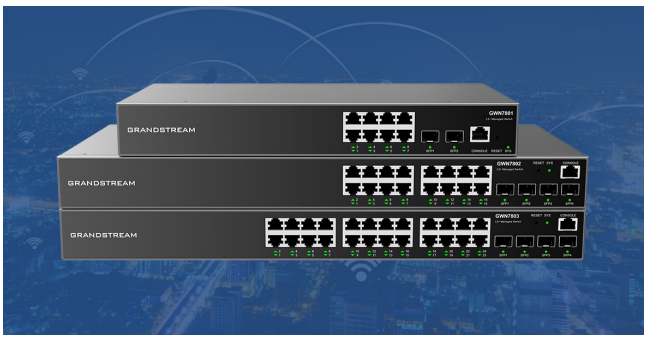

GRANDSTREAM GWN7831 Layer 3 Aggregation Managed Switch Installation Guide

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GRANDSTREAM
CONNECTING THE WORLD

GRANDSTREAM GWN7831 Layer 3 Aggregation Managed Switch

OVERVIEW

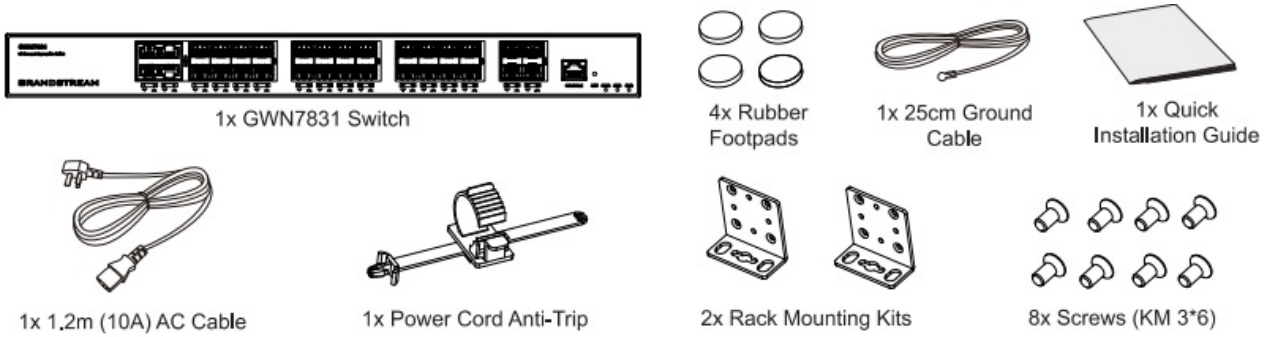
The GWN7831 is Layer 3 aggregation managed switch that allows medium-to-large enterprises to build scalable,

secure, high performance, and smart business networks that are fully manageable. It provides 4 combo port, 24 SFP ports and 4 SFP+ ports with a maximum switching capacity of 128Gbps. It supports advanced VLAN for flexible and sophisticated traffic segmentation, advanced QoS for prioritization of network traffic, IGMP/MLD Snooping for network performance optimization, and comprehensive security capabilities against potential attacks. GWN7831 can be managed in a number of ways, including the local Web user interface of the GWN7831 switch and CLI, the command-line interface. And also supported by GWN. Cloud and GWN Manager, Grandstream's cloud and on-premise network management platform. With complete end-to-end quality of service and flexible security settings, the GWN7831 is the best value enterprise-grade managed switch for medium-to-large businesses.

PRECAUTIONS

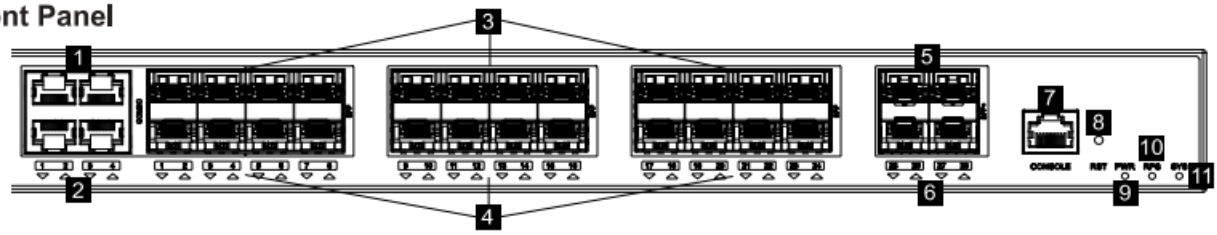
- Do not attempt to open, disassemble, or modify the device.
- Do not expose this device to temperature outside range of 0 °C to 45 °C for operation and -1 0 °C to 60 °C for storage.
- Do not expose the GWN7831 to environments outside of the following humidity range: 10-90% RH (non-condensing) for operation and 10-90% RH (non-condensing) for storage.
- Do not power cycle your GWN7831 during system boot up or firmware upgrade. You may corrupt firmware images and cause the unit to malfunction.

PACKAGE CONTENTS

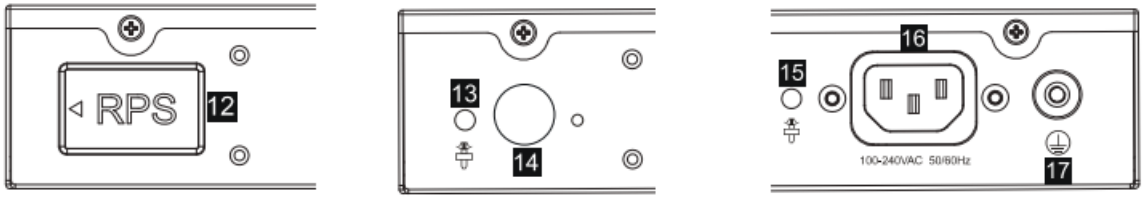


PORTS & LED INDICATORS

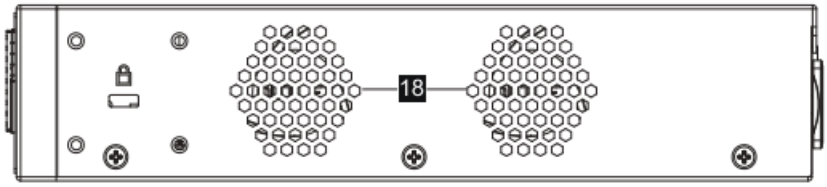
Front Panel



Back Panel



Side Panel



No.	Port & LED	Description
1	Port 1-4	4x 10/100/1000Mbps Ethernet ports
2	1-4	Ethernet ports' LED indicators
3	SFP 1-24	24x 1Gbps SFP ports ***Note:*** *SFP 1-4 and Port 1-4 combine 4 Combo ports.*
4	1-24	SFP ports' LED indicators
5	SFP+ 25-28	4x 10Gbps SFP+ ports
6	25-28	SFP+ ports' LED indicators
7	Console	1x Console port, used to connect a PC directly to the switch and manage it.
8	RST	Factory Reset pinhole, press for 5 seconds to reset factory default settings
9	PWR	Internal power supply LED indicator
10	RPS	Secondary external power supply LED indicator
11	SYS	System LED indicator
12 13 14 10	11 RPSIII 100-240VAC 50-60Hz Fan	External power supply rubber plug External RPS power cord anti-trip hole E xternal RPS power outlet Power cord anti-trip hole Power socket Grounding terminal 2x Fans

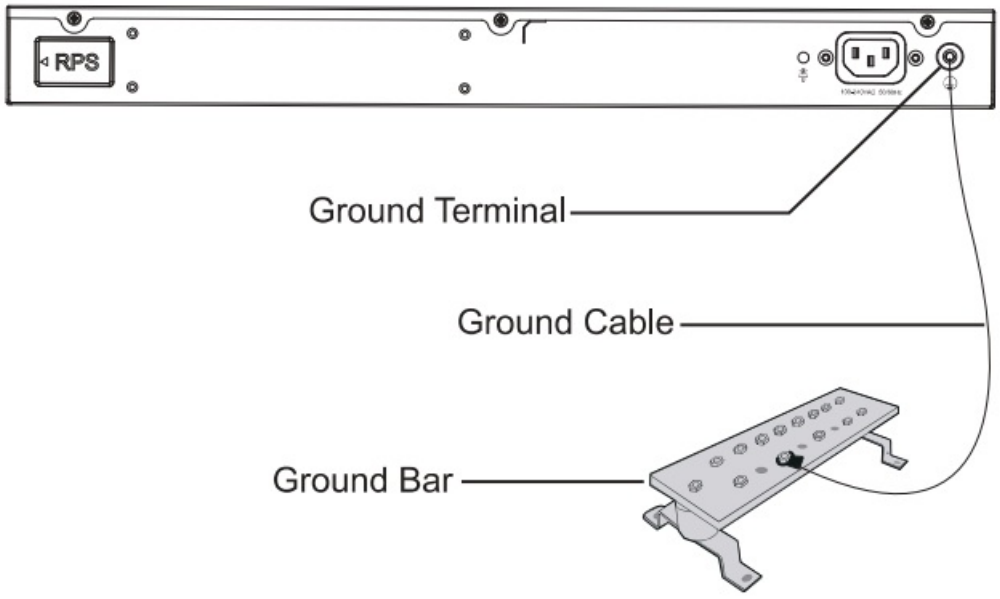
Note: External RPS (Redundant Power Supply) is sold separately.

LED Indicator

LED Indicator	Status	Description
System Indicator	Off	Power off
	Solid green	Booting
	Flashing green	Upgrade
	Solid blue	Normal use
	Flashing blue	Provisioning
	Solid red	Upgrade failed
	Flashing red	Factory reset
Port Indicator	Off	Port off
	Solid green	Port with 10Gbps connected and there is no activity
	Flashing green	Port with 10Gbps connected and data is transferring
	Solid yellow	Port with 1Gbps connected and there is no activity
	Flashing yellow	Port with 1Gbps connected and data is transferring
PWR/RPS Indicator	Off	Unused or failure
	Solid Green	In use
	Solid Red	Overvoltage or under voltage

POWERING & CONNECTING

Grounding the Switch

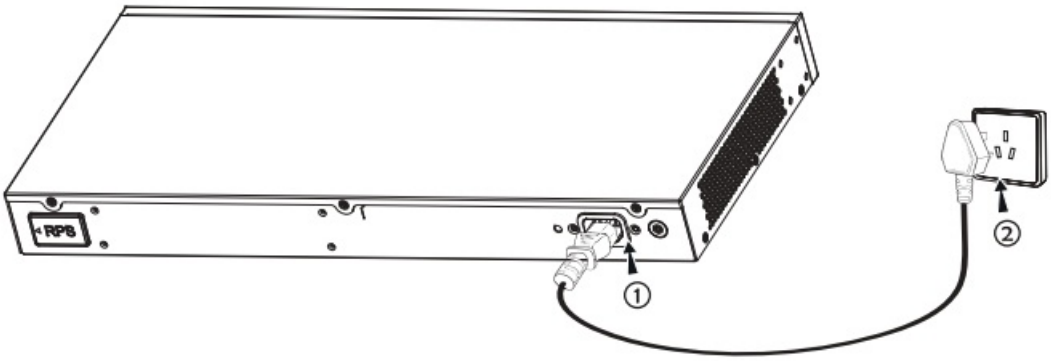


1. Remove the ground screw from the back of switch, and connect one end of the ground cable to the wiring terminal of switch.
2. Put the ground screw back into the screw hole, and lighten ii with a screwdriver.

3. Connect the other end of the ground cable to other device that has been grounded or directly to the terminal of the ground bar in the equipment room.

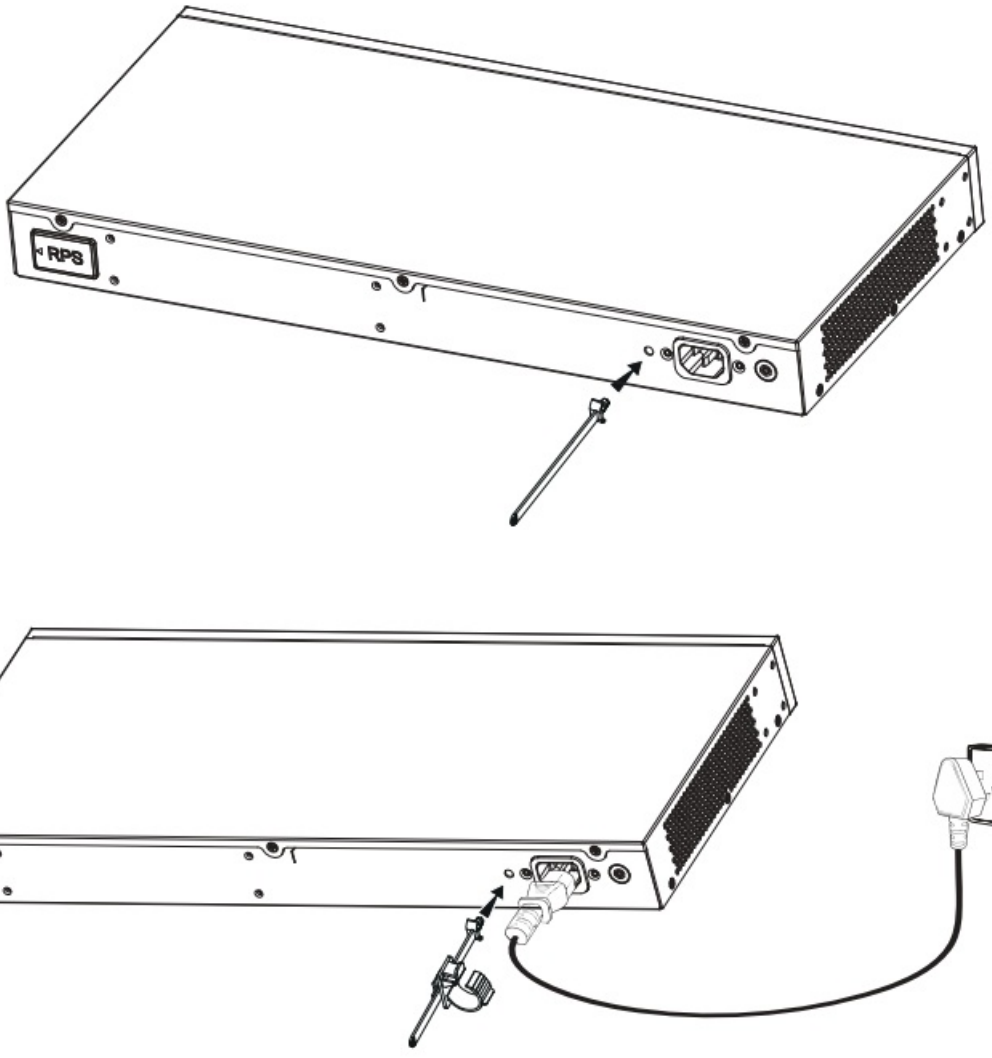
Powering on the Switch

Connect the power cable and the switch first, then connect the power cable to the power supply system of the equipment room.



Connecting Power Cord Anti-Trip

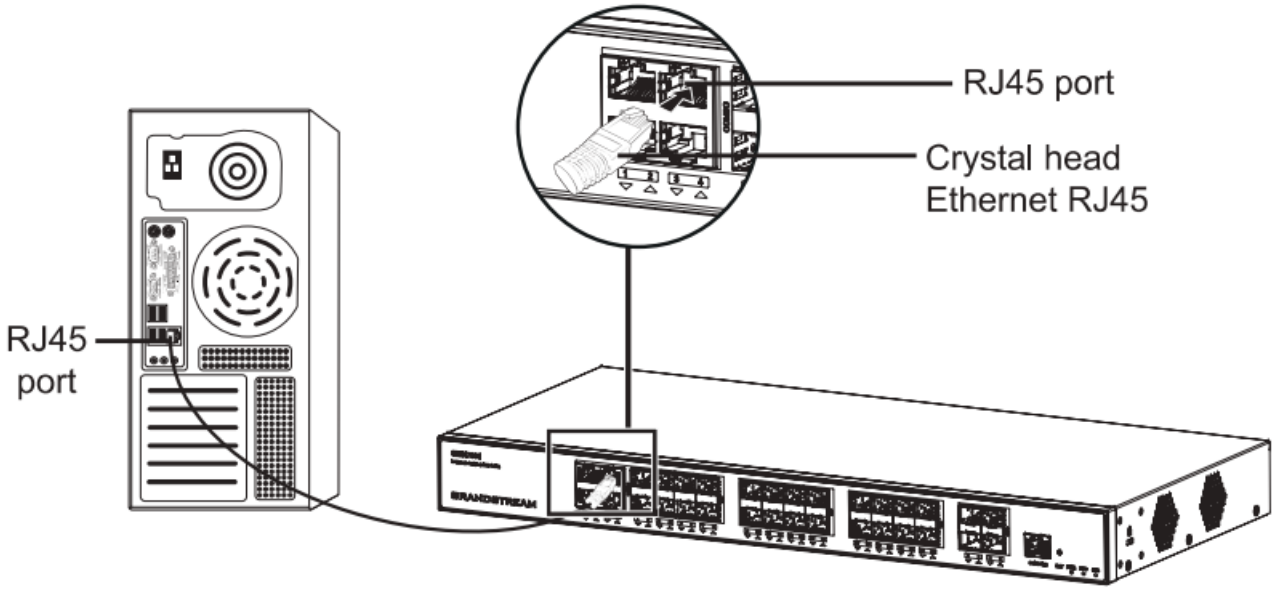
In order to protect the power supply from accidental disconnection, it's recommended to use a power cord anti-trip for installation.



1. Force the head of the fixing strap tightly into the hole next to the power socket until it's buckled on the shell without falling off.
2. After plugging the power cord into the power outlet, slide the protector over the remaining strap until ii slides over the end of the power cord.
3. Wrap the strap of the protective cord around the power cord and lock it tightly. Fasten the straps until the power cord is securely fastened.

POR T CONNECTING

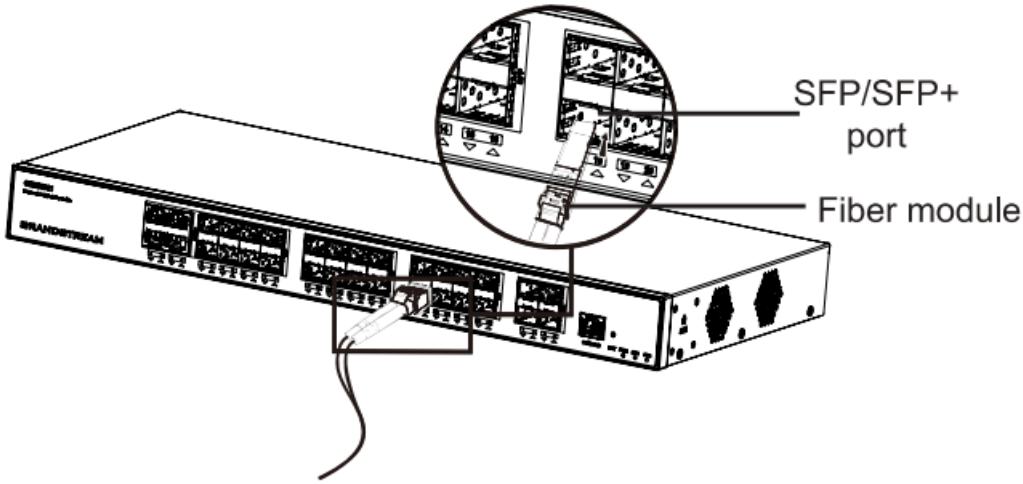
Connect to RJ45 Port



1. Connect one end of the network cable to the switch, and the other end to the peer device.
2. After powered on, check the status of the port indicator. If on, it means that the link is connected normally; if off, it means the link is disconnected, please check the cable and the peer device whether is enabled.

Connect to SFP/SFP+ Port

The installation process of the fiber module is as follows:



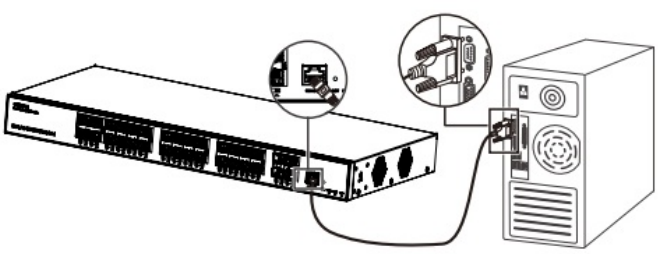
1. Grasp the fiber module from the side and insert it smoothly along the switch SFP/SFP+ port slot until the module is in close contact with the switch.
2. When connecting, pay attention to confirm the Rx and Tx ports of SFP/SFP+ fiber module. Insert one end of the fiber into the Rx and Tx ports correspondingly, and connect the other end to another device.
3. After powered on, check the status of the port indicator. If on, it means that the link is connected normally; if off, it means the link is disconnected, please check the cable and the peer device whether is enabled.

Notes:

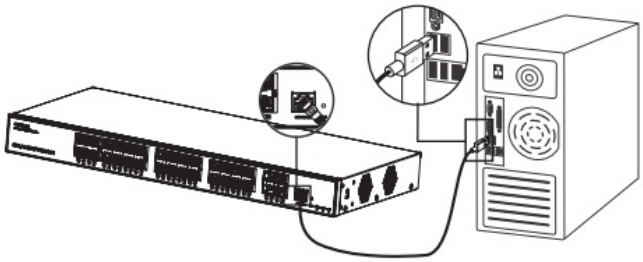
1. Please select the optical fiber cable according to the module type. The multi-mode module corresponds to the multi-mode optical fiber, and the single-mode module corresponds to the single-mode optical fiber.
2. Please select the same wavelength optical fiber cable for connection.
3. Please select an appropriate optical module according to the actual networking situation to meet different transmission distance requirements.
4. The laser of the first-class laser products is harmful to eyes. Do not look directly at the optical fiber connector.

Connect to Console Port

1. Connect the console cable (prepared by yourself) to the D89 male connector or USB port to the PC.
2. Connect the other end of the RJ45 end of the console cable to the console port of switch.



Connect to Console Port (DB9)



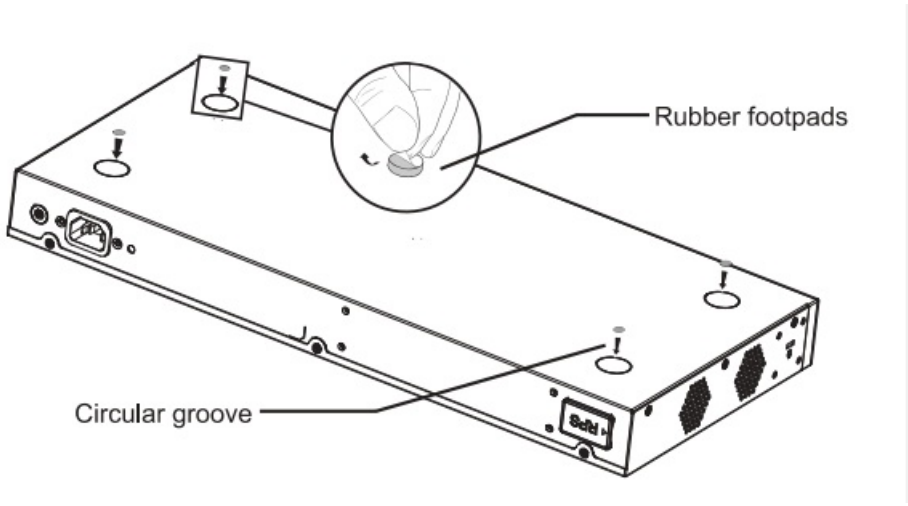
Connect to Console Port (USB)

Notes:

1. To connect, the steps order (1 -> 2) must be respected.
2. To disconnect, the steps order is reversed (2 -> 1).

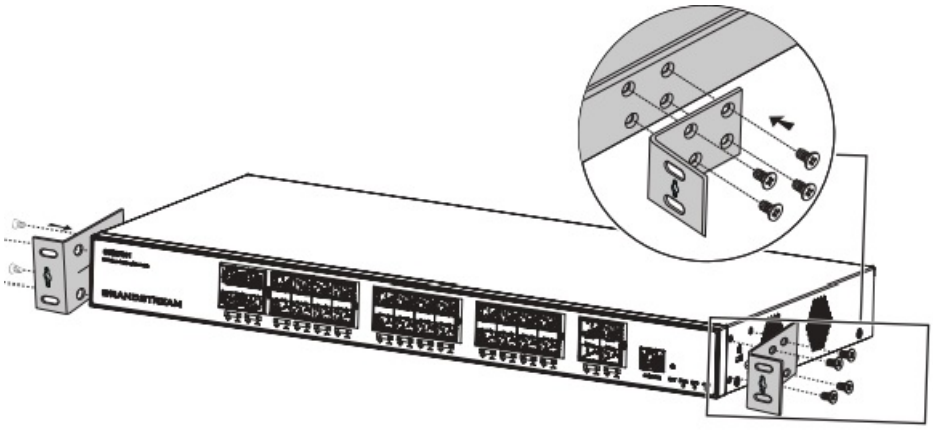
INSTALLATION

Install on the Desktop

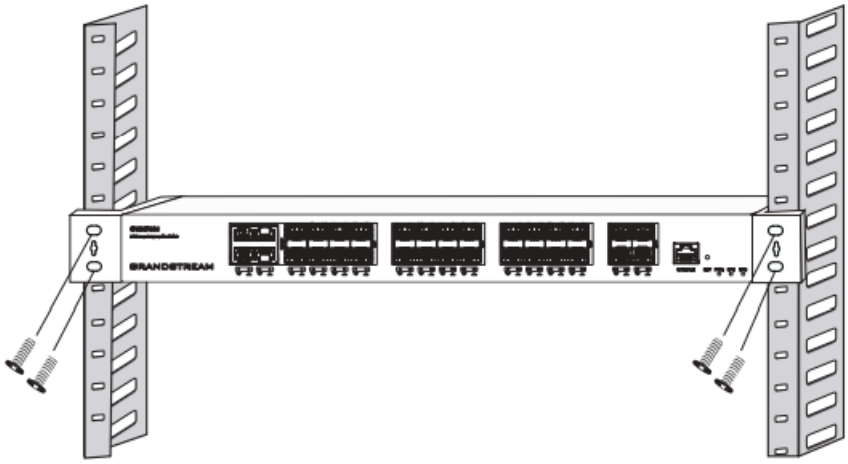


1. Place the bottom of switch on a sufficiently large and stable table.
2. Peel off the rubber protective paper of the four footpads one by one, and stick them in the corresponding circular grooves at the four corners of the bottom of the case.
3. Flip the switch over and place it smoothly on the table.

Install on a 19″ Standard Rack

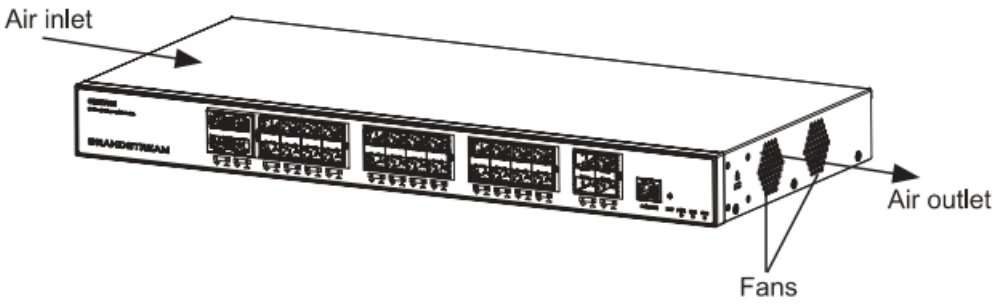


1. Check the grounding and stability of the rack.
2. Install the two L-shaped rack mounting in the accessories on both sides of switch, and fix them with the screws provided (KM 3*6).
3. Place the switch in a proper position in the rack and support it by the bracket.
4. Fix the L-shaped rack-mounting to the guide grooves at both ends of the rack with screws (prepared by yourself) to ensure that the switch is stable and horizontally installed on the rack.



Note
To avoid high temperatures and keep the device cool, sufficient space should be left around the switch for heat dissipation. The air inlet of the switch cannot face or be close to the air outlet of other devices.

ACCESS & CONFIGURE



Note: If no DHCP server is available, the GWN7831 default IP address is 192.168.0.254.

Method 1: Login using the Web UI

1. A PC uses a network cable to correctly connect any RJ45 port of the switch.
2. Set the Ethernet (or local connection) IP address of the PC to 192.168.0.x (“x” is any value between 1-253), and the subnet mask to 255.255.255.0, so that it is in the same network segment with switch IP address. If DHCP is used, this step could be skipped.
3. Type the switch’s management IP address http://<GWN7831_1P> in the browser, and enter username and password to login. (The default administrator username is “ad min” and the default random password can be found at the sticker on the GWN7831 switch) .

Method 2: Login using the Console port

1. Use the console cable to connect the console port of switch and the serial port of PC.
2. Open the terminal emulation program of PC (e.g. SecureCRT), enter the default username and password to login. (The default administrator username is “admin” and the default random password can be found at the sticker on the GWN7831 switch).

Method 3: Login Remotely using SSH/Telnet

1. Turn on the Telnet of the switch.
2. Enter “cmd’ in PC/Start.
3. Enter telnet <GWN7831_/P> in the cmd window.
4. Enter the default username and password to login. (The default administrator username is “ad min” and the default random password can be found at the sticker on the GWN7831 switch).

Method 4: Configure using GWN.Cloud / GWN Manager
Type **https://www.gwn.cloud** in the browser, and enter the account and password to login the cloud platform. If you don’t have an account, please register first or ask the administrator to assign one for you.

The GNU GPL license terms are incorporated into the device firmware and can be accessed via the Web user interface of the device at my_device_ip/gpl_license. It can also be accessed here: **https://www.grandstream.com/legal/open-source-software** To obtain a CD with GPL source code information please submit a written request to: **info@grandstream.com**
Refer to online documents and FAQ for more detailed information: **https://www.grandstream.com/our-products**

Documents / Resources

	**GRANDSTREAM GWN7831 Layer 3 Aggregation Managed Switch** [pdf] Installation Guide YZZGWN7831, gwn7831, GWN7831 Layer 3 Aggregation Managed Switch, GWN7831 Aggregation Managed Switch, Layer 3 Aggregation Managed Switch, Aggregation Managed Switch, Aggregation Switch, Managed Switch, Switch