VOLKTEK

Quick Installation Guide
9505-24GP4XS-D-I

1. Overview

This 9505-24GP4XS-D-I is a high-performance Layer 2 managed PoE switch featuring 8 x 10/100/1000 Mbps bt PoE++ ports, 16 x 10/100/1000 Mbps at/af PoE+ and 4 x 10G SFP+ uplink fiber slots, providing flexible support for both copper and fiber network architectures. With a robust PoE budget, it can deliver up to 90W on the btPoE ports, enabling reliable power and data transmission for high-power devices such as Wi-Fi 6/7 access points, PTZ cameras, LED displays, and IoT gateways. Equipped with a comprehensive suite of Layer 2 features – including VLAN segmentation, Link Aggregation, Spanning Tree Protocol, QoS traffic prioritization, IGMP Snooping, and ACL access control – this switch helps optimize bandwidth utilization, enhance data transmission efficiency, and ensure the quality and security of critical applications.

With high switching capacity and wire-speed forwarding architecture, it delivers stable, low-latency performance even under heavy multi-user traffic loads, making it ideal for real-time video streaming, large file transfers, and mission-critical business systems. Offering multiple management interfaces, including a user-friendly Web GUI, command line interface (CLI), and standard SNMP protocol support, the switch allows IT administrators to choose their preferred management method. It also supports remote firmware upgrades, configuration backup, and restore, ensuring rapid deployment and easy maintenance. The unit features a durable metal housing and efficient thermal design, ensuring reliable 24/7 operation. Its rack-mountable form factor saves valuable cabinet space and simplifies centralized network management. With advanced btPoE capability, it provides a future-proof solution for powering next-generation devices in enterprise, campus, surveillance, and smart city networks.

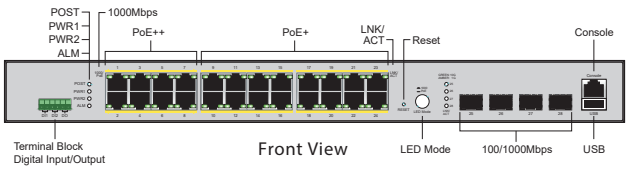
2. Package Checklist

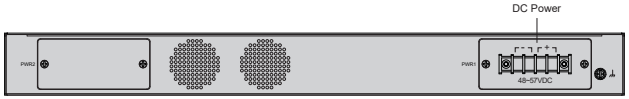
The switch is shipped with the following items*.
If any of these are missing or damaged, please contact your customer service representative for assistance.

- The Switch x 1
- Quick Installation Guide x 1
- Rack-Mount Kit x 1
- Console Cable x 1
- Rubber Foot x 4

* Visit our product webpage to locate your model and download the user manual.
* Contents of the package can be adjusted based on customer demand.

Panel view





9505-24GP4XS-D-I Back View

3. Mounting and Dismounting to Rack

ATTENTION:
The switch is an open type device and shall be Rack mounted in 19" cabinet and the ambient temperature should not exceed the operating temperature.

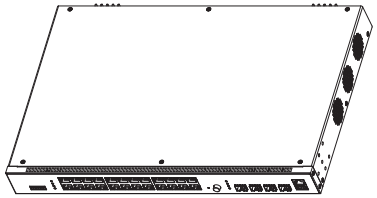
ATTENTION:
Le commutateur est un appareil de type ouvert et doit être monté dans une armoire rack de 19 pouces. La température ambiante ne doit pas dépasser la température maximale de fonctionnement.

Mounting the switch

Attach brackets to each side of the switch and place the brackets in the rack's slots. Insert and tighten screws to securely attach the bracket to the rack on each side.

Dismounting the switch

Loosen the screws attach the bracket to the rack on each side.



ATTENTION:
When installing, make sure to allow for enough space between devices to properly install the cabling. And provide ample space for air flow.

ATTENTION:
Lors de l'installation, veillez à laisser suffisamment d'espace entre les appareils pour permettre une installation correcte du câblage. Prévoyez également un espace suffisant pour assurer une bonne circulation de l'air.

4. Wiring Requirements

The Switch is capable of connecting up to 24 network devices on RJ45 ports and 4 x 10G SFP+ fiber uplink connections at Fast Ethernet, Gigabit Ethernet, or 10 Gigabit Ethernet speeds.

WARNING:
Safety measures should be taken before connecting the power cable. Turn off the power before connecting modules or wires. The correct power supply voltage is listed on the product label. Check the voltage of your power source to make sure that you are using the correct voltage. DO NOT use a voltage greater than what is specified on the product label. Calculate the maximum possible current in each power wire and common wire. Observe all electrical codes dictating the maximum current allowable for each wire size. If current exceeds the maximum rating, the wiring can overheat causing serious damage to your equipment.

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Please read and follow these guidelines:

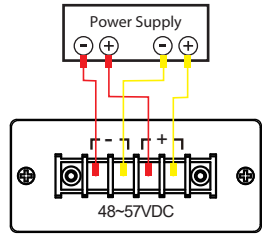
- Use separate paths to route wiring for power and devices. If power wiring and device wiring paths must cross make sure the wires are perpendicular at the intersection point.
  Note: Do not run signal or communications wiring and power wiring through the same wire conduit. To avoid interference, wires with different signal characteristics should be routed separately.
- You can use the type of signal transmitted through a wire to determine which wires should be kept separate. The rule of thumb is that wiring that shares similar electrical characteristics can be bundled together.
- You should separate input wiring from output wiring
- We advise that you label the wiring to all devices in the system.

4.1 Wiring Power Input

The Switch requires a DC power supply of 48~57V DC. Total system PoE power budget is **685W @ 70°C**.

- **btPoE Ports (1-8)**: Divided into two groups (Ports 1-4, Ports 5-8). Each group supports a maximum of 240W.
- **at/af PoE Ports (9-24)**: Powered by the remaining system budget.

Note: The voltage provided by the two power inputs on the backside panel must be equal or not differ by more than 1V.



To install the power supply, follow the instructions below:
1. Use crosshead screwdriver to loosen the wire-clamp screws.
2. Insert the negative/positive DC wires into the -/+ terminals, respectively.
3. Tighten the wire-clamp screws to prevent the wires from loosening.

ATTENTION:
Please use 10~14 AWG for power cables.

ATTENTION:
Veuillez utiliser des câbles d'alimentation de calibre 10 à 14 AWG.

4.2 Installing the SFP/SFP+ modules and Fiber cables

1. Slide the selected SFP/SFP+ module into the selected SFP/SFP+ slot (Make sure the SFP/SFP+ module is aligned correctly with the inside of the slot).
2. Insert and slide the module into the SFP/SFP+ slot until it clicks into place.
3. Remove any rubber plugs that may be present in the SFP/SFP+ module's mouth.
4. Align the fiber cable's connector with the SFP/SFP+ module's mouth and insert the connector.
5. Slide the connector in until a click is heard.
6. If you want to pull the connector out, first push down the release clip on top of the connector to release the connector from the SFP/SFP+ module.

To properly connect fiber cabling: Check that the fiber terminators are clean. You can clean the cable plugs by wiping them gently with a clean tissue or cotton ball moistened with a little ethanol. Dirty fiber terminators on fiber optic cables will impair the quality of the light transmitted through the cable and lead to degraded performance on the port.

Note:
When inserting the cable, be sure the tab on the plug clicks into position to ensure that it is properly seated.

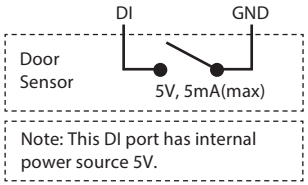
Check the corresponding port LED on the Switch to be sure that the connection is valid. (Refer to the LED chart).

4.3.1 Digital input

Digital input signals are used to represent items that only have two (2) states, such as...ON (binary 0) or OFF (binary 1) states. So, a digital signal is something like telling if a door is open or not.

Action
ON(0)=OPEN(0)
OFF(1)=CLOSE(1)
Maximum Voltage : 5V
Maximum Current : 5mA

Door Sensor Status	Action
Open	ON(O)
Short	OFF(1)



Note: This DI port has internal power source 5V.

4.3.2 Digital output

The Digital Output port is used to send signals to external devices when the Digital Input of the switch triggers specific operations.

Note:
This model use relay component to implement DO function and it's specification is 24V / 1A.

5. LED Indicators

PWR1 (Green)	Illuminated	Primary Power on
	Off	Primary Power off or failure
PWR2 (Green) (If Applicable)	Illuminated	Redundant power on
	Off	Redundant power off or failure
POST (Green)	Illuminated	Switch is ready or running
	Blinking	Self-testing the device when power on
	Off	Switch is not ready
ALM (Red)	Illuminated	Alarm triggered for abnormal power status or anomalous features.
	Off	Normal operation

1000/PoE (Green) 1~24th RJ45 port	Illuminated	1000 mode: Link speed at 1000Mbps
		PoE mode: PoE power is delivered to powered device (PD)
	Off	1000 mode: Link speed at 10/100Mbps
		PoE mode: PoE power feeding is off or not supplied
LNK/ACT (Green) 1~24th RJ45 ports	Illuminated	Port link-up
	Blinking	Activity (receiving or transmitting data)
	Off	Port disconnected or link failed
LNK/ACT (Green/Amber) 25~28th fiber port	Illuminated (Green)	Ethernet link-up at 10Gbps
	Illuminated (Amber)	Ethernet link-up at 1Gbps
	Blinking	Activity (receiving or transmitting data)
	Off	Port disconnected or link failed

6. Environmental Limits

Operating Temperature	-40°C~70°C (40°F~158°F)
Storage Temperature	-40°C~85°C (-40°F~185°F)
Ambient Relative Humidity	5~95% (non-condensing)

ATTENTION:
This device complies with Part 15 of the FCC rules. Operation is subject to the following conditions:
1. This device may not cause harmful interference.
2. This device must accept any interference received including interference that may cause undesired operation.

ATTENTION:
Cet appareil est conforme à la partie 15 des règles de la FCC. Son fonctionnement est soumis aux deux conditions suivantes :
1. Cet appareil ne doit pas provoquer d'interférences nuisibles.
2. Cet appareil doit accepter toute interférence reçue, y compris les interférences susceptibles de provoquer un fonctionnement indésirable.

ATTENTION:
If the equipment is used in a manner not specified by Volktek, the protection provided by the equipment may be impaired.

ATTENTION:
Si l'équipement est utilisé d'une manière non spécifiée par Volktek, la protection qu'il assure peut être compromise.

7. Configuration

Connect through Web Browser:

- Connect your computer to one of the Ethernet ports.
- Use the default IP-address 192.168.0.254 to login to the switch.

Default Username	admin
Default Password	admin

Note:
For more details on configuration please refer manual of the switch.

Connect through Console Port:

- Connect your computer to the console port on the Switch using the appropriate cable.
- Use terminal emulation software with the following settings:

Default Settings for the Console Port

Setting	Default Value
Terminal Emulation	VT100
Baud Rate	115200
Parity	None
Number of Data Bits	8
Number of Stop Bits	1
Flow Control	None

- Press [ENTER] to open the login screen.

Setting	Default Value
Default Username	admin
Default Password	admin

LIMITED WARRANTY

VOLKTEK Corporation warrants this product against defect in materials and workmanship for a period of FIVE (5) YEARS to the original purchaser.

If you discover a defect, VOLKTEK will, at its sole option, repair or replace the product at no additional charge, provided that you contact VOLKTEK technical support to obtain a Return Merchandise Authorization Number (RMA) and instruction on how and where repairs can be made. This warranty does not apply if the product has been damaged by accident, abuse, misuse, misapplication, neglect, fire, water, lightning or other acts of nature, failure to follow supplied instructions, installation or removal, have been repaired or have undergone attempted repair by unauthorized personnel without written consent from VOLKTEK, modified, defaced, or has its serial numbers removed. VOLKTEK reserves the right to use remanufactured, refurbished, or used parts and components in making warranty repairs.

All expressed or implied warranties for this product, including the implied warranties of merchantability and fitness for a particular purpose are limited in duration to the warranty period. No warranties expressed or implied will applied after this period. VOLKTEK shall not be liable for lost profits, damage to other property caused by any defects of this product, or damages based upon inconvenience, loss of product use, loss of time, commercial use, incidental and/or consequential damages for the breach of any expressed or implied warranty, including damages to property, and to the extent permitted by law, damages for personal injury, even if VOLKTEK has been advised of the responsibilities of such damages.

If you have any further questions, please contact Customer Support:

Address of the manufacturer.

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