

INS-8108E

Premium Unmanaged 8 x 10/100 RJ45 Industrial Switch

Description

INS-8005E is an unmanaged industrial Fast Ethernet switch with 5 auto-negotiation 10/100 Mbps downlink ports to expand Ethernet networks in factory floors and for high demanding environments with complex networks and limited space.

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. It prioritizes industrial protocols for industrial applications, like Ethernet/IP, PROFINET, and GOOSE packets. Additionally, it offers per-port and 802.1p Tag Quality of Service to ensure the delivery of high priority data.

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

Traffic control mechanisms regulate excessive traffic to avoid delay, data loss and connection issues between devices. This unmanaged switch 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.



Quick and Convenient Installation with Auto-negotiation

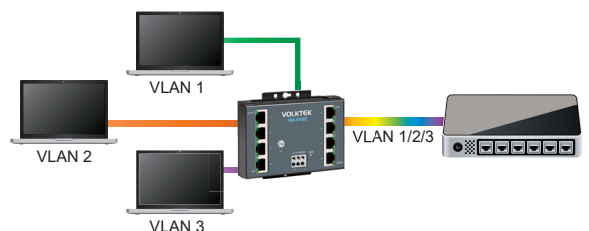
INS-8108E works as soon as it is connected and makes installation convenient. One 12~48VDC power supply connects to the 3-pin terminal block for power. The 10/100 Mbps ports use auto MDI/MDI-X connection for auto-negotiation to work as soon as connected to other network devices at the required speed without extra software installation needed. The LED lights next to the ports display when the device is in operation. The slim and flat design allows it to be fit to the wall and at many locations with limited space. It 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-8108E 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

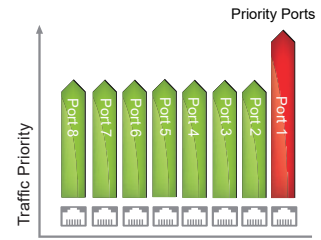
INS-8108E is aware enough to read the source and destination of VLAN tagged data packets. This unmanaged switch delivers VLAN packets without changing or dropping them assuring operational data in industrial fields is delivered safely across devices.



Features Highlight

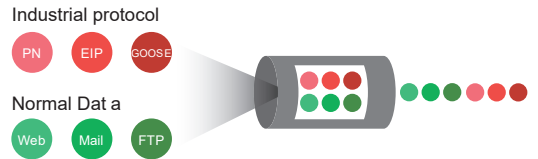
Critical Data Transmission Priority

INS-8108E streamlines the execution of time-sensitive applications with the 802.1p Tag QoS by classifying data into high and low priority. Mission-critical applications in industrial automation like manufacturing and monitoring can be done without delay through port priority on ports #1 and #2 even during high traffic.



Prioritizes Industrial Standard Protocols

Industrial automation applications employ packet protocols that focus on delivering data under tight time constraints. This unmanaged switch is configured with iQoS to prioritize industrial application protocols and deliver time-sensitive data used in industrial applications first, including Ethernet/IP, PROFINET, and GOOSE (Generic Object Oriented Substation Events).



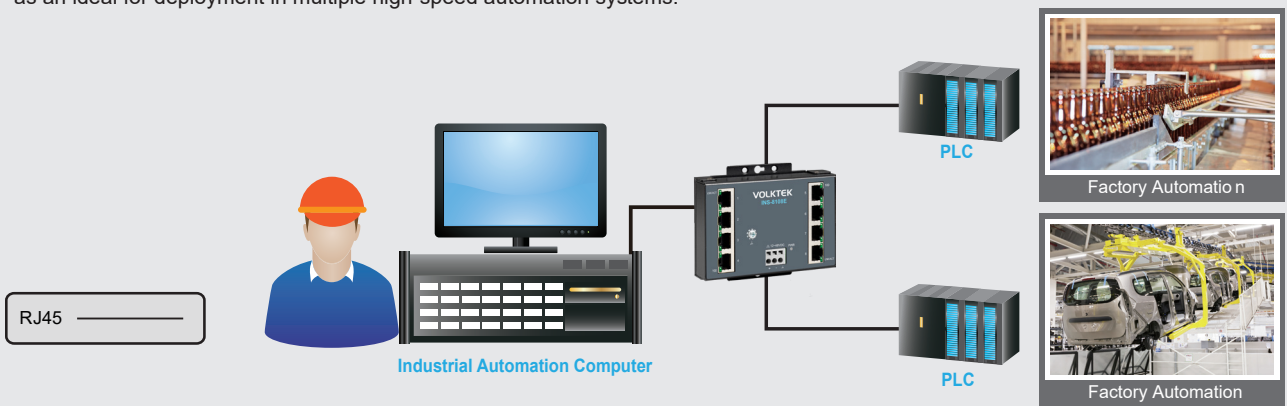
Connects Large Network Groups and Facilitates Data for Monitoring Systems

During network discovery unmanaged switches can cause device flapping and make it difficult for monitoring systems to access device data. INS-8108E avoids device flapping when connected to a managed switch. Using the LLDP Filter feature the device can be used in large networks. It allows other devices in the network to exchange identifiable data for accurate monitoring without concerns from detecting erroneous messages and false alerts in the presence of an unmanaged switch.



Applications

The INS-8108E is compatible with 10/100Mbps through RJ45 transceivers to guarantee a strong, stable connection of Ethernet, Fast Ethernet through SFP slots, as an ideal for deployment in multiple high-speed automation systems.



Specifications

Standards	
IEEE 802.3	10Base-T
IEEE 802.3u	100Base-TX
IEEE 802.3	Nway Auto-negotiation
IEEE 802.3x	Flow Control
IEEE 802.1p	Class of service
Interface	
Ports	8 x 10/100Base-TX (RJ45)
LED Panel	PWR, 100, LNK/ACT
Features	
Performance	Jumbo frame Size: 9216 Bytes
	MAC Table Entries: 4K
	Throughput: 14,880 pps to 10 Mbps ports 148,800 pps to 100 Mbps ports
Forwarding Rate	1.2Mpps
Switch Fabric	1.6Gbps
Functions	LLDP Filter, Flow Control, Storm Control, Port Priority (Port 1, Port 2), 802.1p CoS/ QoS,
	VLAN Passthru, iQoS (EIP/PROFINET/ GOOSE QoS)
Power	
Input Voltage	12~48 VDC
Connection	Terminal block
Power Input Polarity Protection	Present
Power Consumption	1.8W (Max)
Mechanical and Environment	
Housing	Aluminum (IP30 Protection)
Mounting	DIN-Rail, Wall Mount (optional)

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	145g	
Dimension (WxHxD)	109.2 x 73.8 x 30.73mm (4.3 x 2.9 x 1.2in)	
Certifications (Processing)		
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 62000-6-4
	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)
Safety	UL 61010-1 / UL 61010-2-210	
Shock Test	IEC 60068-2-27	
Freefall Test	IEC 60068-2-31	
Vibration	IEC 60068-2-6	
Ordering Information		
INS-8108E	Premium Unmanaged 8 x 10/100 RJ45 Industrial Switch	

Note:

* The highest degree of temperature operation certified by UL is -40°C~75°C (-40°F~167°F).

* Specifications subject to change without notice.

Dimension

