B&B ELECTRONICS

PRODUCT INFORMATION

Model: EIR508 Series

Eight Port Managed Industrial Ethernet Switches

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)

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Specifications

Technology

IEEE Standards	802.3 10Base-T Ethernet, 802.3u 100Base-TX and 100Base-FX Fast Ethernet
	802.3x Flow Control and Back Pressure, 802.1d Spanning Tree, 802.1w Rapid Spanning Tree
	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)

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
	EN6100-4-2, -4-3, -4-4,
	EN6100-4-5, -4-6
Safety	EN60950
Free Fall	IEC60068-2-32
Shock	IEC60068-2-27
Vibration	IEC60068-2-6

CE Declaration of Conformity

Manufacturer's Name	B&B Electronics Mfg CO
Manufacturer's Address	707 Dayton Road
	PO Box 1040
	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
	EN61000-4-2, -4-3, -4-4, -4-5
	EN61000-4-6, -4-8, -4-11, -4-12
	EN61000-6-2, -6-4

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