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INS-8615

Managed 5 x 10/100/1000 RJ45 & 1 x FX/GbE SFP Switch

Description

The INS-8615 is a Managed Industrial Switch specifically designed to suit your heavy industrial environments and contains all necessary standard features to deploy in automation systems. Engineered with hardened components and enclosed in a rugged IP30 metal case, the INS-8615W can operate in wide temperatures from -40°C to 75°C and also has excellent tolerance capability to high vibration and shock.

Despite the fact that the INS-8615 is perfectly designed to operate in extreme industrial conditions; the switch is also equipped with a variety of management functions that let you configure communication parameters as you desire and monitor the network behavior in number of different simple ways. In addition, the switch is built with dual redundant power inputs to ensure reliability and maximize network up time. Other integrated features of the switch such as Auto-negotiation, Rate limitation and Port Isolation optimizes your network performance and provide a secure network, offering a cost-effective solution in a small but powerful package.

Modbus   -40°C 75°C   IP Code 30   DIN Rail

RoHS C€ FC

Features Highlight

Robust Performance and Protection

Well-protected in an IP30 metal casing, the switch provides high level of immunity against EMI and EMS found in industrial environments. Along with those, the INS-8615 is built with various protection features such as ESD Protection, Surge Protection, Over Voltage/Current Protection, Reverse Polarity Protection and Short Circuit Protection to ensure continuous operation of mission-critical applications even in unstable power conditions.

Efficient Network Monitoring and Proactive Capability

The INS-8615 supports the most accepted and enhanced traffic management, monitoring and analysis protocols such as SNMP and RMON. SNMPv1/v2c allows administrators to centrally manage different levels in a network and RMON gives the capability to monitor the network performance. In addition, QoS, IGMP and VLAN give the capability to remotely monitor network performance. This avoids high OPEX and provides administrators the control they need to manage a healthy and efficient network.

Port-based VLAN, IEEE 802.1Q VLAN to Ease Network Planning

Planning, designing and managing complex networks is now simplified with INS-8615. The switch supports VLANs which segment large networks into smaller parts and organize them into separate broadcast domains. This helps the administrators to control the traffic patterns, limit broadcast traffic and reduce broadcast storms. This feature prevents unnecessary network traffic transmitted by unregistered users and simplifies the network design irrespective of its size.

Comprehensive QoS Mechanisms to Assign Priority

Industrial applications need different levels of services delivered to them reliably without any transmission delays and interruptions. The INS-8615 has comprehensive QoS mechanisms which assign priority to applications and sends only specific dedicated traffic to them. In addition, its Gigabit SFP slot for real-time network applications that need extended reach and flexible operating bandwidths. With full control of limiting the bandwidth, the administrators can prevent unpredictable errors and utilize the bandwidth more effectively.
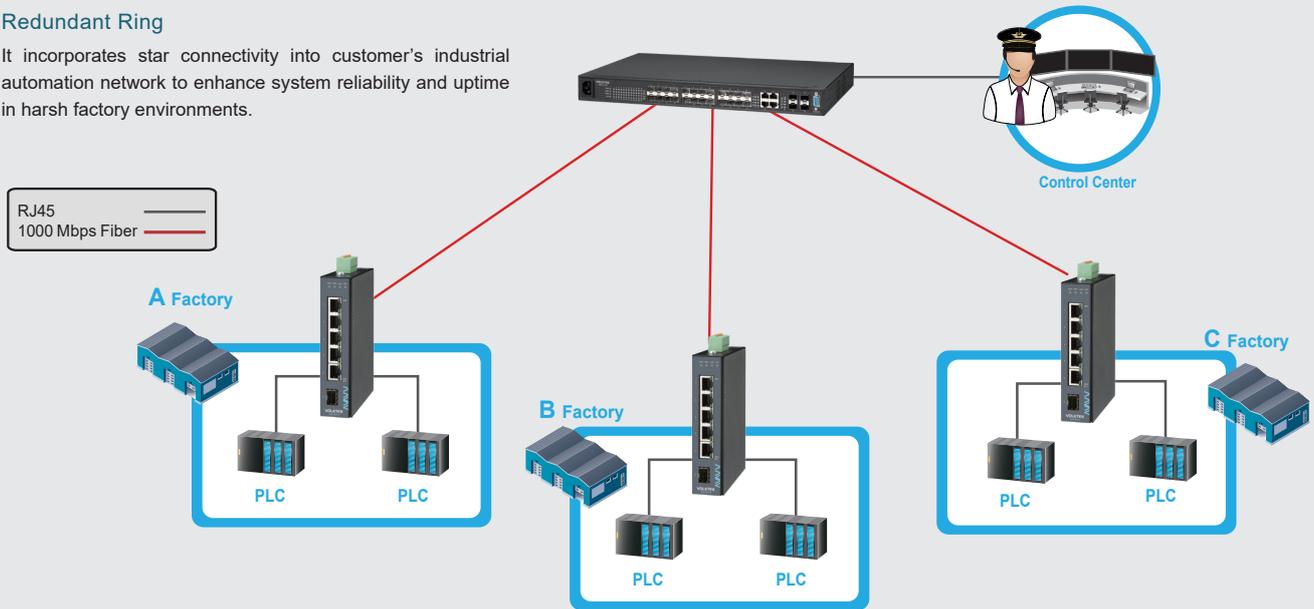
Gigabit Connectivity for Industrial Networks

Switch features 5 10/100/1000Base-T ports and 1 100FX/Gigabit SFP slot to satisfy new and evolving network demands in longer distances via its fiber port. With one gigabit fiber slots, the INS-8615 easily establishes fiber channel for gigabit Ethernet connectivity and allows you to take advantage of gigabit fiber based star topologies. The switch provides long distance, high-speed fiber connectivity while offering enhanced noise immunity and data security across deployed systems. The INS-8615 is a well-suited robust, cost-effective and future-proof solution for fiber based industrial networks.
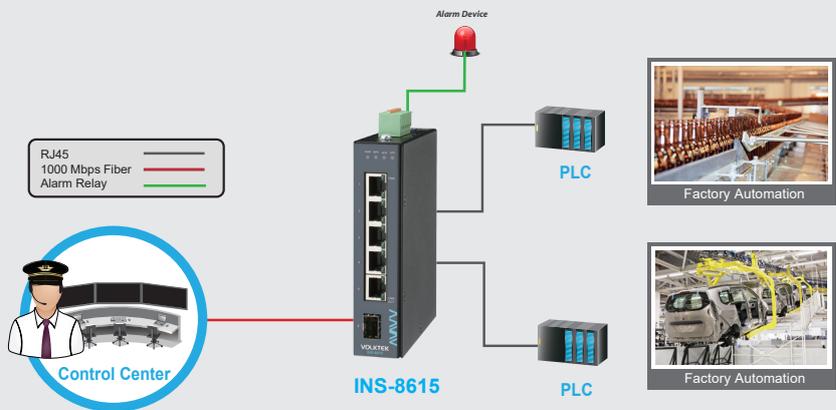
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Applications

Redundant Ring

It incorporates star connectivity into customer's industrial automation network to enhance system reliability and uptime in harsh factory environments.

RJ45
1000 Mbps Fiber

Control Center

A Factory

PLC   **PLC**

B Factory

PLC   **PLC**

C Factory

PLC   **PLC**

The INS-8615 is compatible with 10/100/1000Mbps through RJ45 transceivers to guarantee a strong & stable connection of Ethernet, Fast Ethernet or Gigabit Ethernet, providing flexible deployment options to satisfy industrial networking requirements.

The INS-8615 is built with relay contact outputs that trigger alarms to notify network engineers in the event of any malfunction of port links or power failure, and enables them to quickly respond and resolve high priority issues.

Alarm Device

RJ45
1000 Mbps Fiber
Alarm Relay

PLC

Factory Automation

Factory Automation

Control Center

INS-8615

PLC

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Specifications

Standards	
IEEE 802.3	10BASE-T
IEEE 802.3u	100BASE-TX
IEEE 802.3ab	1000BASE-T
IEEE 802.3u	100BASE-FX
IEEE 802.3z	1000BASE-SX/LX
IEEE 802.3	Nway Auto-negotiation
IEEE 802.3x	Flow Control
IEEE 802.3ad	Link Aggregation
IEEE 802.3az	Energy Efficient Ethernet (EEE)
IEEE 802.1AB	LLDP
IEEE 802.1D	STP
IEEE 802.1w	RSTP
IEEE 802.1p	Class of Service
IEEE 802.1Q	VLAN Tagging
IEEE 802.1X	Port Authentication

Interface	
Ports	5 x 10/100/1000BASE-T (RJ45)
	1 x GbE SFP Slot
DIP Switch	Primary/Redundant Power Voltage Drop Alarm setting
LED Panel	PWR, RPS, ALM, POST, 1000, LNK/ACT

Features	
Performance	Jumbo frame Size: 10KB
	MAC Table Entries: 8K
	Active VLAN: 256
	Switch Fabric: 12Gbps
	L2 Forwarding Rate: 8.9Mpps
Management	CLI, Telnet/SSH, HTTP, SNMP v1/v2c/v3, SNMP Trap, MVLAN, Firmware Upgradable, Configuration Backup/Restore, Syslog, SNTP, LLDP, DHCP Client/Relay/Option 82, e-mail Alarm, Server Control, Mirroring, DDM, SFP Info, Auto-Provisioning, EEE, RMON Statistics, ModbusTCP
Reliability	STP/RSTP, ERPS v1/v2, Dual Homing, LACP, Static Trunk
VLAN	IEEE 802.1Q, Port-based VLAN, MAC-based VLAN
Traffic Control	IGMP Snooping/Throttling, QoS, Flow Control, Rate Limit, Storm Control, Traffic Monitor, Port Isolation, Loop Detection
Security	ACL, SSH, Port-based 802.1x, Port Security, MAC Search, Static MAC, DHCP Snooping, DHCP Sever Screening, ARP Inspection, BPDU Guard/Filter, Root Guard, Managed Host

Power		
Input Voltage	Primary inputs: 20~57VDC	
	Redundant inputs: 20~57VDC	
Connection	Teminal Block	
Power Consumption	10W	
Alarm Relay	One relay output, 1 A @ 24V DC	

Mechanical and Environment	
Housing	Metal Case (IP30 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	515 g (1.1 lb)
Dimension (WxHxD)	31 x 139.4 x 118.2 mm (1.22 x 5.49 x 4.65 in)

Certifications	
EMI	FCC Part 15 Subpart B Class A
	EN 55011 class A
	EN 55032 class A
	EN 61000-6-4
EMS	EN 61000-6-2
	EN 55035
	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 (DIPS)
Shock	IEC 60068-2-27
Freefall	IEC 60068-2-32
Vibration	IEC 60068-2-6

Ordering Information	
INS-8615	Managed 5 x 10/100/1000 RJ45 & 1 x FX/GbE SFP Switch

Optional Accessories	
Power Supply	SDR-120-48: 120W DIN-Rail 48VDC Industrial Power Supply, -25°C~70°C (-13°F~158°F)
GBM-104	1000BASE-SX 1.25G, Multi-mode SFP, 500m
GBM-104-10	1000BASE-LX 1.25G, Single mode SFP, 10Km
GBM-123TS	1000BASE-LX, Bi-Di SFP TX:1310/RX:1550 Single Mode, 10Km
GBM-123RS	1000BASE-LX, Bi-Di SFP TX:1550/RX:1310 Single Mode, 10Km

Note :

* The SFP communication distance upon the request.

* Industrial SFP with wide operating temperature from -40°C~85°C (-40°F~185°F) is available upon request.

* Specifications subject to change without notice.

Dimension