

# SLX-16MS-1 Industrial Ethernet Switch

Sixnet Networking Series



## Managed 16 Port Industrial Ethernet Switch

The SLX-16MS is a 16 port industrial Ethernet managed switch designed to be rugged, reliable, real-time and secure. It combines compact DIN rail packaging, protected circuitry and powerful software to keep your system going even under the toughest conditions.

### PRODUCT HIGHLIGHTS

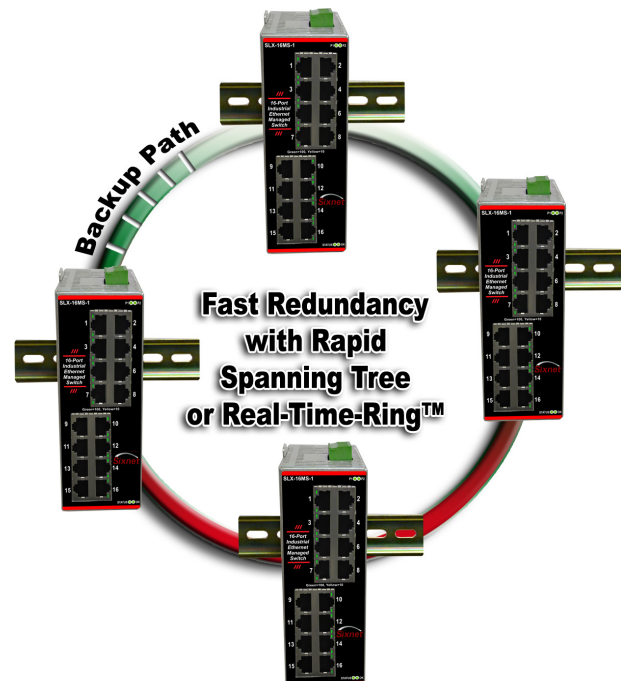
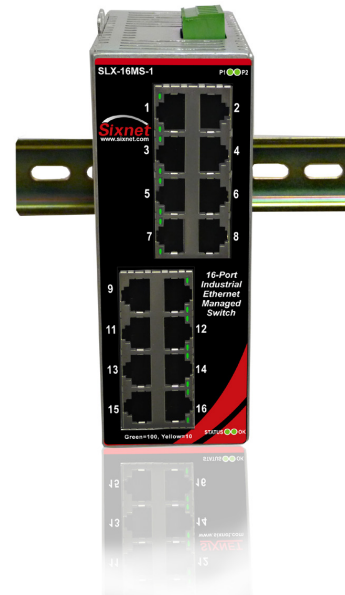
- 16 ports of fast 10/100 Ethernet
- High port count in a small footprint
- Truly rugged design with -40 to 75°C operation
- Easy to configure management functions

### REAL-TIME SECURE PERFORMANCE

- Real-Time-Ring™ or Rapid Spanning Tree (RSTP) for fast redundant ring or mesh networks
- SNMPv1 and v2 network management
- SNMPv3 authentication & encryption for security
- SNMP notifications (traps) for report on event
- Priority Queuing (QoS/CoS) for real-time operation
- IGMP for Multicast filtering (snooping & querying)
- VLAN for convenient traffic segregation
- Broadcast & multicast storm protection
- RMON & port mirroring for advanced diagnostics
- Security with HTTPS, SSL, SSH, SNMPv3 & more
- Easy configuration via Web, Telnet or CLI
- Free field-installable firmware upgrades forever

### TROUBLE FREE OPERATION

- -40 to +75 °C operating range
- UL/CSA (CUL), CE and Hazloc (Zone 2) rated (PENDING)
- Dual (redundant) power inputs
- Industrial surge and spike protection
- Self-test/alarm output contact
- DIN rail or direct panel mounting



# ▶▶▶ SLX-16MS-1 Industrial Ethernet Switch Specifications

## ETHERNET PERFORMANCE

- 16 fast Ethernet ports
- Managed, store & forward, wire-speed
- All IEEE 802.3 Ethernet protocols supported
- RJ45 ports 1 - 16 (shielded) 10/100BaseTX
- RJ45 port speed auto-negotiation
- RJ45 MDI/MDIX auto-crossover
- RJ45 TD and RD auto-polarity
- Typical latency (varies on load & settings)
  - @ 10 Mbps: 16 us + frame time
  - @ 100 Mbps: 5 us + frame time
- Full or half duplex operation configurable per port
- MAC addresses supported 8192
- Memory bandwidth 32 Gbps
- Ethernet isolation 1500 VRMS 1 minute
- Console ports – USB and RS232 (RJ45)

## ETHERNET COMPLIANCE

- IEEE 802.3u (Fast Ethernet 100Mbps for newer devices)
- IEEE 802.3 (10Mbps Ethernet supports legacy devices)
- IEEE 802.3x (Full-Duplex with Flow Control)
- IEEE 802.1D/w (Rapid Spanning Tree for redundant rings and Spanning Tree for interoperability)
- IEEE 802.1p (Priority Queuing – QoS, CoS, ToS/DS)
- IEEE 802.1Q (VLAN for traffic segregation)

## REAL-TIME-RING™

- Link loss recovery: 30 mS plus 5 mS per hop
- Switches in a ring: <50 for best performance
- Multiple rings supported (configurable)

## “OK” ALARM OUTPUT

- Indicates power & operational status
- Voltage same as switch input voltage
- Maximum current output 0.5 Amp

## POWER INPUT

- Redundant input terminals
- Reverse polarity protection
- Input power (typical with all ports active)
  - 7 W
- Power input voltage 10-30 VDC
- Transient protection 15,000 watts peak
- Spike protection 5,000 watts (10x for 10 uS)

## ENVIRONMENTAL

- Operating temperature:
  - -40 to +75 °C (cold startup at -40 °C)
- Storage temperature -40 to +85 °C
- Humidity (non-condensing) 5 to 95% RH (optional conformal coating is available)
- Vibration and shock – IEC60068-2-6, -27
- Maximum Operating Altitude: 30,000 ft.

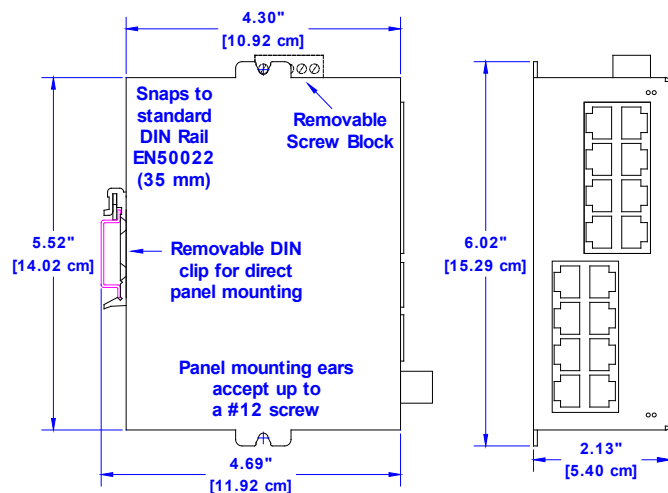
## STANDARDS COMPLIANCE

- Electrical safety – UL508 / CSA C22.2/14; EN61010-1, CE
- EMC – FCC part 15, ICES-003; EN61000-6-4, EN61000-6-2, CE
- Hazardous locations – UL1604 / CSA C22.2/213 (Class I, Div. 2); EN60079-15 (Zone 2, Category 3), CE (ATEX)
- Maritime – designed for marine and offshore per ABS
- RoHS and WEEE compliant
- ISO9001:2000 certified company

## PHYSICAL

- DIN rail or direct panel mounting
- Case – Corrosion-resistant aluminum
- Ingress protection – IP40
- Weight – 0.34 kg (12 oz.)
- Dimensions – see mechanical diagram

## MECHANICAL DRAWING



See the User Manual for a More Detailed Diagram

All specifications are subject to change. Consult factory for latest info.

## ORDERING GUIDE

**SLX-16MS-1** 16 port industrial Ethernet switch

## ACCESSORIES

**ET-PS-024-02** Power supply – AC to 24VDC, 2A

**SP-ETH-2** Dual port Ethernet surge & lightning protector for the 10/100 ports only

**RJ45-DB9F-CBL** Console port cable, DB9 to RJ45



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