

## 18 PORT INDUSTRIAL ETHERNET MANAGED SWITCH

The SLX-18MG is an 18 port industrial Ethernet managed switch with 16 fast and 2 Gigabit combination ports that support both copper and fiber optic connections. This switch is 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

- 18 ports including 2 flexible Gigabit combo ports that can be RJ45 copper or fiber optic
- 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

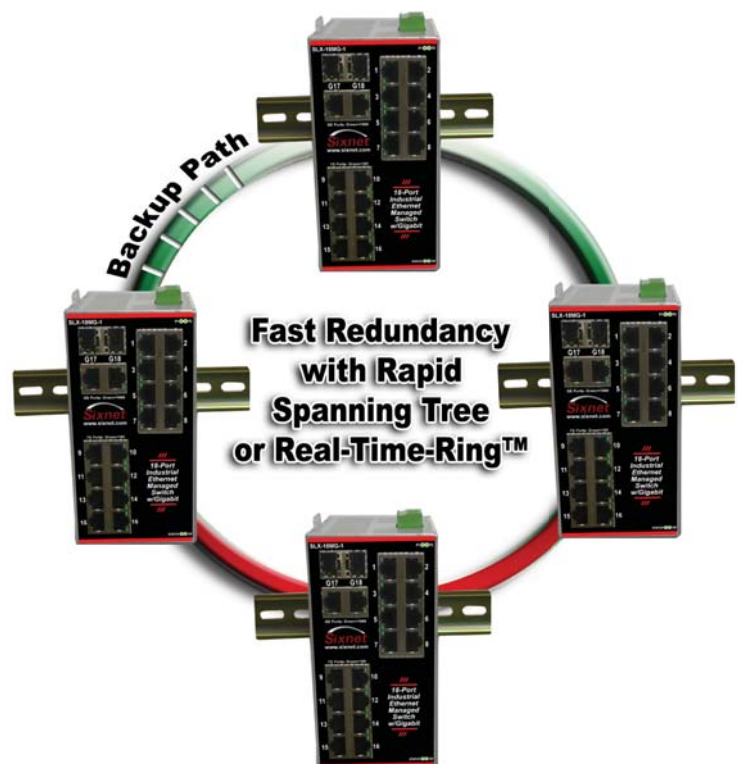
- Real-Time-Ring™ or Rapid Spanning Tree (RSTP) for fast redundant ring or mesh networks
- SNMPv1 and v2 network management
- SNMPv3 authentication & encryption for security
- SNMP notifications (traps) for report on event
- Priority Queuing (QoS/CoS) for real-time operation
- IGMP for Multicast filtering (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



**Two Flexible Combination Gigabit Ports**  
Your choice – Just connect to the RJ45 for a 10/100/1000Mbps auto-detecting copper link or plug in a fiber transceiver for a 100 or 1000Mbps noise-immune fiber link. These advanced ports give you the flexibility you need and make your job easier!



**ETHERNET PERFORMANCE**

- 18 Ethernet ports including 2 Gigabit
- Managed, store & forward, wire-speed
- All IEEE 802.3 Ethernet protocols supported
- RJ45 ports 1 - 16 (shielded) 10/100BaseTX
- RJ45 ports 17 - 18 (shielded) 10/100/1000BaseTX
- RJ45 port speed auto-negotiation
- RJ45 MDI/MDIX auto-crossover
- RJ45 TD and RD auto-polarity
- Ports 17 and 18 are combination gigabit ports that have both a RJ45 connector and SFP fiber connector. For each of these ports, only one of the connectors can be used at a time.
- SFP (pluggable) ports 17 - 18 accept mini-GBIC transceivers
- Fiber optic port speed: 100 Mbps or 1000 Mbps
- Fiber typical specs (see separate datasheet for details)
  - Multimode, 0.55 km, 850 nm, 50-62.5/125 μm
  - Singlemode, 10 km, 1310 nm, 9-10/125 μm
  - Long haul, up to 120 km, 1550 nm, 9-10/125 μm
- 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)
  - 8 W (w/ no fiber plugged in)
  - 10 W (w/ 2 fiber plugged in)
- 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

**STANDARDS COMPLIANCE**

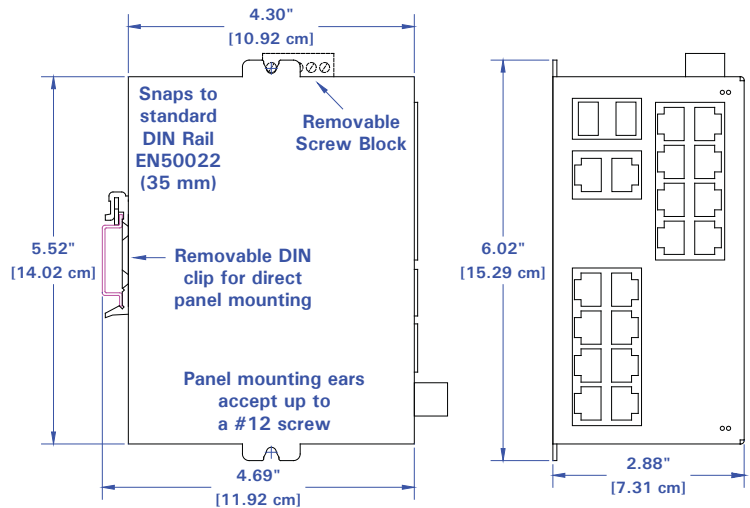
- Electrical safety – UL508 / CSA C22.2/14; EN61010-1, CE
- EMC – FCC part 15, ICES-003; EN61000-6-4, EN61000-6-2, CE
- Hazardous locations – UL1604 / CSA C22.2/213 (Class I, Div. 2) EN60079-15 (Zone 2, Category 3), CE (ATEX)
- Maritime – designed for marine and offshore per ABS
- RoHS and WEEE compliant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

**PHYSICAL**

- DIN rail or direct panel mounting
- Case – Corrosion-resistant aluminum
- Ingress protection – IP30
- Weight – 0.34 kg (12 oz.)
- Dimensions – see mechanical diagram

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

**MECHANICAL DRAWING**



See the User Manual for a More Detailed Diagram

**ORDERING GUIDE**

<b>SLX-18MG-1</b>	18 port industrial Ethernet switch
<b>GMFIBER-SFP-500</b>	Gigabit SFP fiber transceiver, mm, 550 m
<b>GMFIBER-SFP-2K</b>	Gigabit SFP fiber transceiver, mm, 2 km
<b>GSFIBER-SFP-10K</b>	Gigabit SFP fiber transceiver, sm, 10 km
<b>GSFIBER-SFP-30K</b>	Gigabit SFP fiber transceiver, sm, 30 km
<b>GSFIBER-SFP-50K</b>	Gigabit SFP fiber transceiver, sm, 50 km
<b>GSFIBER-SFP-80K</b>	Gigabit SFP fiber transceiver, sm, 80 km
<b>FMFIBER-SFP-4K</b>	100Mb SFP fiber transceiver, mm, 4 km
<b>FSFIBER-SFP-30K</b>	100Mb SFP fiber transceiver, sm, 30 km
<b>FSFIBER-SFP-60K</b>	100Mb SFP fiber transceiver, sm, 60 km
<b>FSFIBER-SFP-100</b>	100Mb SFP fiber transceiver, sm, 100 km

**ACCESSORIES**

<b>ET-PS-024-02</b>	Power supply – AC to 24VDC, 2A
<b>SP-ETH-2</b>	Dual port Ethernet surge & lightning protecton for the 10/100 ports only
<b>RJ45-DB9F-CBL</b>	Console port cable, DB9 to RJ45

**NOTE:** Contact SIXNET for special or long haul transceivers up to 120 Km.



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Datasheet SLX-18MG-1  
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