VOLKTEK

Quick Installation Guide
SEN-8428PL Series

1. Overview

The SEN-8428PL Lite-Managed PoE+ Switch Series is designed for semi-harsh environments to withstand vibration, shock, free fall, and power surges. The switch is easy to set up and supports the critical software features required in security systems. The switch is equipped with 8 x 10/100/1000 Mbps PoE+ downlink ports and 2-port FX/GbE multi-rate SFP uplink. This switch provides a total PoE power budget of 240 W, with up to 30 W available per PoE port.

2. Package Checklist

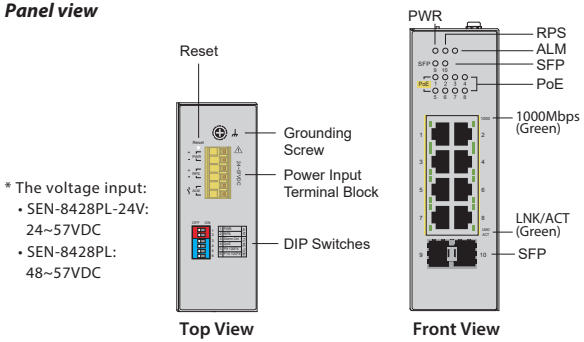
The switch is shipped with the following items*.
If any of these are missing or damaged, please contact your customer service representative for assistance.

- The Switch x 1
- DIN-Rail kit x 1
- Quick Installation Guide x 1

* 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



3. Mounting and Dismounting to DIN-Rail

ATTENTION:
The Switch is an open type device and shall be DIN-Rail mounted or wall mounted (optional) in the cabinet and the ambient temperature should not exceed the operating temperature.

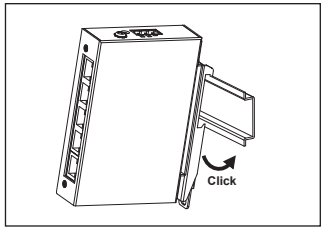
ATTENTION:
Le commutateur est un appareil de type ouvert et doit être monté sur rail DIN ou fixé au mur (en option) dans l'armoire et la température ambiante ne doit pas dépasser la température de fonctionnement.

Mounting the switch

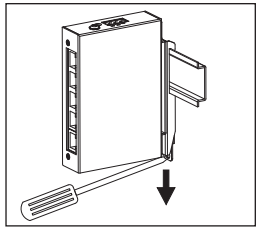
Place the switch on the DIN rail from above using the slot and push the front of the switch toward the mounting surface until it snaps into place with a click sound.

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 Firewall (illustration)



Removing the Firewall (illustration)

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.

ATTENTION:
Un rail de montage sans corrosion est recommandé.
Lors de l'installation, assurez-vous de laisser suffisamment d'espace entre les appareils pour installer correctement le câblage. Et offrez suffisamment d'espace pour la circulation de l'air.

4. Grounding the Switch

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.

ATTENTION:
Ce produit est destiné à être monté sur une surface de montage bien mise à la terre telle qu'un panneau métallique.

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.

AVERTISSEMENT:
Des mesures de sécurité doivent être prises avant de brancher le câble d'alimentation. Coupez l'alimentation avant de connecter des modules ou des fils. La tension d'alimentation correcte est indiquée sur l'étiquette du produit. Vérifiez la tension de votre source d'alimentation pour vous assurer que vous utilisez la bonne tension. NE PAS utiliser une tension supérieure à celle indiquée sur PAS utiliser une tension supérieure à celle indiquée sur l'étiquette du produit. Calculez le courant maximum possible dans chaque fil d'alimentation et fil commun. Respectez tous les codes électriques dictant le courant maximum autorisé pour chaque taille de fil. Si le courant dépasse la valeur nominale maximale, le câblage peut surchauffer et endommager gravement votre équipement.

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.

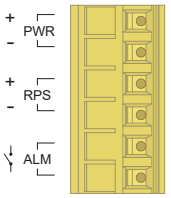
5.1 Wiring Power Input

5.1.1 The Switch with terminal block

You can use "PWR" for Primary Power input and "RPS" for Redundant Power Input. Check the polarity while connecting.

- SEN-8428PL-24V: 24~57VDC
- SEN-8428PL: 48~57VDC

Top view of Terminal Block is shown on the right:



Terminal Block

Caution:
- Use copper conductors only
- Wiring cable temperature should support at least 105˚C
- The wire gauge for the terminal block should range between 12~18 AWG

ATTENTION:
- Utilisez uniquement des conducteurs en cuivre
- La température du câble de câblage doit supporter au moins 105 °C
- Le calibre du fil pour le bornier doit être compris entre 12 et 18 AWG

To insert power wire and connect the specified voltage and maximum electric current to the terminal block, follow the steps below:
1. Use a flat-head screwdriver to push in and open the wire clamp.

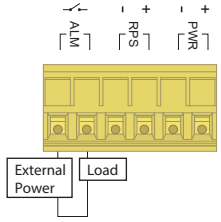
2. Insert the negative/positive DC wires into the (- / +) terminals, respectively as shown on the label.
3. Tighten the wire-clamp by releasing the screwdriver to prevent the wires from loosening.

ATTENTION:
Please use a power supply from 24~57VDC (SEN-8428PL-24V) / 48~57VDC (SEN-8428PL), 6A (DC) maximum. The device power shall be supplied by SELV circuit.

ATTENTION:
Veuillez utiliser une alimentation de 24~57VDC (SEN-8428PL-24V) / 48~57VDC (SEN-8428PL), 6A (DC) maximum. L'alimentation de l'appareil doit être fournie par un circuit SELV.

NOTE: We strongly request that each Industrial PoE switch to connect to individual power supply. Please don't use one power supply to two or more PoE switches at a time.

5.2 Wiring the relay contact (ALM)



Relay rating: 24V, 1A

The switch has one set of relay alarm output. This relay contact uses two contacts of the terminal block on the switch top panel. The two contacts of the terminal block connector are used to detect user-configured events. The two wires attached to the fault contacts form an open circuit when a user-configured event is triggered. If a user-configured event does not occur, the fault circuit remains closed.

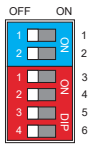
5.3 Cabling RJ45

Connect one end of an Ethernet/RJ45 cable into the Ethernet port of the switch and the other end to the attached networking device.

- Ports 1-8 support 10/100/1000Mbps speeds.
- Ports 9-10 support 100FX/Gigabit speeds.
- All the RJ45 ports on the switch support auto-negotiation and auto MDI/MDI-X to eliminate the need for crossover cabling.

* Category 5e cable or above should be used.

6. DIP Switch Setting



1	PWR	ON: Primary power alarm reporting is enabled
2	RPS	OFF: Redundant power alarm reporting is disabled
3	Storm	ON: Broadcast storm control is enabled
		OFF: Broadcast storm control is disabled
4	QoS	ON: Port Priority is enabled
		OFF: Port Priority is disabled
5	P9 ~ P10	ON: Port 9~10 100FX support is enabled
6		OFF: Port 9~10 100FX support is disabled

7. LED Indicators

PWR (Green)	Illuminated	Primary power on
	Off	Primary power off or failure
RPS (Green)	Illuminated	Redundant power on
	Off	Redundant power off or failure
ALM (Red)	Illuminated	Alarm triggered for abnormal power status and anomalous features.
	Off	Normal operation or DIP switch OFF
PoE (Green) (1~8th RJ45 port)	Illuminated	Supplying power to powered device (PD)
	Off	PoE power feeding is off or not supplied
1000 (Green) (1~8th RJ45 port)	Illuminated	Link speed at 1000Mbps
	Off	Link speed at 10/100Mbps
LNK/ACT (Green) (1~8th RJ45 port)	Illuminated	Port link-up
	Blinking	Activity (receiving or transmitting data)
	Off	Port disconnected or link failed
SFP (Green) (9~10th Fiber port)	Illuminated	Port link-up
	Blinking	Activity (receiving or transmitting data)
	Off	Port disconnected or link failed

8. Environmental limits

Operating Temperature	-10°C~60°C (14°F~140°F)
Storage Temperature	-40°C~85°C (-40°F~185°F)
Ambient relative humidity	5 to 95% (non condensing)

NOTE:
- *The highest degree of temperature operation certified by UL is -10˚C~60˚C (14°F~140°F).*
- *Two switches 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:
Cet appareil est conforme à la partie 15 des règles de la FCC.
Le fonctionnement est soumis aux conditions suivantes :
1. Cet appareil ne doit pas causer 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 the 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 fournie par l'équipement peut être altérée.

ATTENTION:
Please leave at least 5cm of space at the left and right of the unit for ventilation.

ATTENTION:
Veuillez laisser au moins 5 cm d'espace à gauche et à droite de l'unité pour la ventilation.

9. 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 user manual.

LIMITED WARRANTY

VOLKTEK Corporation warrants this product against defect in materials and workmanship for a period of THREE (3) 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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