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INS-8408A

Unmanaged 8 x 10/100/1000 RJ45 Industrial Switch

RoHS CE FC

Description

The INS-8408A is an 8-port Gigabit Unmanaged Industrial Ethernet switch specifically designed for high-speed industrial Ethernet networks that demand both, high bandwidths and rugged connectivity. The INS-8408A is an environmental friendly product as it incorporates Green Ethernet design, IEEE802.3az - Energy Efficient Ethernet (EEE), to significantly reduce power consumption as well as operation costs. Well protected in a rugged IP30 grade housing, the switch ensures dependable and uninterrupted operations even in harsh environments, making it an ideal networking solution for Industrial applications.

Equipped with 8-10/100/1000BASE-T ports, the INS-8408A supports both Gigabit and Fast Ethernet options with Auto MDI/MDIX and Auto-negotiation to offer greater flexibility in choosing the type of connectivity you need. In addition to high-speed data transmissions, the switch supports 9K jumbo frame to increase throughput and QoS on ports-1&2 to ensure delivery of critical data. Redundant power supply with wide-range input power, built-in relay alarm for instant notification of power and port failure, DIN-Rail mounting and many more features of the INS-8408A fulfill the special needs of Industrial Ethernet networks.

Features Highlight

Robust Performance and Protection

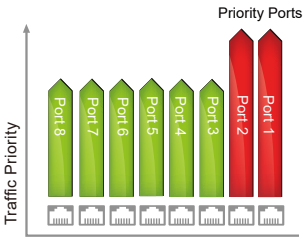
Built with field-hardened components and enclosed in rugged IP30 grade casing, the INS-8408A can withstand harsh industrial environments such as constant vibration, heavy shocks, humidity and extreme temperatures ranging from -40°C to 70°C. The switch supports Surge protection and ESD protection to deliver increased level of immunity against industrial voltage transients. Along with wide-range redundant power inputs extending from 9~57VDC, the INS-8408A integrates robust design and solid performance to ensure continuous operation of mission-critical applications even in tough and unstable industrial environments.

Eco-friendly Green Ethernet Design

To address the concerns of increasing power consumption, the INS-8408A implements IEEE802.3az Energy Efficient Ethernet (EEE) compliant Green Ethernet technology. This eco-friendly design allows the switch to automatically adjust power consumption and conserve energy during the periods of low data activity. By powering down the links when utilization is low (or completely idle) and powering them back up when they need to transmit data, the INS-8408A saves substantial amounts of energy without affecting network performance. This helps you to lower energy usage significantly and save your operational costs.

Optimal Bandwidth Utilization

Understanding the need of smoother data transmissions for specific industrial applications, the INS-8408A has two built-in VIP ports (ports 1, 2) that support IEEE802.1p Quality of Service (QoS). These two ports classifies, prioritizes and sends traffic only from highest priority queues as it arrives to ensure that high priority traffic is forwarded with least delay possible. Thereby, the INS-8408A enhances bandwidth utilization to ensure time sensitive data gets delivered efficiently to mission-critical applications connected to its two VIP ports, even during burst of high traffic.



Easy Plug-and-play Operation

Featuring Auto-MDI/MDIX and Auto-negotiation on all ports, the INS-8408A automatically detects and configures the best mode of operation over a link. This eliminates the need of user setup or configuration procedure and simplifies installation. The switch also has various DIP switches that provide a simplest and quickest way to manually turn on/off alarm for ports, primary and redundant power. In addition, the INS-8408A is designed for DIN-Rail mounting into industrial cabinets allowing convenient and simple Ethernet connections.

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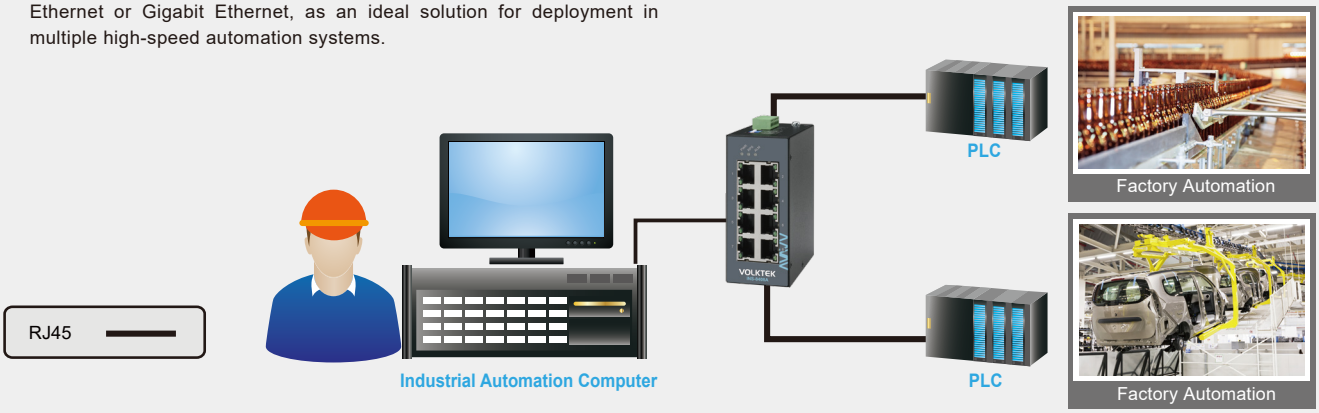
Features Highlight

Redundant Power by industrial Terminal Block

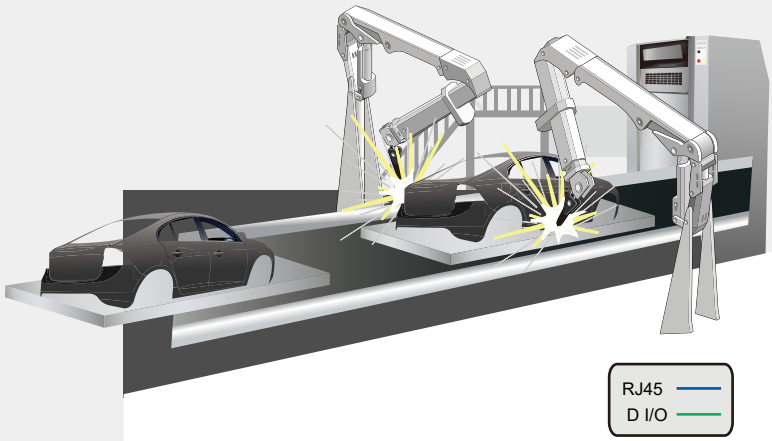
The 8408A is designed with an impressive, much more compact and safer industrial terminal block for redundant power, offering a low-cost, simple solution to the problem of unexpected power failures. In case the primary power supply fails, the INS-8408A's terminal block immediately powers switch with redundant power supply, and enables to provide continuous network services to mission-critical applications in industrial environments. Thus protecting the network from a single failure of a network device power supply and resulting in more reliable network.

Applications

The INS-8408A 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.

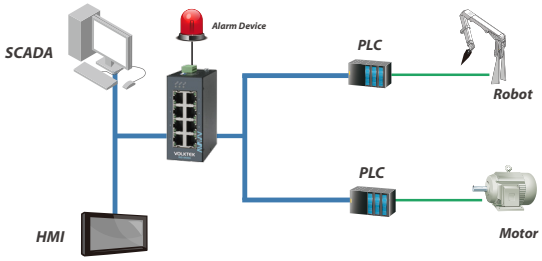


Factory Automation



Relay Output Alarm for Power Failure

The INS-8408A is built with relay contact outputs that trigger alarms to notify network engineers in the event of power failure, and enables them to quickly respond and resolve high priority issues.



Redundant Power input

The INS-8408A has dual power inputs to provide a redundant system against power supply disruptions. In case of one power source failure, the other acts as a backup to remain continuous network power for critical industrial applications.

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Specifications

Standards	
IEEE 802.3	10BASE-T
IEEE 802.3u	100BASE-TX
IEEE 802.3ab	1000BASE-T
IEEE 802.3x	Flow Control
IEEE802.3az	Energy Efficient Ethernet (EEE)
IEEE802.1p	Quality of Service(QoS)
Interface	
Ports	8 x 10/100/1000Base-T (RJ45)
Connectors	One removable 6-pin terminal block
Features	
Performance	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: 16Gbps
Power	
Primary/Redundant inputs	12/24/48V DC (9 to 57V DC)
Power Consumption	5W (Max)
Alarm Relay	One relay output, 1 A @ 24V DC
ESD protection	8KV / 15KV
Surge protection	3KV / 6KV (RJ45 Ports Line to ground)
Reverse Polarity	Present
Overload current	Present
Mechanical and Environment	
Housing	Metal (IP30 protection)
Mounting	DIN-Rail, Wall Mount (Optional)
Operating Temperature	-40°C~70°C
Storage Temperature	-40°C to 85°C
Operating Humidity	5 to 95% RH (non-condensing)
Storage Humidity	5 to 95% RH (non-condensing)
Weight	480g
Dimension (WxHxD)	99.6x115.8x50mm (3.92x4.56x1.97inch)

Standards and Certifications		
CE	EMI	FCC Part 15 Subpart B class A EN 55022 EN 55011 EN 61000-6-4
	EMS	EN 55024 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) EN 61000-4-11
Shock Test		IEC 60068-2-27
Freefall Test		IEC 60068-2-32
Vibration		IEC 60068-2-6
Ordering Information		
INS-8408A		Unmanaged 8 x 10/100/1000 RJ45 Industrial Switch
Optional Accessories		
Power Supply		SDR-120-48: 120W DIN-Rail 48VDC Industrial Power Supply, -25°C~70°C

**Specifications subject to change without notice.*

Dimension