VOLKTEK

Quick Installation Guide
7160-7GP1GT-24V-I

1. Overview

The 7160-7GP1GT-24V-I series is an unmanaged PoE+ switch, which is equipped with eight 10/100/1000BASE-T ports. It's a very cost-effective, and future-proof industrial-grade switch. The 7160-7GP1GT-24V-I series is a full Gigabit Ethernet switch supporting IEEE 802.3at/802.3af on ports 1 to 7. It is classified as power source equipment (PSE), provides up to 30 watts per specific port, and reduces the effort needed to install power. The switch can be used to power IEEE 802.3at/af standard powered devices (PD) and provide an economical high-bandwidth solution for your industrial Ethernet network. The 7160-7GP1GT-24V-I series supports a wide range of power inputs. It means it can support PoE operation in different field applications.

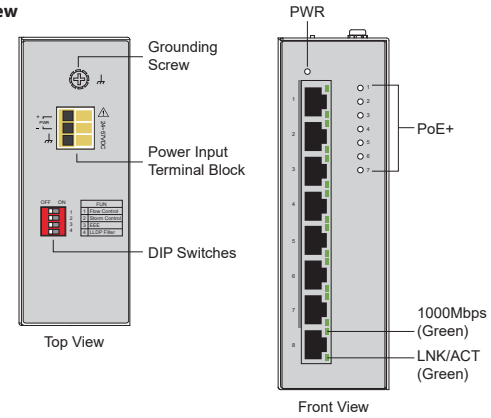
2. Package Checklist

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

* 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.

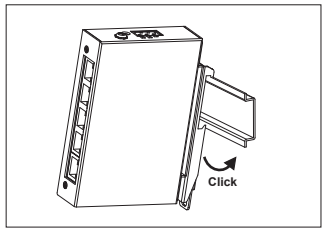
ATTENTION:
Le commutateur est un appareil de type ouvert et doit être monté sur rail DIN ou fixé au mur (en option) dans l'armoire et la température ambiante ne doit pas dépasser la température de fonctionnement.

Mounting the Switch

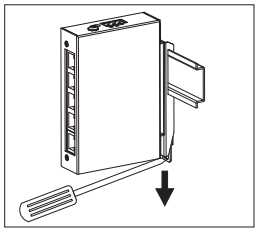
Place the switch on the DIN-Rail from above using the slot, push the front of the switch toward the mounting surface until it snaps into place with a click sound.

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 (illustration)



Removing the Switch (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 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.

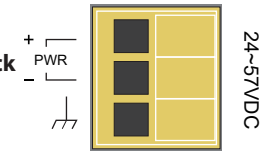
Please read and follow these guidelines:

- 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

The switch with 3 terminal block

You can use "PWR" for Power input
Top view of Terminal Block is shown in the figure below:



Terminal Block

Caution:
- Use copper conductors only
- Wiring cable temperature should support at least 105˚C
- Tighten the wire to a torque value 5lb
- The wire gauge for the terminal block should range between 12~18AWG

ATTENTION:
- Utilisez uniquement des conducteurs en cuivre
- La température du câble de câblage doit supporter au moins 105°C
- Serrer le fil à une valeur de couple de 5lb
- Le calibre du fil pour le bornier doit être compris entre 12 et 18 AWG

To insert power wire and connect the specied voltage and maximum electric current to the terminal block, follow the steps below:

1. Use a at-head screwdriver to loosen the wire-clamp screws.
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, 6A (DC) maximum. The device power shall be supplied by SELV circuit.

ATTENTION:
Veuillez utiliser une alimentation de 24~57VDC, 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.

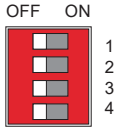
5.2 Cabling RJ45

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

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

Note: Category 5e cable or above should be used.

6. DIP Switch Setting & Reset Button



Flow Ctrl	ON: Enable Flow Control function
	OFF: Disable Flow Control function
Storm Ctrl	ON: Enable Storm Control function
	OFF: Disable Storm Control function

EEE	ON: Enable IEEE 802.3az function
	OFF: Disable IEEE 802.3az function
LLDP Filter	ON: Enable LLDP Filter function
	OFF: Disable LLDP Filter function

7. LED Indicators

PWR (Green)	Illuminated		Primary power on
	Off		Primary Power failure or not available
PoE 1st~7th	PoE (Green)	Illuminated	Supplying power to powered device (PD)
		Off	PoE power feeding is off or not supplied
	1000 (Green)	Illuminated	Link speed at 1000Mbps
		Off	Link speed at 10/100Mbps
	LNK/ACT (Green)	Illuminated	Port link-up
		Blinking	Activity (receiving or transmitting data)
		Off	Port disconnected, or link failed
8	1000 (Green)	Illuminated	Link speed at 1000Mbps
		Off	Link speed at 10/100Mbps
	LNK/ACT (Green)	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) (See NOTE)
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.

Limited Warranty

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