# SLX-5EG-2SFP Industrial Ethernet Switch

# Sixnet Networking Series



# **SlimLine Plus Gigabit Industrial Connectivity**



# **PRODUCT HIGHLIGHTS**

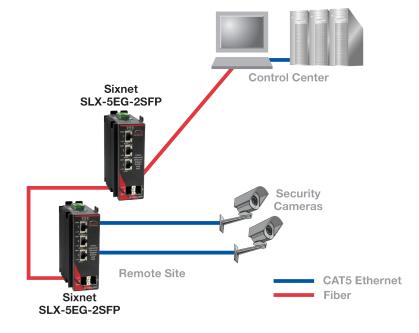
- 3 fully IEEE-compliant Gigabit PoE ports (10/100/1000)
- 2 Gigabit SFP ports
- High performance and reliability
- Industrial-hardened design

# **APPLICATIONS**

- Video & Security
- Transportation
- Oil & Gas
- Mining
- Maritime

The 5-port Red Lion Sixnet SLX-SEG-2SFP (2 + 3G) all Gigabit Ethernet switch is designed for exceptional performance and superior reliability in industrial networking environments. Gigabit operation drives ultrafast data throughput and network efficiency. The SLX series features rugged construction optimized for high tolerance to extreme environmental conditions. Convenient plug-and-play capabilities eliminates time-consuming setup and configuration. Ethernet SFP ports for fiber or copper links can be mixed and matched to provide port flexibility.

## **APPLICATION SCENARIO: VIDEO & SECURITY**



# **FEATURES & BENEFITS**

### Real-Time Ethernet Performance

- Provides plug-and-play simplicity
- Offers ease of use
  - All Gigabit ports
  - Flexible fiber configuration via SFP
  - Auto-sensing for speed and duplex
  - Auto-MDI/MDIX-crossover works with straight or crossed cables
  - Auto-polarity corrects for crossed signals
  - No user configuration required
  - Dual redundant power inputs

#### Rugged, Reliable Operation

- Supports deployment in extreme environments
- Provides high reliability in the toughest applications
  - Ultra-reliable 1,000,000+ hours MTBF
  - Operating temperature: -40° to +85°C
  - Rugged corrosion-resistant metal enclosure
  - Hazardous locations for Class I, Div 2 and Zone 2



### **SPECIFICATIONS**

#### **Ethernet Performance**

- Type: unmanaged
- Operation: store and forward wire-speed switching, non-blocking
- Modes: full or half duplex operation with flow control on all ports
- MAC addresses: 1,024
- Memory bandwidth: 32 Gbps
  Typical latency
- 3 μS for 1000 Mbps 5 μS for 100 Mbps
- 16 µS for 10 Mbps
- Jumbo frames: up to 10K
- Ethernet isolation: 1,500 Vrms 1 minute

#### **RJ45 Copper Ports**

- 3 RJ45 ports fully IEEE 802.3 compliant
- Speed (10/100/1000) and duplex settings (full or half): auto-detecting
- Auto-MDI/MDIX-crossover automatically supports either straight or crossed cables
- Auto-polarity for automatic correction of crossed TD and RD pairs

#### SFP Ports

- 2 SFP (pluggable) ports accept Gigabit mini-GBIC transceivers
- See separate datasheet for fiber transceiver specifications

#### Power Input

- Redundancy: dual power input terminals with reverse polarity protection
- Power input
- 10-44 VDC with no PoE output
- 45-52 VDC for PoE output
- Switch power consumption (without PoE)
   6.2 W (with 2 fiber) typical
- Typical is with all ports active at 1000 Mbps PoE power consumption: up to 15.4 W per port
- Max. power consumption (with PoE)
- 53 W with 3 fully loaded PoE ports
- Transient protection: 15,000 watts peak
- Spike protection: 5,000 watts (10 times for 10  $\mu$ S)

#### PoE Output (Ports 1-3)

- PoE compliance: 100% IEEE 802.3af compliant
- PoE classification: PSE (Power Sourcing Equipment) PoE voltage: 45 to 48 VDC depending on power input
- PoE power: up to 15.4 watts per channel
- PoE RJ45: pin assignments TX/V- (3, 6); RX/V+ (1, 2)
- PoÉ operation: automatic detection and power management
- PoE disconnect mode: AC disconnect
- PoE protection: over-temperature, overcurrent, over/under-voltage and transient

#### Standards & Compliance

- Standards: IEEE 802.3, 802.3u, 802.3x
- Electrical safety: UL508, CSA C22.2/14;
- EN61010-1, CE
- EMC: FCC part 15, ICES-003; EN610006-2/4, CE
- Hazardous locations: ISA 12.12.01, CSA C22.2/213 (Class I, Div 2); EN60079-15
- (Zone 2; Category 3), CE (ATEX) Marine/maritime/offshore compliance
- MTBF: >2MM hours GB @ 40°C per MIL-HNDBK-217F2
- RoHs and WEEE compliant

#### Environmental

- Operating temperature: -40° to +85°C
- Cold startup: -40°C
- Storage temperature: -40° to +85°C
- Humidity: 5 to 95% RH
- (non-condensing; conformal coating optional)
- Shock and vibration: IEC60068-2-6 and -27
- Maximum Operating Altitude: 30,000 ft.

#### Mechanical

- · Material: corrosion-resistant aluminum
- Ingress protection: IP40
- Mounting: DIN-rail or direct-to-panel
- Weight: 15.2 oz (0.43 kg)
- Dimensions: 3.82" x 1.77" x 5.26" (9.71cm x 4.48cm x 13.37cm)

#### Warranty

5 years on design and manufacturing defects

All specifications are subject to change. Contact Sixnet to learn more.

#### **ORDER GUIDE**

PART NUMBER	DESCRIPTION
SLX-5EG-2SFP	5 ports, unmanaged 3GE RJ45 PoE + 2 GE SFP ports
GMFIBER-SFP-500	Gigabit SFP fiber transceiver, multimode, 550 m
GMFIBER-SFP-2K	Gigabit SFP fiber transceiver, multimode, 2 km
GSFIBER-SFP-10K	Gigabit SFP fiber transceiver, singlemode, 10 km
GSFIBER-SFP-30K	Gigabit SFP fiber transceiver, singlemode, 30 km
GSFIBER-SFP-50K	Gigabit SFP fiber transceiver, singlemode, 50 km
GSFIBER-SFP-80K	Gigabit SFP fiber transceiver, singlemode, 80 km

\*See SL/SLX Product Manual for SFP transceiver specifications



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