

INS-801E

Premium Unmanaged 5 x 10/100 RJ45 Industrial Switch

Description

The INS-801E is an unmanaged industrial Fast Ethernet switch featuring 5 independent 10/100BASE-TX ports which is designed for automation application networks to deliver unrivalled performance. Switch is built with rugged, hardened case and components able to withstand a high degree of vibration and shock and an operating temperature from -40°C to 75°C. The INS-801E is engineered and designed especially for harsh and extreme industrial type applications. With its hardened case and high-performance components, the INS-801E is an ideal solution for your extreme industrial automation environment.

The DIN-Rail mounting capability, which is already attached, wide operating temperature and the IP40 housing with LED indicators make the plug-and-play INS-801E switches easy to use and reliable for deployment even in harsh environments and easy way with no configuration required.



RoHS **CE** **FC** **UL LISTED**



Features Highlight

Robust Performance and Protection

With IP40 metal case, surge protection, power voltage drop alarm, and ESD protection, the INS-801E provides a high level of immunity against electromagnetic interference and heavy electrical surges which are easy to deploy in industrial environments. Furthermore, the INS-801E offers high performance switch architecture with 5 ports of 10/100Based-TX to meet the requirements of high-bandwidth access Ethernet, Fast Ethernet in tough operating temperatures.



Prioritize your manufacturing data using iQoS

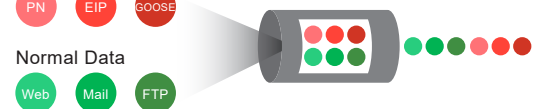
In modern factory automation, heavy data traffic can be realized and need to prioritize based on the industrial communication protocols. Volktek introduced iQoS (industrial QoS) to prioritize your industrial type data packets including EIP (EtherNet/IP), PROFINET, and GOOSE (Generic Object Oriented Substation Events). It allows real-time data transmission irrespective of the vendor and device type under time-constrained applications.

Industrial protocol

PN EIP GOOSE

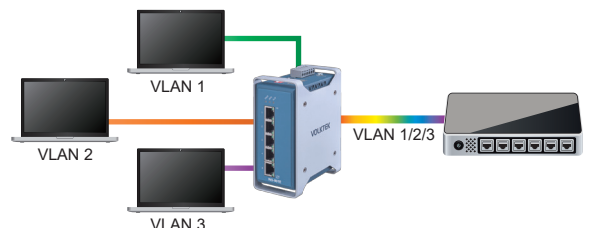
Normal Data

Web Mail FTP



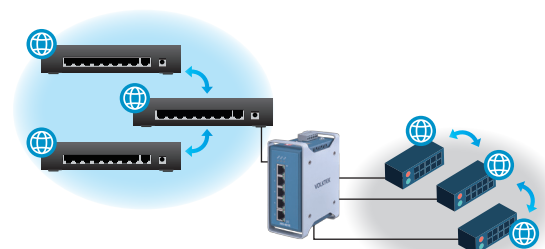
VLAN Passthru

Usually, the VLAN packets cannot identify or transmit over unmanaged devices in the network as missing the VLAN tagging information. By using VLAN Passthru, VLAN packets can easily be forwarded through the unmanaged devices in the network without dropping or blocking which allows users to access the device seamlessly.



LLDP Filter

During the network discovery process device flapping issue can be occurred when the peripheral devices are connected to an unmanaged switch in the network. The Link Layer Discovery Protocol (LLDP) Filter blocks the LLDP packets exchange at unmanaged devices only without disturbing managed groups to avoid the device flapping issue. However, the LLDP works well It provides precise device information and avoids false alarms in your network.



Features Highlight

Redundant Power System

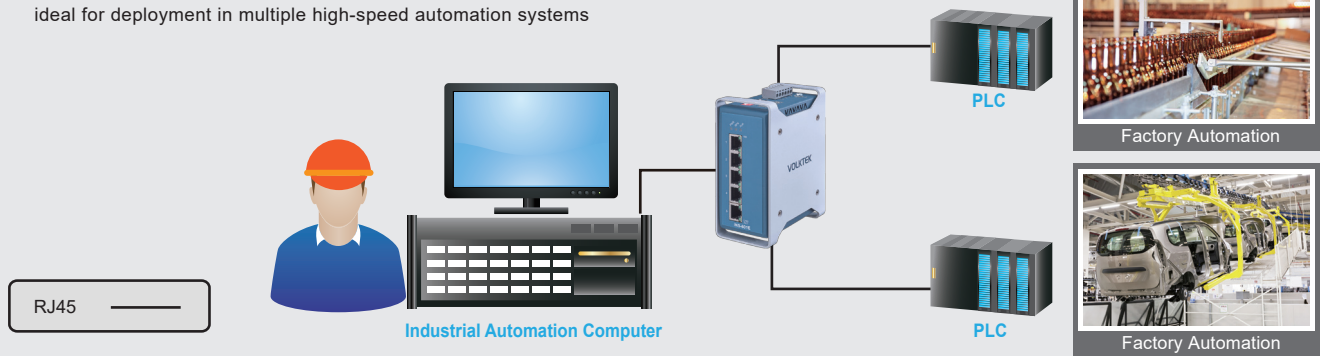
Mission-critical industrial applications need to operate without any interruptions because even a minimum network downtime can hugely impact the overall output. Providing continuous power and as well as data to such applications is now made easy with INS-801E's redundant power system. The switch is designed with standard industrial terminal block for redundant power. In case the internal power supply fails, the INS-801E's terminal block powers the switch and enables the switch to provide continuous services to powered devices.

Efficient Storm Control Mechanism

In the challenging industrial environment, the Ethernet Switches are connected with various other devices which sometimes get defective or virus affected and thus results generation of huge amount of broadcast traffic that can impact the entire transmission process. To address this issue, INS-801E is configured with efficient Storm Control functionalities which can only allow the traffic of a predefined rate. The Storm Control function can easily managed by DIP Switch without any burden of manual enable and disable.

Applications

The INS-801E is compatible with 10/100Mbps through RJ45 transceivers to guarantee a strong, stable connection of Ethernet, Fast Ethernet 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	5 x 10/100BASE-TX (RJ45)
DIP Switch	PWR, RPS, P1 ~ P5
LED Panel	PWR, RPS, ALM, 100, LNK/ACT
Features	
Performance	Jumbo Frame Size: 9216Bytes
	MAC Table size: 2K
	Throughput: 14,880 pps to 10 Mbps ports 148,800 pps to 100 Mbps ports
Switch Fabric	1Gbps
Forwarding Rate	0.74Mpps
Functions	LLDP Filter, Flow Control, Storm Control, Port Priority (Port 1), 802.1p CoS/QoS, VLAN Passthru, iQoS (EIP/PROFINET/GOOSE QoS)
Power	
Input Voltage	Primary inputs 12~48VDC Redundant inputs 12~48VDC
Connector	Terminal block
Max Power Consumption	2.05W (Max)
Alarm Relay	One relay output, 1A @ 24V DC
Reverse Polarity Protection	Present
Over Load Protection	Present
Mechanical and Environment	
Housing	Aluminum Case (IP40 protection)
Mounting	DIN-Rail
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	400 g (0.88 lb)
Dimension (WxHxD)	57.3 x 131.2 x 100.9 mm (2.26 x 5.17 x 3.97 in)

Standards and Certifications

CE	EMI	FCC Part 15 Subpart B Class A CISPR 32 Class A EN 55032 / BS EN 55032 Class A EN 55011 / BS EN 55011 Class A EN IEC 61000-6-4 / BS EN IEC 61000-6-4
	EMS	EN 55035 / BS EN 55035 Class A EN IEC 61000-6-2 / BS EN IEC 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) IEC 61000-4-8 (PFMF)
Safety		UL 61010-1 / UL 61010-2-210
Shock		IEC 60068-2-27
Freefall		IEC 60068-2-31
Vibration		IEC 60068-2-6
Ordering Information		
INS-801E		Premium Unmanaged 5 x 10/100 RJ45 Industrial Switch
Optional Accessories		
Power Supplies		SDR-120-48: 120W DIN-Rail 48VDC Industrial Power Supply, -25°C~70°C

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

