## imall

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832 Email & Skype: info@chipsmall.com Web: www.chipsmall.com Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



## SLX-8MS Industrial Ethernet Switches

Sixnet<sup>®</sup> Networking Series

# red lon<sup>®</sup>

### Managed Fast Ethernet Switches

Red Lion's Sixnet<sup>®</sup> series SLX-8MS managed Fast Ethernet switches feature eight ports with up to four fiber ports and Modbus monitoring, providing reliable connectivity in harsh environments.

Rugged SLX-8MS managed switches feature 8 ports (up to 4 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-8MS 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**

- > 8 Fast Ethernet Ports
  - Up to eight 10/100Base-T(X) copper ports
  - Up to four 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



- 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











#### **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 Maximum Throughput: Up to 1.6 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): 4.3 W (without fiber) 6.3 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 eight (8) RJ-45 ports 100Base-FX: Up to four (4) 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**

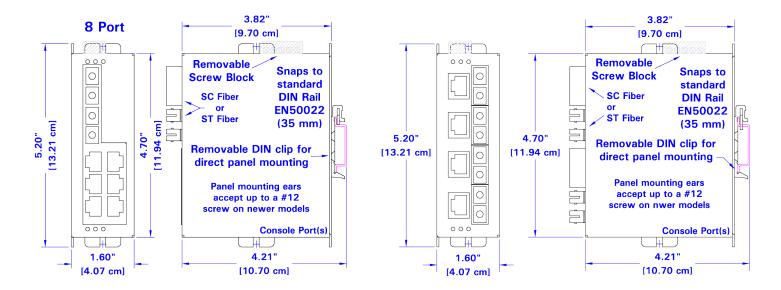
Electrical Safety: UL508/CSA C22.2/142; IEC61010-1, CE EMI Emissions: FCC part 15, ICES-003; EN61000-6-4, CE EMC Immunity: EN61000-6-2, CE Hazardous Locations: ANSI/ISA 12.12.01, CSA C22.2/213 (Class 1, Division 2); EN60079-0, -15 (zone 2; category 3), CE (ATEX) Marine: Offshore rated per ABS Eye Safety (Fiber Models): IEC60825-1, Class 1; FDA 21 CFR 1040.10 and 1040.11 MECHANICAL

Case Dimensions: Height: 4.7" (11.94 cm) Width: 1.6" (4.07 cm) Depth: 3.82" (9.70 cm) Weight: 10.0 oz (0.28 kg) 8MS-4/5; 11.0 oz (0.31 kg) 8MS-8/9 Mount: DIN rail (35 mm) and panel mount

#### WARRANTY

5 Years on Design and Manufacturing Defects

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



#### **ORDER GUIDE**

PART NUMBER	PRODUCT LINE			
SLX-8MS-1	8-Port Industrial Fast Ethernet Managed Switch (8 10/100Base-T Copper Ports)			
SLX-8MS-4XX	8-Port Industrial Fast Ethernet Managed Switch (6 10/100Base-T, 2 100Base-FX, Multimode 4km Ports)			
SLX-8MS-5XX	8-Port Industrial Fast Ethernet Managed Switch (6 10/100Base-T, 2 100Base-FX, Singlemode 20km Ports)			
SLX-8MS-8XX	8-Port Industrial Fast Ethernet Managed Switch (4 10/100Base-T, 4 100Base-FX, Multimode 4km Ports)			
SLX-8MS-9XX	8-Port Industrial Fast Ethernet Managed Switch (4 10/100Base-T, 4 100Base-FX, Singlemode 20km 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	ММ	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.

ADLD0402 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.