VOLKTEK

IEN-8428P QIG

1. Overview

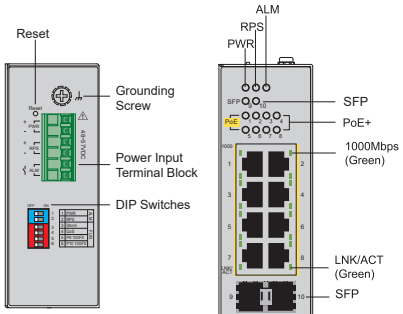
IEN-8428P is equipped with eight 10/100/1000Base-T ports plus two 100/1000Base-SX/LX SFP slots. IEN-8428P is a scalable, cost-effective and future-proof industrial grade unmanaged PoE+ switch. IEN-8428P is a full Gigabit Ethernet switch supporting IEEE 802.3at/802.3af on ports 1 to 8, i.e. it transmits both power and data over a single Ethernet cable for PoE appliances and devices. It provides a total PoE power budget of 240 W, with up to 30 W available per PoE port for IEEE 802.3at PoE+ devices. The switch operates in a wide temperature range from -40°C to 75°C, making it robust enough to suit virtually any factory environment.

2. Package Checklist

Open the package of the IEN-8428P and carefully unpack it. Check the contents of the package for the following items*:

- IEN-8428P Switch x 1
- DIN-Rail kit x 1
- Quick Installation Guide x 1

* Contents of the package can be adjusted based on customer demand.



3. Mounting and Dismounting to DIN-Rail

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

ATTENTION :
L'interrupteur est un dispositif ouvert et doit être monté sur rail DIN dans l'armoire. La température ambiante ne doit pas dépasser la température de fonctionnement.

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

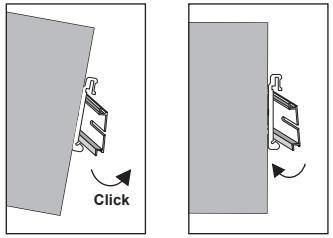
MISE EN GARDE
Surface chaude, ne pas toucher. Portez un équipement de protection avant d'entrer en contact.

Mounting the switch

Place the switch 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.

ATTENTION :
Il est recommandé d'utiliser un rail de montage résistant à la corrosion. Lors de l'installation, veillez à laisser suffisamment d'espace entre les appareils pour permettre le bon passage du câblage. Assurez-vous également d'avoir 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 conçu pour être monté sur une surface de montage correctement 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:
Prenez des mesures de sécurité avant de brancher le câble d'alimentation. Coupez l'alimentation avant de connecter des modules ou des câbles. 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 tension correcte. N'utilisez PAS une tension supérieure à celle indiquée sur l'étiquette du produit. Calculez l'intensité maximale possible dans chaque fil d'alimentation et fil commun. Respectez tous les codes électriques qui imposent l'intensité maximale autorisée pour chaque section de fil. Si l'intensité dépasse la valeur nominale maximale, le câblage peut surchauffer et endommager gravement votre équipement.

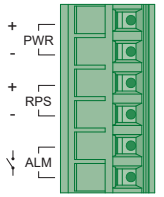
Please read and follow these guidelines:

- 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

You can use "PWR" for Primary Power input and "RPS" for Redundant Power Input.

Top view of Terminal Block is shown in the figure below:



Terminal Block

Caution:

- Use copper conductors only
- To use wiring cable with rated temperature at least **105°C**
- Tighten the wire to a torque value **5lb**
- The wire gauge for the terminal block should range between **12~18 AWG**

MISE EN GARDE:

- Utilisez uniquement des conducteurs en cuivre
- Utiliser un câble avec une température nominale d'au moins **105°C**
- Serrer le fil à une valeur de couple de **5lb**
- Le calibre de fil du bornier doit être compris entre **12 et 18 AWG**

To insert power wire and connect the 48~57VDCat a maximum of 6A DC power to the power terminal block, follow the steps below:

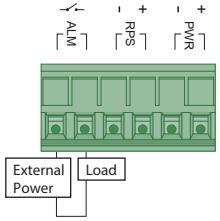
- Use flat-head screw driver to loosen the wire-clamp screws
- Insert the negative/positive DC wires into the PWR-/PWR+ terminals, respectively
- Tighten the wire-clamp screws to prevent the wires from loosening

ATTENTION:
Please use a power supply from 48~57VDC, 6A maximum. The power device shall be supplied by SELV circuit.

ATTENTION:
Veuillez utiliser une alimentation de 48 à 57 VCC, 6A maximum. L'appareil doit être alimenté par un circuit SELV.

NOTE: We strongly request that each Industrial PoE switch connects to an individual power supply. Please don't connect 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.

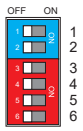
5.3 Cabling RJ45

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

- Ports 1-8 of the switch support Fast Ethernet as well as Gigabit Ethernet (10/100/1000Base-T PSE Ports)
- 9-10 Port of the switch supports 100FX/Gigabit speed
- 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 & Reset Button



PWR	ON: Primary power alarm reporting is enabled
	OFF: Primary power alarm reporting is disabled
RPS	ON: Redundant power alarm reporting is enabled
	OFF: Redundant power alarm reporting is disabled
Storm	ON: Broadcast/DLF storm control is enabled
	OFF: Broadcast/DLF storm control is disabled
QoS	ON: Port-based QoS enabled on P1&P2
	OFF: 802.1p QoS enabled (default)

P9 100FX	ON: Port 9 link speed is set to 100Base-FX
	OFF: Port 9 link speed is set to 1000Base-SX/LX
P10 100FX	ON: Port 10 link speed is set to 100Base-FX
	OFF: Port 10 link speed is set to 1000Base-SX/LX

7. LED Indicators

PWR (Green)	Illuminated	Primary Power is connected
	Off	Primary Power failure or not available
RPS (Green)	Illuminated	Redundant Power is connected
	Off	Redundant Power failure or not available
ALM (Red)	Illuminated	Alarm for no Primary power or Low I/P voltage
	Off	No alarm to report or DIP function is disabled
PoE 1st~8th port (Green)	Illuminated	PoE power is delivered to powered device (PD)
	Off	PoE power feeding doesn't function
1000 (Green)	Illuminated	Link on 1000Mbps
	Off	Link on 100Mbps or 10Mbps
LNK/ACT (Green)	Illuminated	Ethernet port link-up
	Blinking	Data is transmitting / receiving
	Off	Port disconnected or link failed
SFP (Green)	Illuminated	Data is transmitting / Receiving
	Off	Port disconnected or link failed

8. Environmental limits

Operating Temperature	-40˚C~75˚C (-40°F~167°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 -40˚C~75˚C (-40°F~167°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 :
Cet appareil est conforme à la partie 15 de la réglementation FCC.
Son utilisation est soumise aux conditions suivantes :

1. Cet appareil ne doit pas provoquer d'interférences nuisibles.

2. Cet appareil doit tolérer toute interférence reçue, y compris celles pouvant entraîner 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 offerte 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'appareil pour la ventilation.

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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