VOLKTEK

INS-8405M QIG

1. Overview

INS-8405M Unmanaged Industrial Ethernet Switch is specially designed to expand reliable Ethernet connectivity to factory floors and outdoor environments with extreme temperature and climatic conditions.
INS-8405M is equipped with 5 x 10/100/1000 RJ45 Ports enclosed in IP30 housing.

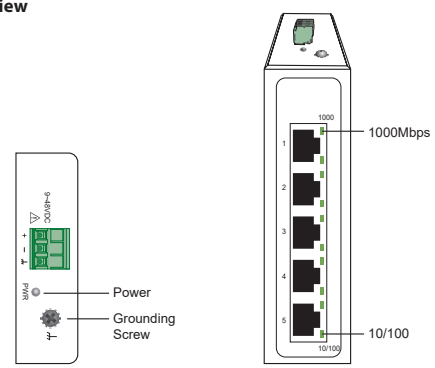
2. Package Checklist

INS-8405M is shipped with the following items*. If any of these are missing or damaged, please contact your customer service representative for assistance.

- INS-8405M 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



Top View Front View

3. Mounting and Dismounting to DIN-Rail

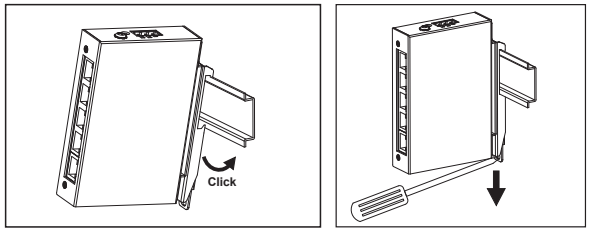
ATTENTION:
The INS-8405M ia an open type device and INS-8405M shall be DIN-Rail mounted or wall mounted (optional) in cabinet or enclosure and the ambient temperature should not exceed 75°C.

Mounting the switch

Place the INS-8405M 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

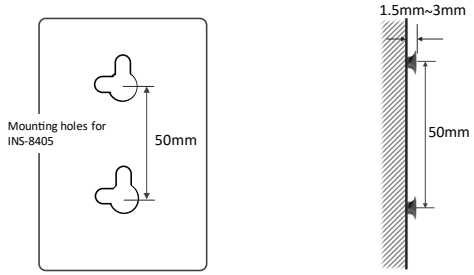
Press the switch from top and pull out the lower edge of the switch and then remove the switch from the DIN rail.



Mounting the Switch Removing the Switch

Wall-Mounted Mask of INS-8405M

Step1: Please this device by using mounting holes on the wall at the appropriate place.



Mounting holes drawing of INS-8405M Screw installation Distance

Step2: The wall-mount direction can be straight or horizontal.



Straight direction installation

horizontal direction installation
(horizontal direction is not evaluated by UL)

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 INS-8405M

Grounding and wire routing help limit the effects of noise due to electromagnetic interference (EMI).

Step 1: Run the ground connection from the ground screw to the grounding surface prior to connecting devices.

Step 2: Connect the ground connection from the terminal block to the grounding surface prior to connecting device.

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:

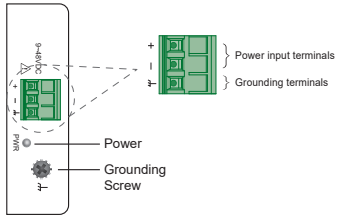
- Use separate paths to route wiring for power and devices. If power wiring and device wiring paths must cross make sure the wires are perpendicular at the intersection point.
  NOTE: Do not run signal or communications wiring and power wiring through the same wire conduit. To avoid interference, wires 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

5.1.1 INS-8405M with 3pin terminal block

Check the polarity while connecting.

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



Caution:

- Use copper conductors only
- Wiring cable temperature should support at least 105˚C
- Tighten the wire to a torque value 4.5lb.in with green connector.
- The wire gauge for the terminal block should range between 12~24 AWG with green connector, 12~22AWG with gray connector.

MISE EN GARDE:

- 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 4.5lb.in avec le connecteur vert.
- Le calibre de fil du bornier doit être compris entre 12 et 24 AWG avec un connecteur vert, 12 ~ 22 AWG avec un connecteur gris.

To insert power wire and connect the 9~48VDCat a maximum of 0.5A 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 (- / +) terminals, respectively
- Tighten the wire-clamp screws to prevent the wires from loosening

ATTENTION:
Please use a power supply from 9~48VDC, the device power shall be supplied by SELV circuit.

5.1.2 Cabling RJ45

Connect one end of an Ethernet/RJ45 cable into Ethernet port of INS-8405M 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 RJ45 Ports)
- All the RJ45 ports on the INS-8405M 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. LED Indicators

PWR (Green)	Illuminated	Power On by terminal block PWR
	Off	Terminal block PWR fails or is not available
1000 (Green)	Illuminated	Link speed at 1000Mbps
	Blinking	Data is transmitting / receiving
	Off	Link speed at 10/100Mbps or link failed
10/100 (Green)	Illuminated	Copper port link-up 10/100 Mbps
	Blinking	Data is transmitting / receiving
	Off	Link speed at 1000Mbps or link failed

7. Environmental limits

Operating Temperature	-40˚C~75˚C
Storage Temperature	-40˚C~85˚C
Altitude	Up to 2000m
Ambient relative humidity	5 to 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:
If the equipment is used in a manner not specified by the VOLKTEK, the protection provided by the equipment may be impaired.

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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