

INS-8528M

Managed 8 x 10/100 RJ45 & 2 x FX/GbE SFP
Industrial Switch, DNV GL Marine Approval

Description

The INS-8528M is a Managed Industrial Switch specifically designed to suit your heavy industrial environments and contains all the standard features to deploy in automation systems. Engineered with hardened components and enclosed in a rugged IP30 aluminum case, the INS-8528MM can operate in wide temperatures from -40°C to 75°C and also has excellent tolerance capability to high vibration and shock. Under DNV (Det Norske Veritas) certified, the INS-8528MM suits your heavy industrial environments in maritime & offshore applications.

Despite the fact that the INS-8528M 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.



Features Highlight

Robust Switch Performance

INS-8528M is built with IP30 aluminum case, surge and ESD protection to deliver robust performance and withstand extreme conditions in Industrial environments. The SFP ports support 100/1000Mbps for high bandwidth transmissions and the SFP DDM feature enables service providers to monitor SFP parameters. In case of any abnormal hardware condition, the switch automatically sends warnings through email and relay output with real-time alarm messages. This assists the system administrators to immediately react to emergency events and diagnose the faults more efficiently for smoother network operations.



Port-BASEd VLAN, IEEE 802.1Q VLAN, GARP and GVRP to ease network planning

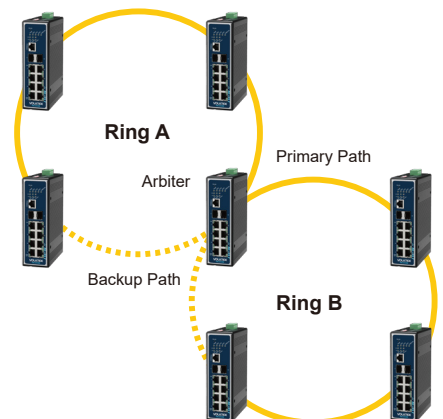
Planning, designing and managing complex networks is now simplified with INS-8528M. The switch supports VLANs which segment large networks into smaller parts and organize them into separate broadcast domains. This helps the administrators to control the traffic patterns, limit broadcast traffic and reduce broadcast storms. As the network expands, to provide control of increased VLANs, the switch offers GVRP feature, an application protocol of GARP, which registers devices and its ports depending on their availability. This feature prevents unnecessary network traffic transmitted by unregistered users and simplifies the network design irrespective of its size.

Network Redundancy

- Volktek's industrial switches redundant ring architecture enhances network reliability and make them ideal for deploying secure automation network systems in tough outdoor industrial environments, such as ITS, maritime, mining, and manufacturing systems.
- New generation of Volktek Xpress Ring delivers a various choice of ring topologies, including Xpress Ring, Dual Xpress Ring, Dual Homing, in rapid recovery time (<20ms @ 250 switches).
- G.8032v2, Ethernet Ring Protection Switching (ERPS) protocol, provides protection for Ethernet traffic in a multiple ring topology with fast recovery time (less than 50ms).

Redundant Power system

Mission-critical industrial applications need to operate without any interruptions because even a minimum network downtime can hugely impact the overall output. Providing continuous power and as well as data to such applications is now made easy with INS-8528MM's redundant power system. The switch is designed with standard industrial terminal block for redundant power. In case the primary power supply fails, the secondary power will enable the switch to provide continuous service.



Certificates & Approvals

Marine

Type Approval

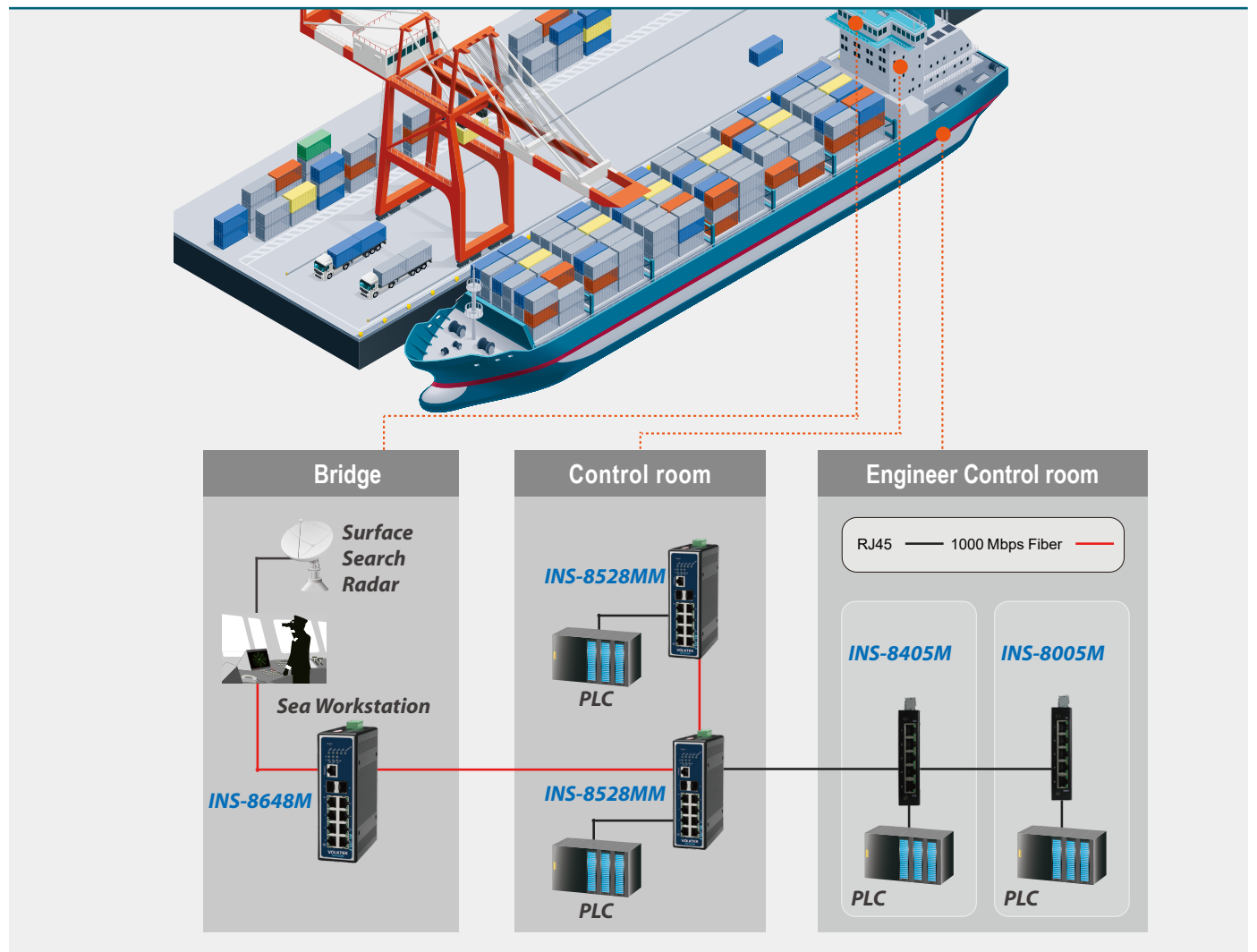


EN 60945



Marine Certifications Ensure Secure Communication Networks for Offshore Environments

Applications



Specifications

| Standards | |
|----------------------------|--|
| IEEE 802.3 | 10BASE-T |
| IEEE 802.3u | 100BASE-TX |
| IEEE 802.3ab | 1000BASE-T |
| IEEE 802.3x | Flow Control |
| IEEE 802.3ad | Link Aggregation |
| IEEE 802.1ab | LLDP |
| IEEE 802.1D | STP |
| IEEE 802.1w | RSTP |
| IEEE 802.1s | MSTP |
| IEEE 802.1p | Class of Service |
| IEEE 802.1Q | VLAN Tagging |
| IEEE 802.1X | Port Authentication |
| Interface | |
| Ports | 8 x 10/100BASE-TX (RJ45) 2 x 100FX/GbE SFP Slots 1 x RJ45 Console Port |
| DIP Switch | Primary/Redundant Power Voltage Drop Alarm setting |
| LED Panel | PWR, RPS, ALM, POST, 1000, 10/100 |
| Features | |
| Performance | Jumbo frame Size: 10KBytes |
| | MAC Table Entries: 16K |
| | Active VLAN: 4K |
| | Switch Fabric: 5.6Gbps |
| | L2 Forwarding Rate: 4.1Mpps |
| Management | CLI, Telnet/SSH, HTTP/HTTPs, SNMP v1/v2c/v3, SNMP Trap, MVLAN, Firmware Upgradable, Configuration Backup/Restore, Syslog, SNTP, PTP, LLDP, UDLD, DHCP Client/Relay/Option82, e-mail Alarm, Server Control, Mirroring, DDM, SFP Info, Auto-Provisioning, RMON Statistics, ModbusTCP |
| | Reliability |
| VLAN | IEEE 802.1Q, GARP/GVRP, Port-based VLAN, MAC-based VLAN, IP-based VLAN, Protocol-based VLAN, QinQ |
| Traffic Control | IGMP Snooping/Throttling, IGMP Proxy/Filter, MLD, MVR, QoS, Flow Control, Rate Limit, Storm Control, Traffic Monitor, Port Isolation, Loop Detection, Static Route |
| Security | ACL, SSH, HTTPs, SNMPv3, Port-based 802.1x, TACACS+, Port Security, MAC Search, Refusal MAC, Sticky MAC, Static MAC, DHCP Snooping, DHCP Sever Screening, ARP Inspection, BPDU Guard/Filter, Root Guard, Managed Host |
| Power | |
| Input Voltage | Primary inputs : 12~60VDC Redundant inputs : 12~60VDC |
| Power Consumption | System : 12W |
| Alarm Relay | One relay output, 1 A @ 24V DC |
| Mechanical and Environment | |
| Housing | Aluminum (IP30 Protection) |
| Mounting | DIN-Rail |
| Operating Temperature | -40°C~75°C |
| Storage Temperature | -40°C~85°C |
| Operating Humidity | 10 to 95% RH (non-condensing) |
| Storage Humidity | 5 to 95% RH (non-condensing) |
| Weight | 780g |
| Dimension (WxHxD) | 50x161.7x122.2mm (1.97x6.36x4.81inch) |
| Certifications | |
| EMI | FCC Part 15 Subpart B Class A |
| | EN 55022 : class A |
| | EN 55011 : 2009 class A |
| | 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) |
| Marine | DNVGL-CS-0339:2016 |
| | DNVGL-RU-SHIP-Pt4Ch9:2018 |
| | IEC-60945, IACS E10 (Rev.6 2014) |
| Shock | IEC 60068-2-27 |
| Freelfall | IEC 60068-2-32 |
| Vibration | IEC 60068-2-6 |
| Optional Accessories | |
| Power Supply | SDR-120-48: 120W DIN-Rail 48VDC Industrial Power Supply, -25°C~70°C |
| GBM-104 | 1000BASE-SX 1.25G, Multi-mode SFP, 500m |
| GBM-123TS | 1000BASE-LX, Bi-Di SFP TX:1310/RX:1550 Single Mode, 10Km, 0°C~70°C / -32°F~158°F |
| GBM-123RS | 1000BASE-LX, Bi-Di SFP TX:1550/RX:1310 Single Mode, 10Km, 0°C~70°C / -32°F~158°F |

Note :

- * The SFP communication distance upon the request.
- * Industrial SFP with wide operating temperature from -40°C~85°C is available upon request.
- * Specifications subject to change without notice.

Dimension

