SLX-5MS Industrial Ethernet Switches

Sixnet® Networking Series

▶▶▶ Managed Fast Ethernet Switches

Red Lion's Sixnet® series SLX-5MS managed Fast Ethernet switches features five ports with up to two fiber ports and Modbus monitoring, providing reliable connectivity options in harsh environments.



Rugged SLX-5MS managed switches feature 5 ports (up to 2 fiber ports) and are housed in slim, hardened metal DIN-rail enclosures with redundant 10-30 VDC power inputs. Designed to handle harsh environments, SLX-5MS switches offer wire-speed throughput, high MTBF and wide -40° to 75°C operating temperature ratings. Real-Time Ring, Modbus/TCP and HTTPS 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

- 5 Fast Ethernet Ports
  - Up to Five 10/100Base-T(X) copper ports
  - Up to two 100Base-FX fiber 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
  - >2 million hours MTBF
  - UL/CSA: Class 1, Div 2
- Fully Managed Features Include:
  - Web browser or CLI management
  - Secure web (HTTPS/SSL) and Telnet (SSH)
  - Broadcast and multicast storm protection
  - SNMP v1, v2, v3
  - DHCP Server
  - Real-Time Ring fast-healing ring technology
  - RSTP - 802.1w and 802.1D
  - 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

▶▶▶ SLX-5MS Industrial Ethernet Switch Specifications

SWITCH PROPERTIES
- Operation: Managed
- Number of MAC Addresses: 2048
- IEEE Compliance: 802.3, 802.3u, 802.3x, 802.1D/w, 802.1p and 802.1Q
- 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
- Ethernet isolation 1500 VRMS 1 minute
- Maximum Throughput: 1 Gb/s
- MDIX Auto Sensing Cable
- Auto Sensing Speed and Flow Control
- Communications: Full Wire Speed
- MTBF: > 2M hours GB @ 40°C per MIL HNDBK-217F2

POWER INPUT
- Input Voltage Range: Dual 10-30 VDC power inputs
- Input Power (Max): 7 W
- Input Power (Typical):
  - 3.6 W (without fiber)
  - 5.6 W (with fiber)
- Transient Protection (Peak): 15,000 watts
- Spike Protection: 5,000 watts (10 times for 10 us)

CONNECTORS
- 10/100Base-T: Up to five (5) RJ-45 ports
- 100Base-FX: Up to two (2) ST or SC duplex fiber ports
- Configuration Port: One (1) RS-232 (RJ-45) and one (1) USB (mini)

NETWORK MEDIA
- 10BaseT: ≥ Cat3 cable
- 100BaseTX: ≥ Cat5 cable
- 100Base-FX Multimode: 50-62.5/125 µm
- 100Base-FX Singlemode: 9-10/125 µm

RECOMMENDED WIRING CLEARANCE
- Front: 4" (10.2 cm)
- Top: 4" (10.2 cm)

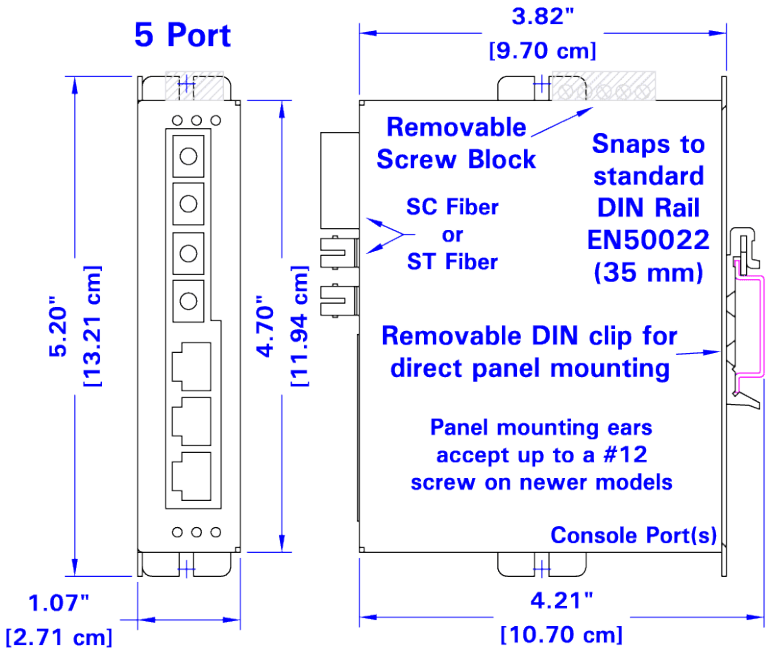
ENVIRONMENTAL
- Operating Temperature: -40°C to 75°C
- Storage Temperature: -40°C to 85°C
- Operating Humidity: 5% to 95% (non condensing)
- Operating Altitude: 0 to 30,000 ft.
- Shock and Vibration: IEC 60068-2-6, -27

CERTIFICATION & COMPLIANCE
- Electrical Safety: UL508/CSA C22.2/142; IEC61010-1, 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
- Eye Safety (Fiber Models): IEC60825-1, Class 1; FDA 21 CFR 1040.10 and 1040.11

MECHANICAL
- Case Dimensions:
  - Height: 4.7" (11.94 cm)
  - Width: 1.07" (2.71 cm)
  - Depth: 3.82" (9.70 cm)
  - Weight: 8 oz (0.23 kg)
- Mount: DIN rail (35 mm) and panel mount

WARRANTY
- 5 Years on Design and Manufacturing Defects

DIMENSIONS *in inches (mm)*



SLX-5MS Industrial Ethernet Switch Specifications

ORDER GUIDE

PART NUMBER	PRODUCT LINE
SLX-5MS-1	5-Port Industrial Fast Ethernet Managed Switch (5 10/100Base-T Copper Ports)
SLX-5MS-4XX	5-Port Industrial Fast Ethernet Managed Switch (3 10/100Base-T, 2 100Base-FX, Multimode 2km Ports)
SLX-5MS-5XX	5-Port Industrial Fast Ethernet Managed Switch (3 10/100Base-T, 2 100Base-FX, Singlemode 30km Ports)
SLX-5MS-5XXL	5-Port Industrial Fast Ethernet Managed Switch (3 10/100Base-T, 2 100Base-FX, Singlemode 60km 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

Where XX = ST or SC connector

FIBER TRANSCEIVER CHARACTERISTICS

FIBER MODE	MM	SM	SM
Fiber Length	2 km	30 km	60 km
TX Power Min	-23.5 dBm	-15 dBm	-5 dBm
RX Sensitivity Max	-32 dBm	-34 dBm	-35 dBm
Wavelength	1310 nm	1310 nm	1310 nm

* Fiber Length distances represent typical performance. Link budgets should be evaluated based on specific application conditions.

www.redlion.net

Connect. Monitor. Control.

Americas
sales@redlion.net

Asia-Pacific
asia@redlion.net

Europe
Middle East
Africa
europe@redlion.net

+1 (717) 767-6511

As the global experts in communication, monitoring and control for industrial automation and networking, Red Lion has been delivering innovative solutions for over forty years. Our automation, Ethernet and cellular M2M technology enables companies worldwide to gain real-time data visibility that drives productivity. Product brands include Red Lion, N-Tron and Sixnet. With headquarters in York, Pennsylvania, the company has offices across the Americas, Asia-Pacific and Europe. Red Lion is part of Spectris plc, the productivity-enhancing instrumentation and controls company. For more information, please visit www.redlion.net.

ADLD0210 051116 © 2016 Red Lion Controls, Inc. All rights reserved. Red Lion, the Red Lion logo, N-Tron and Sixnet are registered trademarks of Red Lion Controls, Inc. All other company and product names are trademarks of their respective owners.