VOLKTEK

Quick Installation Guide
SEN-9425P-24V-SS
SEN-9425P-24V-RW

1. Overview

The SEN-9425P-24V-RW and SEN-9425P-24V-SS Unmanaged PoE+ Ethernet Switches are specially designed to expand reliable Ethernet connectivity to Railway (RW) and Substation (SS) applications and outdoor environments with extreme temperature and climatic conditions. In the following contents, the SEN-9425P-24V-RW/SS stands for SEN-9425P-24V-RW and SEN-9425P-24V-SS.

SEN-9425P-24V-RW/SS is equipped with 4x10/100/1000Base-T PoE+ ports & 1x10/100/1000Base-T & 2 Gigabit SFP slots enclosed in IP30 housing.

PoE Specification of SEN-9425P-24V-RW/SS

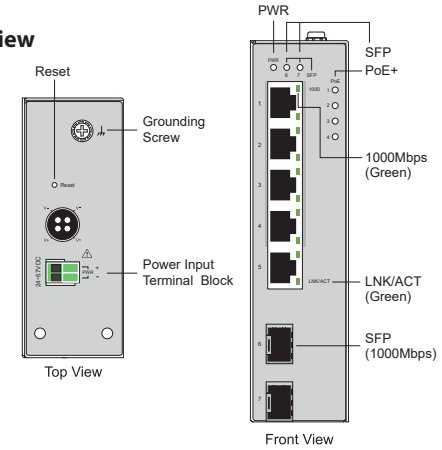
SEN-9425P-24V-RW/SS supports the PoE function. There are four ports which can support PoE+ PSE mode. Each PoE port can provide up to 30Watt. The total PoE power budget of switch is 120Watt.

2. Package Checklist

Before installing SEN-9425P-24V-RW/SS verify the package contains the following:

- SEN-9425P-24V-RW or SEN-9425P-24V-SS Switch x 1
- DIN Rail Kit x 1
- Quick Installation Guide x 1

Panel view



3. Mounting and Dismounting to DIN-Rail

ATTENTION:
The SEN-9425P-24V-RW/SS is an open type device and SEN-9425P-24V-RW/SS shall be DIN-Rail mounted or wall mounted (optional) in cabinet or enclosure and the ambient temperature should not exceed 70°C for SEN-9425P-24V-SS and should not exceed 75°C for SEN-9425P-24V-RW

CAUTION:
HOT surface do not touch. Wear protective equipment before coming into contact.

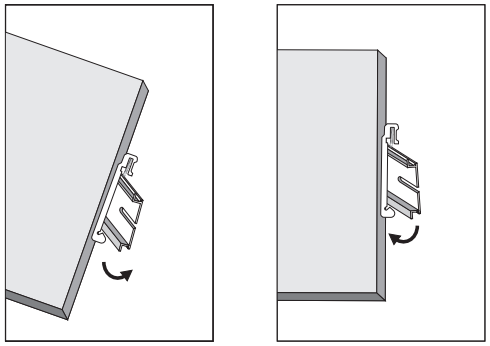
MISE EN GARDE
Surface chaude, ne pas toucher. Portez un équipement de protection avant d'entrer en contact.

Mounting the switch

Place the SEN-9425P-24V-RW/SS on the DIN rail from above using the slot, push the front of the switch toward the mounting surface until it snaps into place with a click sound.

Dismounting the switch

Press the switch from top and pull out the lower edge of the switch and then remove the switch from the DIN rail.



Mounting the Switch Removing the Switch

ATTENTION:
A corrosion-free mounting rail is advisable.
When installing, make sure to allow for enough space between devices to properly install the cabling. And provide ample space for air flow.

4. Grounding the switch SEN-9425P-24V-RW/SS

Grounding and wire routing help limit the effects of noise due to electromagnetic interference (EMI). Run the ground connection from the ground screw to the grounding surface prior to connecting devices.

ATTENTION:
This product is intended to be mounted to a well-grounded mounting surface such as a metal panel.

5. Wiring requirements

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.

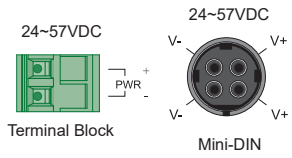
Please read and follow these guidelines:

- 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.

5.1 Wiring Power Input

You can use "PWR" Power Input Terminal Block or 4-Pin mini-DIN connector for Power input
Top view of Terminal Block and 4-Pin mini-DIN connector is shown in the figure below:



CAUTION
- Use copper conductors only
- Wiring cable maximum temperature should not exceed 105˚C
- Tighten the wire to a torque value 4.5lb.in.
- The wire gauge for the terminal block should range between 12~18 AWG

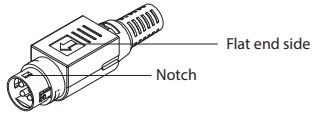
MISE EN GARDE
- Utilisez uniquement des conducteurs en cuivre
- La température maximale du câble ne doit pas dépasser 105˚C
- Serrez le fil à un couple de 4,5 lb.in.
- Le calibre de fil du bornier doit être compris entre 12 et 18 AWG

Connecting to Terminal block:

To insert power wire and connect the 24~57VDC at a maximum of 6A DC power to the power terminal block, follow the steps below:

- Use flat-head screw driver to loosen the wire-clamp screws
- Insert the negative/positive DC wires into the PWR-/PWR+ terminals, respectively
- Tighten the wire-clamp screws to prevent the wires from loosening

Connecting to 4-pin mini DIN connector:



- Face the flat end to the right side of the switch and insert in to female 4-pin receiver. Note the notch is inserted properly into female receiver.
- While removing pull it up-wards to release the lock and take it out.

ATTENTION
Please use a power supply from 24~57VDC, the device power shall be supplied by SELV circuit.

5.2 Cabling RJ45

Connect one end of an Ethernet/RJ45 cable into Ethernet port of SEN-9425P-24V-RW/SS and other end to attached networking device.

- Ports 1-5 of the switch support Fast Ethernet as well as Gigabit Ethernet (10/100/1000Base-T PSE Ports)
- 6-7 Port of the switch supports 100FX/Gigabit speed
- All the RJ45 ports on the SEN-9425P-24V-RW/SS support auto negotiation and auto MDI/MDI-X to eliminate the need for crossover cabling.

6. LED Indicators

PWR	Illuminated	Power supply(24-57VDC) is available from power adapter or terminal block
	Off	Power off
SFP (6~7port)	Illuminated	Ethernet link-up
	Blinking	Activity (receiving or transmitting data)
	Off	Port disconnected or link failed
PoE (1~4port)	Illuminated	PoE power is delivered to the PD device
	Off	No outgoing PoE power
1000 (Mbps)	Illuminated	Copper ports communicate at 1000Mbps speed
	Off	Copper ports communicate at 10/100Mbps speed
LNK/ACT	Illuminated	Ethernet link-up
	Blinking	Activity(receiving or transmitting data)
	Off	Port disconnected or link failed

7. Environmental limits

Operating Temperature	-40˚C~75˚C : SEN-9425P-24V-SS -40˚C~75˚C : SEN-9425P-24V-RW
Storage Temperature	-40˚C~85˚C
Altitude	Up to 2000m
Ambient relative humidity	5 to 95% (non-condensing)
UL61010	Indoor use and pollution degree 2 for SEN-9425P-24V-SS

Note:
- *SEN-9425P-24V-SS's highest degree of temperature operation certified by UL is -40°C~70°C (-40°F~158°F).*
- *Two Switchs must be installed at least 50 mm apart.*

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

8. 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.

Volktek Corporation,
4F, 192 Liancheng Rd, Zhonghe,
New Taipei 23553, Taiwan

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