# ET-5xS-IP67 Ethernet Switch

Sixnet Networking Series



# **Nilitary-Rated Industrial Connectivity**



# **PRODUCT HIGHLIGHTS**

- Reduced installation cost
- Mount anywhere save space
- Ensure real-time operation and allow for deterministic control
- Increased network reliability
- Direct machine mounting
- Outdoor or marine use
- Military applications & much more

The ET-5xS-IP67 is a 5-port IP67 sealed Industrial Ethernet Switch that mounts directly onto a machine or any convenient flat surface in the harshest industrial environments. The rugged packaging and Amphenol RJ Field connectors are IP67 (NEMA 6) rated to protect against water, oil, dust and vibration. This Ethernet switch ensures real-time deterministic performance and super-fast ring redundancy.

# **FEATURES & BENEFITS**

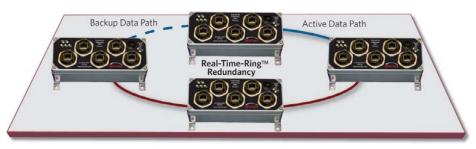
# Rugged, Reliable Operation

- Sixnet reliability and long-term support
  - Reliable 1,000,000+ hours MTBF
  - Firmware upgrades are FREE forever
- Truly industrial design and packaging
- Tough fiber-reinforced enclosure
- Rugged Amphenol connectors
- Dual power inputs and alarm output
- Industrial rated to perform
  - MIL-STD-1275 power protection (-E models)
  - Wide operating temp -40 to 75°C

# Real-Time Ethernet Performance

- Helps optimize vehicle networks
- Protects mission critical communication
  - Fast wire-speed switching
  - Intelligent message routing
  - All IEEE 802.3 protocols supported
  - Plug and play operation

# APPLICATION SCENARIO: REAL-TIME RING REDUNDANCY





# SPECIFICATIONS

### **Ethernet Performance**

- 5 Ethernet ports
- Intelligent store & forward Ethernet switch
- RJ45 ports (shielded) 10/100BaseTX
- RJ45 speed (10 or 100 Mbps) auto-negotiation
- RJ45 MDI/MDIX auto-crossover
- RJ45 TD and RD auto-polarity
- Typical latency @ 10 Mbps=16 us + frame time; typical latency @ 100 Mbps=5 us + frame time; varies on load and settings
- Full or half duplex operation configurable
- MAC addresses: 2048
- Memory bandwidth: 3.2 Gbps
- Ethernet isolation: 1500 VRMS 1 minute

#### **Ethernet Compliance**

- IEEE 802.3u (fast Ethernet 100Mbps)
- IEEE 802.3 (original 10Mbps Ethernet)
- IEEE 802.3x (Full-Duplex with Flow Control)
- IEEE 802.1p (QoS / CoS Quality & Class of Service)

#### Power Input

- Redundant input connections
- Input power ES: 2.4 W, RS: 2.7 W
- Power input voltage (-D models): 10-30 VDC
- Power input voltage (-E models): 10-50 VDC
- Power protection per MIL-STD-1275

#### Environmental

**ORDER GUIDE** 

- Operating temperature: -40 to 75 °C
- Storage temperature: -40 to 85 °C
- Humidity (non-condensing): 5 to 95% RH
- Vibration, shock and freefall: IEC60068-2-6, -27, -32

#### Standards & Compliance

- Electrical safety: UL508 / CSA C22.2/14; EN61010-1, CE
- EMI emissions: FCC part 15, ICES-003; EN61000-6-4, CE
- EMC immunity EN61000-6-2, CE
- Hazardous locations: UL1604 / CSA C22.2/213 (Class I, Div. 2); EN60079-15 (Zone 2, Category 3), CE (ATEX)
- Marine/maritime/offshore tested to meet ABS, DNV and Lloyds
- RoHS and WEEE compliant

#### Mechanical

- Direct machine mounting
- Case: UL 94V-0 materials
- Protection rating IP67 and NEMA 6
- Dimensions (HxWxD): 2.97x7.48x3.75" (7.54x19x9.52cm)
- Weight (typical): 1.2 lbs (.54 kg)

#### Warranty

• 5 years on design and manufacturing defects

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

PART NUMBER	DESCRIPTION
ET-5RS-IP67-x1	Real-time-Ring Model: Pre-set for 1 ring (standard)
ET-5RS-IP67-x0	Real-time-Ring Model: Pre-set for 0 rings (special)
ET-5RS-IP67-x2	Real-time-Ring Model: Pre-set for 2 ring (special)
ET-5RS-IP67-xC	Real-time-Ring Model: Custom configured (special)
ET-5ES-IP67-D	Unmanaged Model: Dual power with industrial protection
ET-5ES-IP67-E	Unmanaged Model: Dual power with MIL-STD-1275
ACCESSORIES	DESCRIPTION
SETUP WIZARD	Free windows configuration tool
ET-RJF-PWR-1	IP67 power plug
EB-RJF-PLUG-1	IP67 Ethernet plug
EB-RJF-CAP-1	IP67 cap for unused ports
EB-RJF-BLKHD-1	IP67 bulk-head connector





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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 award-winning 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. For more information, please visit www.redlion.net. Red Lion is a Spectris company.