VOLKTEK

INS-8405M

Managed 5 x 10/100/1000 RJ45 Industrial Switch, DNV GL Marine Approval

Description

Volktek's INS-8405M unmanaged industrial gigabit ethernet switch is a 5-port 10/100/1000BASE-T switch delivered in a 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. Not an ordinary industrial switch, the INS-8405M is engineered and designed especially for harsh and extreme industrial type applications. With its hardened case, DC power inputs and high performance components, the INS-8405M is perfectly suited for your extreme industrial automation environment.

The INS-8405M provides varied choice of deployment locations even in harsh environments with wall-mount and Din-Rail options in a quick and easy way with no configuration required. Every INS-8405M is equipped with auto MDI/MDI-X on all ports for simple connection to other switches and hubs. Each port of INS-8405M has 2 LEDs to show the link status transmission speed 10/100Mbps and 1000Mbps status. It also provides a relay output for an event alarm. In the event of a power failure, the built-in LED will activate the alarm to notify administrators which making troubleshooting the device a simple task.

Features Highlight

Robust Performance and Protection

With IP30 metal case, surge protection, power voltage drop alarm, and ESD protection, the INS-8405M provides a high level of immunity against electromagnetic interference and heavy electrical surges which are easy to deploy in industrial environments. Furthermore, the INS-8405M offers high performance switch architecture with 5 ports of 10/100/1000Based-T to meet the requirements of high-bandwidth access Ethernet, Fast Ethernet or Gigabit Ethernet in tough operating temperatures.

Industrial Grade EMC Protection Design

• Volktek industrial switches are built with robust protection features including surge and ESD protection to deliver increased level of immunity against industrial voltage transients.

• Volktek industrial switches comply with Industry tandards EN61000-6-2 and EN61000-6-4 to withstand up to 8KV high ESD protection level and dual power inputs to provide a very high reliable system.

Simplified Installation w/ Compact Size

The INS-8405M provides varied choice of deployment locations even in small places, harsh environments with its wall-mount, rack-mount and desktop options in a quick and easy way by its compact size and no configuration required. Every INS-8405M is equipped with auto MDI/MDI-X on all ports for simple connection to other switches and hubs. With diagnostic LEDs panel, the INS-8005M allows you to know switch status and simplify troubleshooting.

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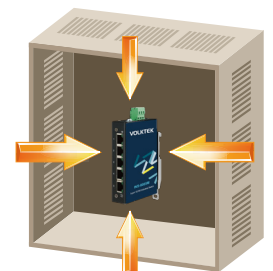
Certificates & Approvals

Marine
Type Approval

DNV·GL MARITIME
TYPE APPROVED PRODUCT

EN 60945

Marine Certifications Ensure Secure Communication Networks for Offshore Environments

Applications

Bridge	Control room	Engineer Control room

Surface Search Radar

Sea Workstation

INS-8648M

INS-8648M

PLC

INS-8648M

PLC

RJ45 ——— 1000 Mbps Fiber ———

INS-8405M

INS-8005M

PLC

PLC

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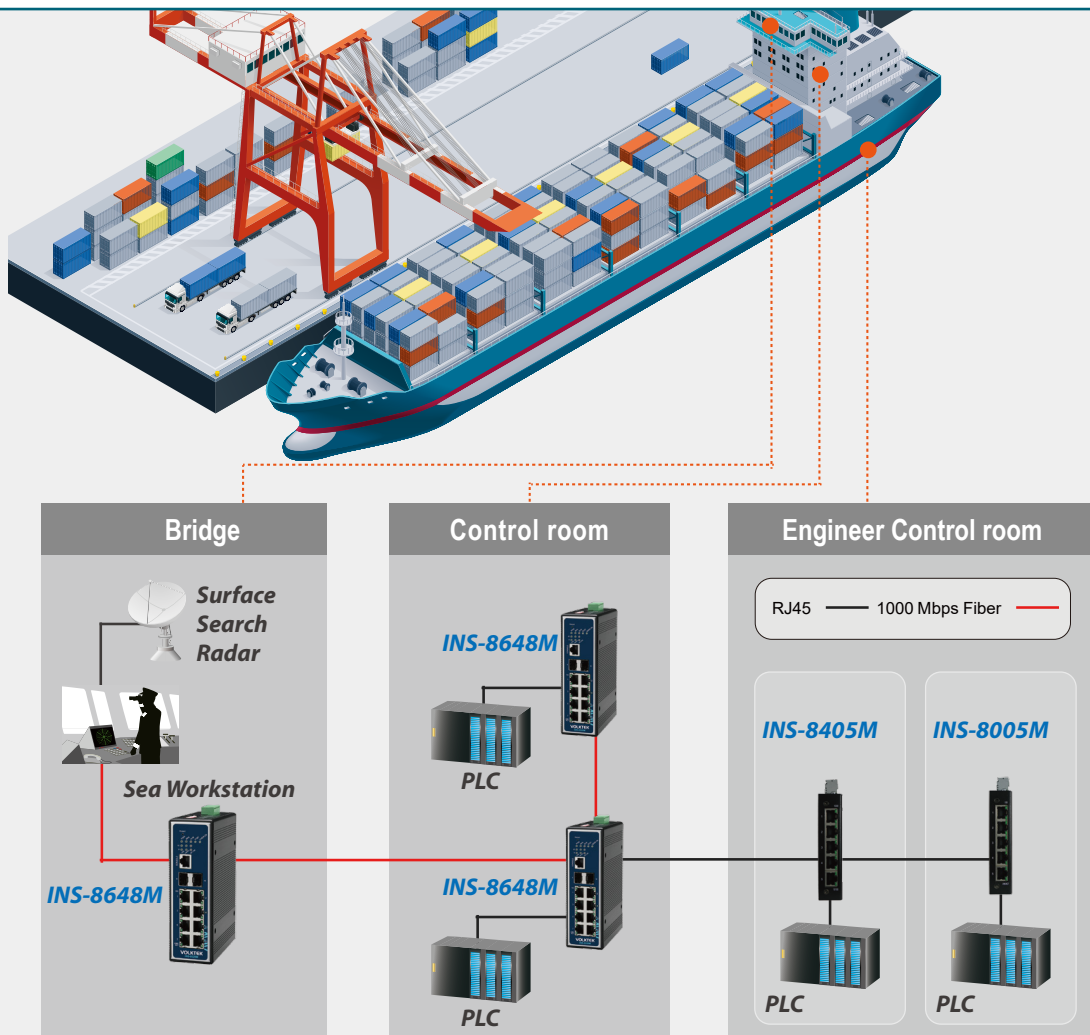
Specifications

Standards	
IEEE 802.3	10BASE-T
IEEE 802.3u	100BASE-TX
IEEE 802.3ab	1000BASE-T
IEEE 802.3x	Flow Control

Interface	
Ports	5 x 10/100/1000BASE-T (RJ45)

Features		
Performance	Jumbo Frame Size: 9K	
	MAC Table size: 2K	
	Throughput: 14,880 pps to 10 Mbps ports	
	148,800 pps to 100 Mbps ports	
	Switch Fabric: 10Gbps	

Power	
Input Voltage	9~48V DC
Connection	Terminal block
Power Consumption	4W (Max)
Surge Protection	6KV
ESD Protection	8KV

Mechanical and Environment	
Housing	Aluminum (IP30 Protection)
Mounting	DIN-Rail, Wall Mount
Operating Temperature	-40°C to 75°C
Storage Temperature	-40°C to 85°C
Operating Humidity	10 to 95% RH (non-condensing)
Storage Humidity	5 to 95% RH (non-condensing)
Weight	160g
Dimension (WxHxD)	23.4x109.2x73.8mm (0.9x4.3x2.9 inch)

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) : Level 3
			EN 61000-4-3 (RS) : Level 3
			EN 61000-4-4 (Burst) : Level 3
			EN 61000-4-5 (Surge) : Level 2
			EN 61000-4-6 (CS) : Level 3
Marine			DNVGL-CS-0339:2016
			DNVGL-RU-SHIP-Pt4Ch9:2018
			IEC-60945, IACS E10 (Rev.6 2014)
Shock Test			IEC 60068-2-27 (Processing)
Freefall Test			IEC 60068-2-32 (Processing)
Vibration			IEC 60068-2-6 (Processing)

Ordering Information	
INS-8405M	Unmanaged 5 x 10/100/1000 RJ45 Industrial Switch, DNV GL Marine Approval, -40°C~75°C

Specifications subject to change without notice.

Dimension

DIN-Rail Bracket