VOLKTEK

INS-8408AM

Unmanaged 8 x 10/100/1000 RJ45 Industrial Switch, DNV Marine Approval



Description

INS-8408AM is an 8-port Gigabit Unmanaged Industrial Ethernet switch has an excellent tolerance capability to high vibration, shock and free fall. Under DNV (Det Norske Veritas) certified for Industrial switch, the INS-8408AM suits your anti-corrosion harsh environments in marine & offshore applications and contains all the standard features of a industrial switch. The INS-8408AM 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 Marine applications.

Equipped with 8-10/100/1000BASE-T ports, the INS-8408AM 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 more features of the INS-8408AM fulfill the special needs of Industrial Ethernet networks.

TYPE APPROVED PRODUCT DNV DNV.COM/AF

RoHS CE FC Ports Priority DIN Rail

APPROVED TYPE APPROVAL SCHEME -40°C 75°C IP Code 30 Surge Protection ESD Protection

Features Highlight

Robust Performance and Protection

Built with field-hardened components and enclosed in rugged IP30 grade casing, the INS-8408AM can withstand harsh industrial environments such as constant vibration, heavy shocks, humidity and extreme temperatures ranging from -40°C to 75°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, the INS-8408AM integrates robust design and solid performance to ensure continuous operation of mission-critical applications even in tough and unstable industrial environments.



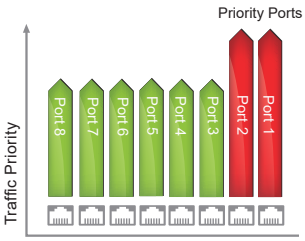
Eco-friendly Green Ethernet Design

To address the concerns of increasing power consumption, the INS-8408AM 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-8408AM 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-8408AM 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-8408AM 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

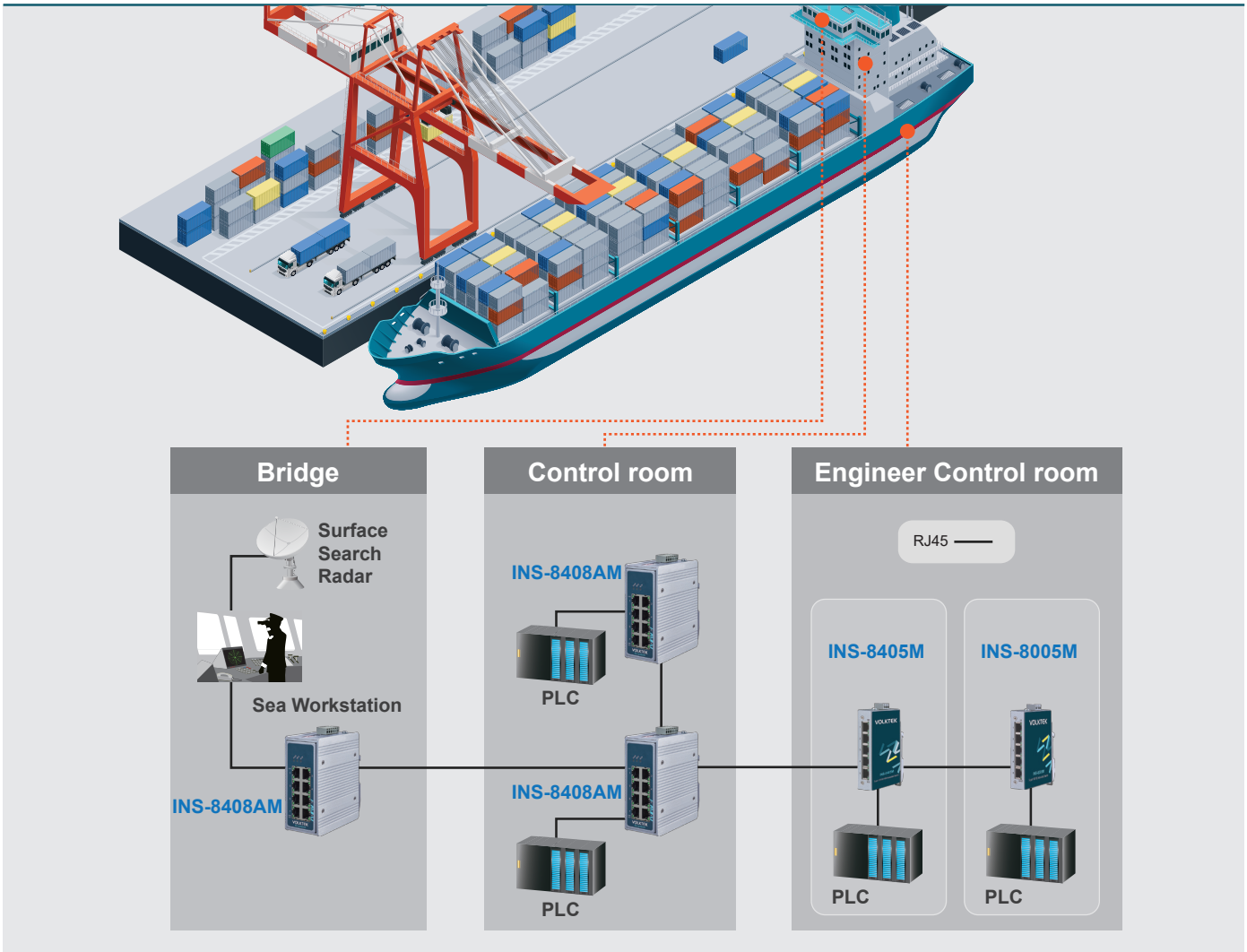
Featuring Auto-MDI/MDIX and Auto-negotiation on all ports, the INS-8408AM automatically detects and configures the best mode of operation over a link. This eliminates the need of user setup or configuration procedure and simplifies installation. The switch also has various DIP switches that provide a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

VOLKTEK

Certificates & Approvals



Applications



VOLKTEK

Specifications

Standards	
IEEE 802.3	10BASE-T
IEEE 802.3u	100BASE-TX
IEEE 802.3ab	1000BASE-T
IEEE 802.3	Nway Auto-negotiation
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	Terminal Block
DIP Switch	PWR, RPS, ALM, 1000, LNK/ACT
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	24VDC
Connection	Terminal Block
Power Consumption	5W (Max)
ESD protection	8KV / 15KV
Surge protection	3KV / 6KV (RJ45 Ports Line to ground)
Reverse Polarity	Present
Overload current	Present
Mechanical and Environment	
Housing	Aluminum, 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	590 g (1.3 lb)
Dimension (WxHxD)	50 x 120 x 100 mm (1.97 x 4.78 x 3.94 in)

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
Marine		DNV-CG-0339: 2021 IEC 60945, IACS E10 (Rev.10 2024) LR certify environmental category ENV1, ENV2, and ENV3
Shock		IEC 60068-2-27
Freefall		IEC 60068-2-32
Vibration		IEC 60068-2-6
Ordering Information		
INS-8408AM		Unmanaged 8 x 10/100/1000 RJ45 Industrial Switch, DNV Marine Approval
Optional Accessories		
Power Supply		SDR-480P-48: 480W DIN-Rail 48V DC Industrial Power Supply, -25°C~70°C (-13°F~158°F)

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.
* The highest degree of temperature operation certified by DNV is (Class D) -25°C~70°C (-13°F~158°F), and the nominal voltage of 24VDC for DNV type approval is specified.
* Specifications subject to change without notice.

Dimension

