# **VOLKTEK**

## INS-8005A

## Unmanaged 5 x 10/100 RJ45 Industrial Switch

#### **Description**

INS-8005A 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 simple requirements and limited space.

The switch offers auto-negotiation on all its ports to send data across devices efficiently in industrial Ethernet applications and in-built traffic optimization with Flow and Storm Control Features to offer reliable performance. The device also transfers VLAN packets to their destination.

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 IP30 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-8005A 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 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. 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.

#### Intelligent VLAN Data Forwarding

INS-8005A 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**





## **Specifications**

Standards		
IEEE 802.3	10Base-T	
IEEE 802.3u	100Base-TX	
IEEE 802.3	Nway Auto-Negotiation	
IEEE 802.3x	Flow Control	
Interface		
Ports	5 x 10/100Base-TX (RJ45)	
Features		
Performance	Jumbo Frame Size: 1552 Bytes	
	MAC Table size: 1K	
	Throughput: 14,880 pps to 10 Mbps ports	
	148,800 pps to 100 Mbps ports	
	Switch Fabric: 1.0Gbps	
QoS	Broadcast storm protection for broadcast packet	
Power		
Input Voltage	12~48VDC, 0.2A max	
Connection	Terminal block	
Power Input Polarity Protection	Present	
Current Overload Protection	Present	
Power Consumption	3W	
Mechanical and Environment		
Housing	Aluminum (IP30 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	180 g (0.4 lb)	
Dimension (WxHxD)	23.4 x 109.2 x 73.8 mm (0.9 x 4.3 x 2.9 in)	

Standards and Certifications		
CE	ЕМІ	FCC Part 15 EN 55011
		EN 55032 Class B
		EN 61000-6-4
	EMS	EN 55024
		EN 61000-6-2
		IEC 61000-4-2 (ESD): Level 3
		IEC 61000-4-3 (RS): Level 3
		IEC 61000-4-4 (Burst): Level 3
		IEC 61000-4-5 (Surge): Level 3
		EN 61000-4-6 (CS): Level 3
		IEC61000-4-8(PFMF)
Shock Test		IEC 60068-2-27
Freefall Test		IEC 60068-2-32
Vibration		IEC 60068-2-6
Ordering Information		
INS-8005A		Unmanaged 5 x 10/100 RJ45 Industrial Switch

<sup>\*</sup>Specifications subject to change without notice.

## Dimension

