

INS-8405A

Unmanaged 5 x 10/100/1000 RJ45 Industrial Switch

Description

INS-8405A is an unmanaged industrial Gigabit Ethernet switch, with 5 auto-negotiation 10/100/1000Mbps downlink ports for expansion of Ethernet networks. This unmanaged switch can connect to different devices, including managed switches and monitoring systems.

The switch offers various in-built traffic optimization and network performance features to prioritize important industrial data packets, prevent the loss of data during communication, and stable transmission; like flow and storm control and VLAN Passthru.

This networking device is built with industrial grade components to protect it from hazards like vibration, shock, free fall, interference, and extreme temperatures that make it resistant to harsh industrial environments.



Features Highlight

Ruggedized Components Designed for Harsh Industrial Environments

Built with industrial-grade components, good thermal conductivity, and enclosed in an IP40 metal case, this Ethernet switch is resistant to extreme environments, vibration, EMI (electromagnetic interference), ESD (electrostatic discharge), power surge, over-voltage, over-current, and reverse polarity. It withstands operation at extreme temperatures between -40°C ~75°C (-40°F~167°F). It follows international safety standards like CE, FCC, and ROHS for safe operation.



Quick and Convenient Installation with Auto-negotiation

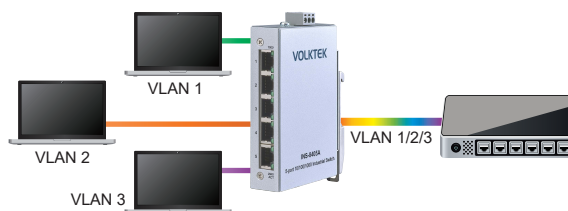
INS-8405A works as soon as it is connected and makes installation convenient. One 12~48VDC power supply connects to the 3-pin terminal block for power. The 10/100/1000 Mbps ports use auto MDI/MDI-X connection for auto-negotiation to work as soon as connected to other network devices at the required speed without extra software installation needed. The LED light displays when the device is in operation. The slim and small design allows it to fit at different locations for many devices to operate in the same network and can be mounted to a standard TH35 DIN rail.

Traffic Control Mechanisms to Optimize Bandwidth Usage

Traffic control mechanisms regulate excessive traffic to avoid delay, data loss and connection issues between devices. INS-8405A offers mechanisms such as Flow and Storm Control that prevent devices from overwhelming each other during the exchange of data and to keep the flux at a tolerable rate, hence keeping devices working within their capacity and avoiding the network from collapsing.

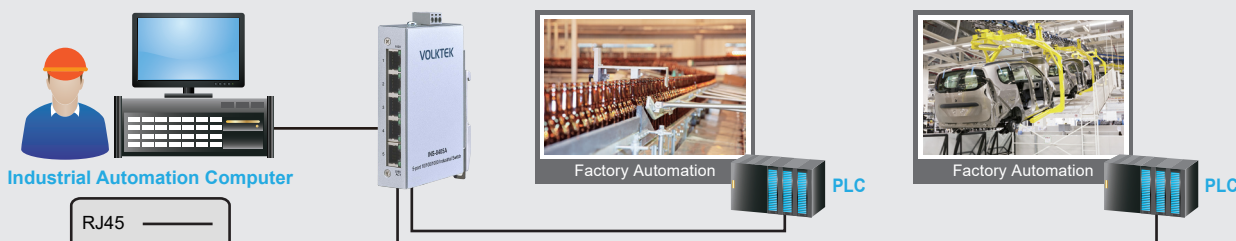
Intelligent VLAN Data Forwarding

INS-8405A is aware enough to read the source and destination of VLAN tagged data packets. This unmanaged switch delivers VLAN packets without changing or dropping them assuring operational data in industrial fields is delivered safely across devices.



Applications

The INS-8405A is compatible with 10/100/1000Mbps through RJ45 transceivers to guarantee a strong, stable connection of Ethernet, Fast Ethernet or Gigabit Ethernet, as an ideal solution for deployment in multiple high-speed automation systems.



Specifications

| Standards | |
|-----------------------------|---|
| IEEE 802.3 | 10BASE-T |
| IEEE 802.3u | 100BASE-TX |
| IEEE 802.3ab | 1000BASE-T |
| IEEE 802.3 | Nway Auto-negotiation |
| IEEE 802.3x | Flow Control |
| IEEE 802.1p | Class of Service |
| Interface | |
| Ports | 5 x 10/100/1000BASE-T (RJ45) |
| LED Panel | PWR, 1000, LNK/ACT |
| Features | |
| Performance | Jumbo Frame size: 9216 Bytes |
| | MAC Table size: 2K |
| | Throughput: 14,880 pps to 10 Mbps ports |
| | 148,800 pps to 100 Mbps ports 1,488,000 pps to 1000 Mbps ports |
| Switch Fabric | 10Gbps |
| Forwarding Rate | 7.4Mpps |
| Functions | Flow Control, Storm Control, VLAN Passthru |
| Power | |
| Input Voltage | 12~48VDC |
| Connector | Terminal block |
| Max Power Consumption | 3W |
| Reverse Polarity Protection | Present |
| Over Load Protection | Present |
| Mechanical and Environment | |
| Housing | Aluminum (IP40 Protection) |
| Mounting | DIN-Rail, Wall Mount |
| Operating Temperature | -40°C~75°C (-40°F~167°F) |
| Storage Temperature | -40°C~85°C (-40°F~185°F) |
| Operating Humidity | 5 to 95% RH (non-condensing) |
| Storage Humidity | 5 to 95% RH (non-condensing) |
| Weight | 183.4 g |
| Dimension (WxHxD) | 23.6 x 111.5 x 73.8 mm (0.93 x 4.39 x 2.90 in) |

| Standards and Certifications | | |
|------------------------------|-----|---|
| CE | EMI | FCC Part 15 Subpart B Class A EN 55011 / BS EN 55011 Class A EN 55032 / BS EN 55032 Class A EN 61000-6-4 / BS EN 61000-6-4 |
| | EMS | EN 55035 / BS EN 55035 EN 61000-6-2 / BS EN 61000-6-2 EN 61000-4-2 (ESD) EN 61000-4-3 (RS) EN 61000-4-4 (Burst) EN 61000-4-5 (Surge) EN 61000-4-6 (CS) EN 61000-4-8 (PFMF) |
| Shock | | IEC 60068-2-27 |
| Freefall | | IEC 60068-2-31 |
| Vibration | | IEC 60068-2-6 |
| Safety | | UL 61010-1, UL 61010-2-201 |
| Ordering Information | | |
| INS-8405A | | Unmanaged 5 x 10/100/1000 RJ45 Industrial Switch |
| Optional Accessories | | |
| Power Supplies | | SDR-120-48: 120W DIN-Rail 48VDC Industrial Power Supply, -25°C~70°C (-13°F~158°F) |

*Specifications subject to change without notice.

Dimension

