# SLX-16MS Industrial Ethernet Switch

*Sixnet® Networking Series*

**red lion®**

## ►►► Managed Fast Ethernet Switch

Red Lion's Sixnet® series SLX-16MS managed Fast Ethernet switch features 16 copper ports, powerful network recovery and Modbus monitoring, providing reliable connectivity in harsh environments.

The rugged SLX-16MS managed switch features 16 10/100Base-T(X) copper ports and is housed in a slim, hardened metal DIN-rail enclosure with redundant 10-30 VDC power inputs. Designed to handle harsh environments, the SLX-16MS switch offers wire-speed throughput, high MTBF and wide -40° to 75°C operating temperature ratings. Real-Time Ring, self-healing ring technology, Modbus/ TCP and advanced security features ensure reliable and secure operation in industrial applications.

### APPLICATIONS

> Alternative Energy

> Maritime

> Oil & Gas

> Transportation

> Utility

> Water/Wastewater

### PRODUCT HIGHLIGHTS

> Hardened Industrial Design

> Wide -40° to 75°C Operating Temperature

> Redundant 10 to 30 VDC Power Inputs

> Modbus/TCP Remote Monitoring

> Real-Time Ring and Rapid Spanning Tree Protocol for network redundancy

### FEATURES & BENEFITS

> 16 Fast Ethernet Ports
  - 16 10/100Base-T(X) copper ports
> Redundant Power Inputs
  - 10-30VDC
  - Reverse polarity protection
> Robust Industrial Design
  - -40° to 75°C operating temperature
  - Hardened IP40 enclosure
  - Extended shock and vibration specs
  - Electrical noise and surge immunity
  - LED status indicators
  - Configurable alarm output
  - DIN-Rail or panel mount
  - UL/CSA: Class 1, Div 2

> Fully Managed Features Include:
  - Web browser or CLI management
  - MAC-based port security
  - Secure web (HTTPS/SSL) and Telnet (SSH)
  - IEEE 802.1x with RADIUS remote server authentication
  - Broadcast and multicast storm protection
  - SNMP v1, v2, v3
  - DHCP Server
  - Real-Time Ring fast-healing ring technology
  - RSTP/MSTP 802.1w, 802.1D, 802.1Q-2005
  - 802.1Q VLAN for traffic segregation
  - 802.1p QoS/CoS/DS
  - IGMP multicast filtering
  - SNTP (Simple Network Time Protocol)
  - RMON & port mirroring for advanced diagnostics
  - Modbus/TCP monitoring for port, power and ring status

**industrial networking**

FC    c(UL)us LISTED    CE    ABS TYPE APPROVED PRODUCT    RoHS compliant    Ex

## SWITCH PROPERTIES

Operation: Managed
Number of MAC Addresses: 8192
IEEE Compliance: 802.3, 802.3u, 802.3x, 802.1D/w,
    802.1p, 802.1Q and 802.1x
Industrial Connectivity: Modbus registers for port,
    power and ring status
Latency (Typical): 5 µs + frame time
Switching Method: Store-and-Forward
LED Status Indicators
Configurable Alarm Contact
Supports Full/Half Duplex Operation
Maximum Throughput: Up to 3.2 Gb/s
MDIX Auto Sensing Cable
Auto Sensing Speed and Flow Control
Communications: Full Wire Speed
MTBF: >1M hours GB @ 40°C per MIL HNDBK-217F2

## POWER INPUT

Input Voltage Range: Dual 10-30 VDC power inputs
Input Power (Typical): 7 W
Transient Protection (Peak): 15,000 watts
Spike Protection: 5,000 watts (10 times for 10 us)

## CONNECTORS

10/100Base-T: Sixteen (16) RJ-45 ports
Configuration Port: One (1) RS-232 (RJ-45) and one (1) USB (mini)

## NETWORK MEDIA

10BaseT: ≥ Cat3 cable
100BaseTX: ≥ Cat5 cable

## RECOMMENDED WIRING CLEARANCE

Front: 4" (10.2 cm)
Top: 4" (10.2 cm)

## ENVIRONMENTAL

Operating Temperature: -40°C to 75°C
Storage Temperature:  -40°C to 85°C
Operating Humidity: 5% to 95% (non condensing)
Operating Altitude: 0 to 30,000 ft.
Shock and Vibration: IEC 60068-2-6, -27

## CERTIFICATION & COMPLIANCE

Electrical Safety: UL508/CSA C22.2/142; EN61010-1, CE
EMI Emissions: FCC part 15, ICES-003; EN61000-6-4, CE
EMC Immunity: EN61000-6-2, CE
Hazardous Locations: ANSI/ISA 12.12.01, CSA C22.2/213 (Class 1,
    Division 2); EN60079-0, -15 (zone 2; category 3), CE (ATEX)
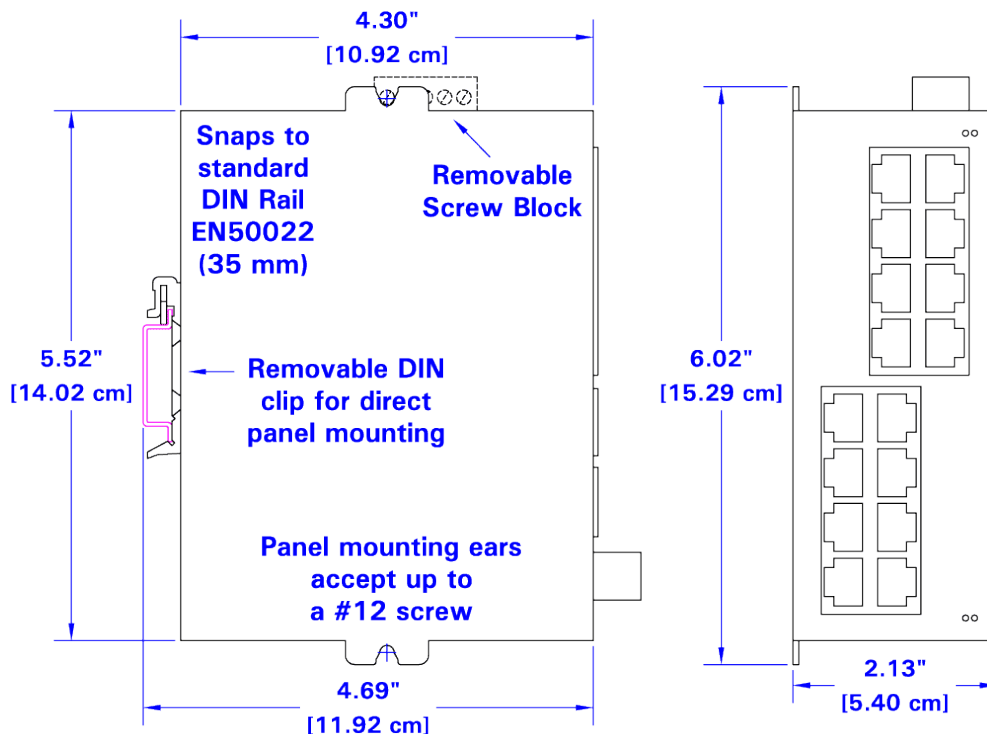Marine: Offshore rated per ABS

## MECHANICAL

Case Dimensions:
    Height: 5.52" (14.02 cm)
    Width: 2.13" (5.4 cm)
    Depth: 4.30" (10.92 cm)
    Weight: 12.0 oz (0.34 kg)
Mount: DIN rail (35 mm) and panel mount

## WARRANTY

5 Years on Design and Manufacturing Defects

**DIMENSIONS** *in inches (mm)*



4.30"
[10.92 cm]

**Snaps to standard DIN Rail EN50022 (35 mm)**

**Removable Screw Block**

5.52"
[14.02 cm]

**Removable DIN clip for direct panel mounting**

**Panel mounting ears accept up to a #12 screw**

6.02"
[15.29 cm]

4.69"
[11.92 cm]

2.13"
[5.40 cm]

**ORDER GUIDE**

| PART NUMBER | PRODUCT LINE |
| --- | --- |
| SLX-16MS-1 | 16-Port Industrial Fast Ethernet Managed Switch (16 10/100Base-T Copper Ports) |
| ET-PS-024-02 | Power supply – AC to 24VDC, 2A |
| SP-ETH-2 | Dual port Ethernet surge & lightning protecton for the 10/100 ports only |
| RJ45-DB9F-CBL | Console port cable, DB9 to RJ45 |