

# SLX-8ES-6/7 Ethernet Switch

Sixnet Networking Series



## ▶▶▶ Three Fiber Industrial Ethernet Unmanaged Switch

The SLX-8ES-6/7 is an 8 port industrial Ethernet unmanaged switch featuring 3 noise-immune Fiber optic ports. This ruggedized switch is industrial hardened to provide superior reliability for long term operation. They require no user setup and immediately start operating as soon as you power them up.

### PRODUCT HIGHLIGHTS

- Three 100 Mbps fiber optic ports for noise immune links up to 120 km
- Slim packaging fits on your DIN rail
- High performance and value
- Truly industrial hardened design
- Dual power inputs keeps you running
- Plug & play saves you time and money

### REAL-TIME OPERATION

- Intelligent routing - No collisions!
- Ideal for any 10/100 Ethernet system

### PLUG AND PLAY SIMPLICITY

- Auto-sensing for speed and duplex
- Auto-mdi/mdix-crossover and auto-polarity

### TROUBLE FREE OPERATION

- Ultra-reliable 1,000,000+ hours MTBF
- -40 to +85°C operating range
- UL, CSA (CUL), CE and Hazloc (Zone 2) rated
- Dual power inputs with spike/surge protection
- Rugged corrosion-resistant aluminum case
- DIN rail or direct panel mounting in multiple positions – No accessories required!



**FIVE 10/100 RJ45 AND  
THREE FAST ETHERNET  
FIBER OPTIC PORTS**

### SIXNET KNOWS INDUSTRIAL –

We have been designing industrial hardware such as Remote Terminal Units for over 30 years and have used this expertise to design the toughest Ethernet switches on the market. Don't trust your critical communications to so-called industrial hardware from commercial switch manufacturers. SIXNET switches give you proven assurance that your system will keep running for years to come.

# SLX-8ES-6/7 Specifications

## ETHERNET PERFORMANCE

- Unmanaged with 8 Ethernet ports
- Ethernet switch type: Intelligent store and forward wire speed
- Ethernet protocols supported: All IEEE 802.3
- RJ45 ports (shielded): 10/100BaseTX
- RJ45 speed (10 or 100 Mbps): Auto-negotiation
- RJ45 MDI/MDIX and TD/RD: Auto-crossover and auto-polarity
- Fiber optic port speed: 100BaseFX (100 Mbps)
- Fiber optic port wavelength: 1300 nm center
- Fiber multimode (mm) typical: 50 or 62.5/125 um (SC or ST)
- Fiber singlemode (sm) typical: 9 or 10/125 um (SC or ST)
- Fiber max. distance (full duplex) (see web for details) 4 km (mm), 20 (sm) or 40 km (long haul) or more (contact SIXNET)
- See separate datasheet for complete fiber transceiver details.
- Typical latency for 100M ports
  - 5 us + frame time
  - Varies on load
- Typical latency for 10M ports
  - 16 us + frame time
  - Varies on load
- Fiber duplex operation: Full duplex
- MAC addresses supported: 1024
- Memory bandwidth: 3.2 Gbps
- Ethernet isolation: 1500 VRMS 1 minute

## ETHERNET COMPLIANCE

- IEEE 802.3 (10Mbps Ethernet supports legacy devices)
- IEEE 802.3u (Fast Ethernet 100Mbps for newer devices)
- IEEE 802.3x (Full-Duplex with Flow Control)

## POWER INPUT

- Redundant input terminals
- Input power consumption: 8.0 W (typical w/ all ports active)
- Power input voltage: 10-30 VDC
  - Transient protection: 15,000 watts peak
  - Spike Protection: 5,000 watts (10 times for 10 us)

## ENVIRONMENTAL

- Operating temperature range
  - -40 to +75 °C
  - cold startup @ -40°C
- Storage temperature range:-40 to +85 °C
- Humidity (non-condensing):
  - 5 to 95% RH
  - Conformal coating is available – contact SIXNET
- Vibration: IEC68-2-6
- Maximum Operating Altitude: 30,000 ft.

## STANDARD COMPLIANCE

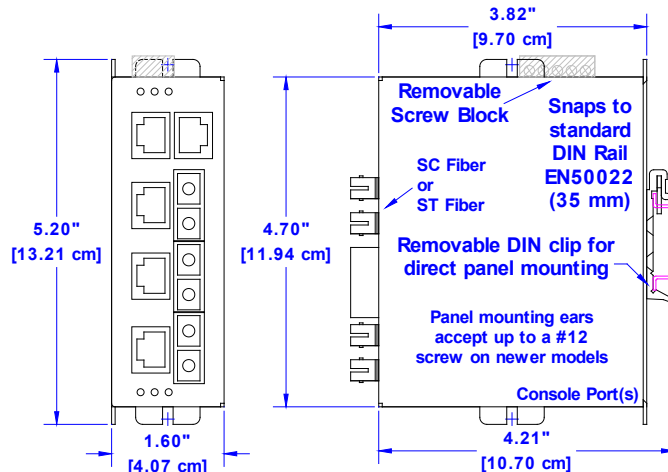
- Electrical safety - UL508/CSA C22.2/14, EN61010-1, CE
- EMC - FCC part 15, ICES-003, EN55022, EN61000-6, CE
- Hazardous locations: UL 1604/CSA C22.2/213 (Class I, Div. 2); EN60079-15 (Zone 2, Category 3), CE (ATEX)
- Maritime rated for marine & offshore per ABS
- Eye safety (fiber models) - IEC60825-1, Class 1; FDA 21 CFR 1040.10 and 1040.11

## PHYSICAL

- DIN rail or direct panel mounting
- Packaging: Aluminum with IP40 protection
- Weight: 11 oz. (0.31kg)
- 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

- SLX-9ES-###** See separate datasheets for unmanaged slim line models with only 1 fiber optic port
- SLX-8ES-6SC** Unmanaged with 5 RJ45 ports & 3 multimode fiber optic port with SC or ST style connector
- SLX-8ES-6ST** Unmanaged with 5 RJ45 ports & 3 multimode fiber optic port with SC or ST style connector
- SLX-8ES-7SC** Unmanaged with 5RJ45 ports & 3 singlemode fiber optic port with SC or ST style connector
- SLX-8ES-7ST** Unmanaged with 5RJ45 ports & 3 singlemode fiber optic port with SC or ST style connector

Special, mixed or long haul (up to 120km) fiber transceivers are available for special order. Contact Sixnet for details.

## ACCESSORIES:

- ET-PS-024-02** Industrial power supply – AC to 24VDC, 2A, with compact packaging, DIN rail mount
- SP-ETH-2** Dual port surge & lightning protector