# Managed Industrial Ethernet Switch 2 GB RJ-45/SFP Ports, 8 PoE Ports

EIRP610-2SFP-T



The EIRP610-2SFP-T is a 10 Port Managed Industrial Gigabit Ethernet Switch. In addition to 8 PoE copper RJ-45 ports, it has 2 RJ-45/SFP Combo ports to accommodate Gigabit Ethernet.

**Small Form-factor Pluggable (SFP) Port:** The SFP Ports provide flexibility when planning a network. Modules are available in multiple fiber formats. If an SFP module is not inserted, the associated combo port can be used with standard RJ-45 copper.

**High-Speed Transmissions:** The switch includes a switch controller that automatically senses transmission speed (10/100/1000 Mbps on two RJ45/SFP combo ports; 10/100 on eight PoE RJ45 copper ports). The RJ-45 interface also auto-detects MDI or MDI-X, eliminating the requirement for a crossover cable. Each port is buffered and supports store-and-forward protocol.

**Dual Power Input:** To reduce the risk of power failure, the switch has two 48 VDC power inputs. If the power fails, the switch will automatically use the secondary power input. Also, if the power goes out the corresponding P1 or P2 LED will go out and the Fault LED will light. The contacts for the alarm output will also open.

Flexible Mounting: IP30 metal enclosure - DIN or Panel mounted. Managed: Powerful management functions including SNMP, LACP, VLAN, Port Trunking, Port Mirroring, Redundant Ring Technology, and Spanning Tree/Rapid Spanning Tree Protocol.

**Power Over Ethernet (PoE):** The eight 10/100 ports are classified as power sourcing equipment (PSE). These ports can be used to power IEEE 802.3af compliant powered devices (PD), eliminating the need for a separate power supply for each device.

**Wide Operating Temperature:** With an operating temperature of -40 to 75°C (-40 to 167°F), this switch is suitable for use in harsh industrial environments.

**Easy Troubleshooting:** There are two LED indicators for each port that display the link status and transmission speed. Three LED indicators for power (P1, P2 and Fault) show power status. FWD LEDs on each PoE port indicate when a powered device is connected. These indicators allow you to quickly diagnose and correct problems and ensure your network remains reliable.

### **PRODUCT FEATURES**

Eight 10/100 BaseT 802.3af end point PoE injector ports

**B&B** ELECTRONICS

- Two RJ-45/SFP combo slots for Gigabit Ethernet
- Redundant ring technology for fast recovery
- Wide operating temperature
- DIN Rail or Panel Mount
- NEMA TS2

#### **ORDERING INFORMATION**

| MODEL NUMBER   | DESCRIPTION  |
|----------------|--|
| EIRP610-2SFP-T | Industrial Gigabit Switch (8 CU, 2 CU/SFP)<br>Power Over Ethernet Sourcing |

#### ACCESSORIES

Connector (-40 to 85°C)

SDR-240-48 - DIN-Rail Power Supply, 10A, 240W, 48V C5UMB3FBL - 3 ft. - Blue - Category 5e UTP Patch Cord DFMM-LCLC-1M - Multi-Mode Duplex Fiber Cable, LC To LC, 1 Meter DFSM-LCLC-1M - Single-Mode Duplex Fiber Cable, LC To LC, 1 Meter SFP-1000SX-M-550M-T - SFP Module, 1000Base-SX, Multi-mode 550m, LC Connector (-40 to 85°C) SFP-100LX-S-10KM-T - SFP Module, 1000Base-LX, Single-mode 10km, LC Connector (-40 to 85°C) SFP-1000LX-S-20KM-T - SFP Module, 1000Base-LX, Single-mode 20km, LC Connector (-40 to 85°C) SFP-1000LX-S-20KM-T - SFP Module, 1000Base-LX, Single-mode 20km, LC Connector (-40 to 85°C) SFP-1000LX-S-30KM-T - SFP Module, 100Base-FX, Single-mode 30km, LC

### MECHANICAL DIAGRAM



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#### SPECIFICATIONS

| SPECIFICATIO               |  |                       |  |
|----------------------------|--|-----------------------|--|
| REGULATORY                 | FCC, CE, UL, NEMA TS2  | VLAN                  | Port Based VLAN<br>IEEE 802.1Q Tag VLAN (256 entries)                                  |
| Approvals                  | UL File Number: E173795  | D 1 T 1 / 10D         | VLAN ID (1 to 4096), GVRP (256 groups)   |
| Free Fall                  | IEC60068-2-32  | Port Trunk w/LACP     | 4 trunk groups / 4 trunk members   |
| Shock                      | IEC60068-2-27  | LLDP                  | Allows the switch to advertise its<br>Identification and capabilities on the LAN       |
| Vibration                  | IEC60068-2-6   | Spanning Tree         | 802.1d Spanning Tree   |
| IEEE STANDARDS             |  | opanning nee          | 802.1w Rapid Spanning Tree   |
| IEEE 802.3                 | 802.3. 10Base-T Ethernet   | X-Ring                | Dual Homing, Ring Coupling, Dual Ring<br>topologies. Recovery time below 20mS          |
| IEEE 802.3u                | 100Base-TX and 100Base-FX Fast Ethernet  | Quality of Service    | Determined by port, tag, IPv4 type of  |
| IEEE 802.3ab               | 1000Base-T   |                       | service, and IPv4/IPv6 different service<br>802.1p class of service, 4 priority queues |
| IEEE 802.3z                | Gigabit Fiber  | Class of Service      | per port   |
| IEEE 802.3x                | Flow Control and Back Pressure   | Port Security         | Supports 100 static MAC entries and 100 MAC Filter                                     |
| IEEE 802.3ad               | Port trunk with LACP   | Port Mirror           | entries  |
| IEEE 802.3f                | Power over Ethernet  |                       | Supports TX, RX, and both packet<br>IGMP Snooping v1, v2 (256 multi-cast               |
| IEEE 802.3d<br>IEEE 802.1w | Spanning Tree Protocol<br>Rapid Spanning Tree Protocol   | IGMP                  | groups and IGMP Query  |
| IEEE 802.1w                | Class of Service   | IP Security           | 10 IP address entries for permission to  |
| IEEE 802.10                | VLAN Taq   | Login Security        | access management functions<br>802.1X Authentication / RADIUS                          |
| IEEE 802.1x                | User Authentication (RADIUS)   | Login Security        | Ingress Packet Filter and Egress Packet  |
| IEEE 802.1ab               | LLDP   |                       | Limit. The egress rate control supports  |
| NETWORK SPECIFICATION      |  |                       | all packet types. Limit rates are: 100K to 102400 Kbps (10/100) and 100 K to           |
|                            | Back-plane (Switching Fabric): 5.6Gbps   | Bandwidth Control     | 256000 Kbps (100). Ingress packet  |
| Architecture               | Throughput (Full-dux): 3.3Mpps@64bytes   |                       | Filter Type combination rules are  |
| Transfer Rate              | 14,880 pps Ethernet Port<br>148,800 pps Fast Ethernet Port   |                       | Broadcast, Multi-Cast, Unknown Unicast,<br>Broadcast/Multi-cast, Broadcast only, and   |
| ITANSIEI NALE              | 1,488,000 pps Gigibit Fiber Ethernet   |                       | all packets.   |
| Buffer                     | 1 MB   | Flow Control          | Flow control full-dux, backpressure half-dux   |
| MAC Table                  | 8K   | System Log            | System Log and remote system log server  |
| Flash ROM                  | 4 MB   | SMTP                  | SMPT SVR and 6 e-mail accounts for alerts  |
| DRAM                       | 32 MB  | SNMP Trap             | Cold Start, Link Down, Link Up, Authorization<br>Fail, PD Disconnect (PoE port event)  |
| Other                      | Broadcast Storm Filtering<br>CSMA/CD   | DHCP                  | Client, Server, Port and IP Binding  |
| INTERFACE                  | COMPACE  | DNS                   | DNS client with primary and secondary  |
| RJ-45 Ports                | 8 x 10/100BaseT, 2 x10/100/1000,   | SNTP                  | DNS server   |
|                            | Auto MDI/MDI-X   |                       | SNTP to synchronize system clock   |
| CU/SFP                     | 2 x Mini-GBIC SFP Combo Ports<br>P1, P2 (Green) to indicate power  | Firmware Update POWER | TFTP update, backup and restore  |
|                            | Fault (Red) to indicate fault  |                       | Dual 48 VDC Inputs   |
| LED                        | Mater (Green) to indicate ring master<br>Link Activity on 10/100 ports (Green)<br>Full Duplex / Collision (Amber)  | Input Voltage         | Reverse Polarity Protection  |
|                            |  | Power Connection      | Removable Terminal Block   |
|                            | SFP LNK/ACT (Green)  | Wire Size             | 12 to 24 AWG   |
|                            | 1000T LNK/ACT (Green)<br>1000M (Green)   | Power Use             | 9.6 Watts (Without PoE Load)   |
|                            | FWD on PoE ports to indicate if a powered  | Fault Output          | 116 Watts (Full PoE Load)<br>1 Relay Output – Normally Closed                          |
|                            | device is connected  | ENVIRONMENTAL         |  |
| POE                        |  | Operating Temperature | - 40 to 75°C (-40 to 167°F)  |
| Ports                      | 1 through 8  | Storage Temperature   | - 40 to 85°C (-40 to 185°F)  |
| Standard                   | 802.3af End Point Alternative A<br>Power Source Equipment (PSE)  | Operating Humidity    | 0 to 95%   |
| Capacity                   | 15.4W per port   | MECHANICAL            |  |
| Pin Assignment             | 1 & 2 – VCC(+), 3 & 6 – VCC(-)   | Enclosure             | IP30 Metal Enclosure   |
| SOFTWARE FEATURES          |  | Mounting              | 35 mm DIN Rail or Panel Mount Attachments  |
| Management                 | SNMP v1, v2C, v3, Web, Telnet, CLI   | Dimensions            | 6.2 x 8.4 x 13.1 cm (2.44 x 3.31 x 5.16 in)  |
| SNMP MIB                   | RFC 1215 Trap, RFC1213 MIBII,<br>RFC 1157 SNMP MIB, RFC 1493 Bridge<br>MIB, RFC 2674 VLAN MIB, RFC 1643,<br>RFC 1757, RSTP MIB, Private MIB, LLDP<br>MIB |                       |  |

