B&B ELECTRONICS

PRODUCT INFORMATION

## Model: EIR508 Series

# Eight Port Managed Industrial Ethernet Switches

ELINX™ Managed Ethernet Switch

CE

## Features

- ✓ **X-Ring Automatic Recovery**
- ✓ **Dual 12 to 48 VDC Power Inputs**
- ✓ **Relay Alarm Output**
- ✓ **IP30 DIN Rail or Panel Mount**
- ✓ **Wide Operating Temperature**
- ✓ **Automatic E-mail Notification for system events**
- ✓ **SNMP or Web GUI Management**

## Functional Description

The Elinx EIR508 series of Industrial Managed Ethernet Switches provide powerful functionality in a small package. Designed for industrial applications, these switches contain all the standard features of other switches, such at IGMP Snooping, Port Based VLAN, 802.1Q Tag VLAN, RJ-45 automatic MDI/MDI-X, auto negotiation, store and forward switching, STP, RSTP, Web Based Management, Ingress Packet Filtering, and Egress Rate Control. These managed switches also come with important industrial features to ensure reliability in an industrial application. X-Ring technology with coupling ring and dual homing allows automatic recovery in less than 300 MS. Dual power inputs ensure reliability. A relay alarm output for port failure notification. DIN Rail and Panel Mounting options on the same IP30 case. Another important feature is automatic e-mail notification for system events such as a cold start, change in network topology, power status or SNMP authentication failure.

## Ordering Information

| Model Number | Description |
|---|---|
| EIR508-T | Industrial Managed Ethernet Switch, 8 10/100 RJ-45 Ports |
| EIR508-2MC-T | Industrial Managed Ethernet Switch, 6 10/100 RJ-45 Ports, 2 MM FO (SC) Port |
| EIR508-2MT-T | Industrial Managed Ethernet Switch, 6 10/100 RJ-45 Ports, 2 MM FO (ST) Port |
| EIR508-2SC-T | Industrial Managed Ethernet Switch, 6 10/100 RJ-45 Ports, 2 SM FO (SC) Port (30 KM) |

B&B ELECTRONICS

www.bb-elec.com orders@bb-elec.com support@bb-elec.com
International Office: 707 Dayton Road PO Box 1040 Ottawa, IL 61350 USA 815-433-5100 Fax 433-5104
European Office: Westlink Commercial Park Oranmore Co. Galway Ireland +353 91 792444 Fax +353 91 792445

B&B ELECTRONICS

PRODUCT INFORMATION

# Specifications

## Technology

| | |
|---|---|
| IEEE Standards | 802.3 10Base-T Ethernet, 802.3u 100Base-TX and 100Base-FX Fast Ethernet<br>802.3x Flow Control and Back Pressure, 802.1d Spanning Tree, 802.1w Rapid Spanning Tree<br>802.1p Class of Service, 802.1Q VLAN Tag |
| Processing Type | Store and Forward |
| Flow Control | Flow control on full duplex, Back Pressure on half duplex |
| MAC Address Table Size | 2 KB |
| Memory Buffer | 1 MB |
| Protocol | CSMA/CD |
| Management | SNMP, Web GUI, and reset to factory default button |
| Transfer Rate | 14,880 bps for Ethernet ports, 14,8800 for Fast Ethernet ports |
| Transfer Packet Size | 64 bytes to 1522 bytes (with VLAN tag) |
| Packet throughput ability | 1.49 Mbps @ 64 bytes |
| X-Ring | 2 ports for X-Ring provide redundant backup with a recovery time below 300 MS. |
| Packet Filter | 4 Selection Rules to filter combinations of Broadcast , Multicast, Unicast, and Unknown packets. |
| VLAN | Port based and Tag. Up to 64 VLAN groups |
| Class of Service | 4 priority queues per port |
| Quality of Service | Port based, Tag based, or IPv4 Type of Service |
| IGMP | IGMP v1 and Query mode. Up t o 256 groups |
| Clock Synchronization | SNTP |
| Management Security | IP Address |
| Port Mirror | TX packet only or TX and RX packet |
| Firmware Update | TFTP |
| DHCP | DHCP Client Function to obtain addresses from DHCP server |
| Bandwidth Control | Ingress Packet Filter rules and Egress Rate Control |

## Interface

| | |
|---|---|
| RJ-45 Ports | 10/100BaseT with auto negotiation, Full/Half Duplex, MDI/MDI-X |
| Fiber Ports | 100Base FX, single-mode or multi-mode with ST or SC connectors |
| Port Indicators (each port) | Green LED for Link / Activity and Yellow LED for Full Duplex / Collision |
| System Indicators | Green LEDs for Power, Power 1, Power 2, and Master. Yellow LED for Fault. |

## Fiber Optics

| Fiber Type | Distance | Wavelength | Cable | Output Optical Power | Input Power Min |
|---|---|---|---|---|---|
| Multimode | 2 KM | 1310 nm | 62.5/125 um | -10 to 0 dBm | < -28 dBm |
| Single Mode | 30 KM | 1310 nm | 9/125 um | -15 to -8 dBm | < -34 dBm |

## Power

| | |
|---|---|
| Input Voltage | 12 to 48 VDC, dual source |
| Current Consumption | 0.8 A max. |
| Input Connection | Terminal Block |
| Relay Alarm | 1A @ 24VDC |

## Mechanical

| | |
|---|---|
| Enclosure | IP30 Aluminum Case |
| Mount | 35 mm DIN or Panel |
| Dimensions | 2.3 x 5.7 x 4.3 in (5.8 x 14.5 x 10.9 cm) |

**CE Declaration of Conformity**

| | |
|---|---|
| Manufacturer's Name | B&B Electronics Mfg CO |
| Manufacturer's Address | 707 Dayton Road<br>PO Box 1040<br>Ottawa, IL 61350 USA |
| Model Numbers | EIR508-T, EIR508-2xx-T series |
| Description | Industrial Managed Switch |
| Type | Light Industrial ITE Equipment |
| Application of Council Directive | 89/336/EEC |
| Standards | EN55022<br>EN61000-4-2, -4-3, -4-4, -4-5<br>EN61000-4-6, -4-8, -4-11, -4-12<br>EN61000-6-2, -6-4 |

Michael J. Fahrion, Director of Engineering

## SNMP MIB

- RFC 1213 MIBII
- RFC 1493 Bridge MIB
- RMON RFC 1757
- RFC 2674 VLAN MIB
- RFC 1643 Ethernet like MIB
- RFC 1215 Trap MIB
- Private MIB for switch info

## SNMP Trap

- Up to 3 Trap Stations
- Cold Start
- Port link up
- Port link down
- Authentication Failure
- Power status
- Port Alarm
- Fault Alarm
- X-Ring

## Environmental

| | |
|---|---|
| Operating Temperature | -40 to 167 F (-40 to 75 C) |
| Storage Temperature | -40 to 185 F (-40 to 85 C) |
| Operating Humidity | 0 to 95% NC |
| MTBF EIR508-T | 319175 hours |
| MTBF EIR508-2xx-T | 315109 hours |

## Regulatory Approvals

| | |
|---|---|
| EMI | FCC Class A<br>EN6100-4-2, -4-3, -4-4,<br>EN6100-4-5, -4-6 |
| Safety | EN60950 |
| Free Fall | IEC60068-2-32 |
| Shock | IEC60068-2-27 |
| Vibration | IEC60068-2-6 |

B&B ELECTRONICS

www.bb-elec.com orders@bb-elec.com support@bb-elec.com
International Office: 707 Dayton Road PO Box 1040 Ottawa, IL 61350 USA 815-433-5100 Fax 433-5104
European Office: Westlink Commercial Park Oranmore Co. Galway Ireland +353 91 792444 Fax +353 91 792445