



Model: EIR208 Series

## 8 Port, Entry-level, Unmanaged, Industrial Ethernet Switches



### Features

- ✓ Up to 3 multi or single-mode fiber ports on one compact switch
- ✓ ST or SC fiber connectors
- ✓ 10/100M, full/half duplex, MDI/MDI-X (Auto-negotiate)
- ✓ Supports IEEE 802.3, 802.3u, and 802.3x standards
- ✓ Industrial IP30 rated DIN rail case
- ✓ 10 to 48 VDC power input
- ✓ Store and forward mechanism
- ✓ Broadcast storm filtering
- ✓ Back-pressure and IEEE 802.3x compliant flow control
- ✓ 2K MAC addresses
- ✓ 64K byte memory buffer

### Functional Description

Designed to fit many applications, The EIR208 series are entry-level, plug-and-play industrial Ethernet Switches. With a compact IP30 DIN rail case, LEDs for power and activity, 10 to 48 VDC power input with removable terminal blocks, auto-negotiation of speed, duplex and auto-cross, these switches are perfect for any applications that doesn't require management features. Choose a switch with eight copper ports, or a combination of copper and up to three fiber ports. Multi-mode fiber models extend range up to 2 km. Single-mode fiber models extend range up to 15 km. 40 km and 80 km models are available upon request. All models require an external power supply (sold separately).

### Ordering Information

| Model      | 10/100 ports | Multi-mode Fiber | Single-mode Fiber |
|------------|--------------|------------------|-------------------|
| EIR208     | 8            |                  |                   |
| EIR208-MT  | 7            | 1 (ST)           |                   |
| EIR208-MC  | 7            | 1 (SC)           |                   |
| EIR208-ST  | 7            |                  | 1 (ST)            |
| EIR208-SC  | 7            |                  | 1 (SC)            |
| EIR208-2MT | 6            | 2 (ST)           |                   |
| EIR208-2MC | 6            | 2 (SC)           |                   |
| EIR208-2ST | 6            |                  | 2 (ST)            |
| EIR208-2SC | 6            |                  | 2 (SC)            |
| EIR208-3MT | 5            | 3 (ST)           |                   |
| EIR208-3MC | 5            | 3 (SC)           |                   |
| EIR208-3ST | 5            |                  | 3 (ST)            |
| EIR208-3ST | 5            |                  | 3 (SC)            |

Other port combinations, including 40 km and 80 km, are available. Call or visit [www.bb-elec.com](http://www.bb-elec.com).

Delmation Products BV  
[www.delmation.nl](http://www.delmation.nl)  
 Tel: (+31) (0)79 342 2041

**B&B electronics**  
 MANUFACTURING COMPANY

## Specifications

### Technology

|                       |                                                                          |
|-----------------------|--------------------------------------------------------------------------|
| Standards:            | IEEE802.3, 802.3u, 802.3x                                                |
| Processing Type:      | Store and forward with IEEE802.3x full duplex, non-blocking flow control |
| Flow Control:         | IEEE802.3x flow control, back pressure flow control                      |
| Packet buffer memory: | 64K bytes                                                                |
| Address Table Size    | 2K MAC Addresses                                                         |

### Interface

|                 |                                                                 |
|-----------------|-----------------------------------------------------------------|
| RJ45 Ports:     | 10/100BaseT(X) auto negation, Full/Half duplex, auto MDI/MD-X   |
| Fiber Ports:    | 100BaseFX, (multi-mode or single-mode with ST or SC connectors) |
| LED Indicators: | Power, (Link and Speed for each port)                           |

### Fiber Optics

| Fiber Type  | Distance | Wavelength | Output Power           | Sensitivity   |
|-------------|----------|------------|------------------------|---------------|
| Multi-mode  | 2 km     | 1310 nm    | Neg. 19 to Neg. 14 dBm | ≤ Neg. 32 dBm |
| Single-mode | 15 km    | 1310 nm    | Neg. 15 to Neg. 8 dBm  | ≤ Neg. 32 dBm |
| Single-mode | 40 km    | 1310 nm    | Neg. 5 to Neg. 0 dBm   | ≤ Neg. 34 dBm |
| Single-mode | 80 km    | 1510 nm    | Neg. 5 to Neg. 0 dBm   | ≤ Neg. 34 dBm |

### Power

|                   |                             |
|-------------------|-----------------------------|
| Input Voltage     | 10 to 48 VDC                |
| Power Consumption | 5.8 W Max                   |
| Current Draw      | 0.22 A @ 24VDC (0.57 A Max) |
| Input Connection  | Removable Terminal Block    |
| Protection        | Reverse Polarity Protection |

### Environmental

|                     |                                    |
|---------------------|------------------------------------|
| Op. Temperature     | 0 to 55 C (32 to 134 F)            |
| Storage Temperature | -40 to 80 C (-40 to 176 F)         |
| Humidity            | 0 to 95% Non-condensing            |
| MTBF                | 106,000 hours                      |
| MTBF Calculation    | Parts count reliability prediction |

### Mechanical

|                         |                                           |
|-------------------------|-------------------------------------------|
| Enclosure               | IP30 DIN mount plastic case               |
| Dimensions (w/ST Con)   | 4.5 x 7.1 x 1.9 in (11.6 x 18.2 x 4.7 cm) |
| Dimensions (w/SC Con)   | 4.2 x 7.1 x 1.9 in (10.6 x 18.2 x 4.7 cm) |
| Dimensions (all Copper) | 4.2 x 7.1 x 1.9 in (10.6 x 18.2 x 4.7 cm) |
| Installation            | 35 mm DIN                                 |

### Regulatory Approvals

|       |                                       |
|-------|---------------------------------------|
| EMI   | FCC Part 15 Class A, CISPR (EN55022)  |
| EMS   | EN61000-4-2 (ESD), EN61000-4-3 (RS)   |
|       | EN61000-4-4(EFT), EN61000-4-5 (Surge) |
| Other | CE                                    |

### CE Declaration of Conformity

|                                   |                                                                                 |
|-----------------------------------|---------------------------------------------------------------------------------|
| Manufacturer's Name:              | B&B Electronics Manufacturing CO                                                |
| Manufacturer's Address:           | PO Box 1040<br>707 Dayton Road<br>Ottawa, IL 61350 USA                          |
| Model Numbers:                    | EIR208 series                                                                   |
| Description:                      | Unmanaged Ethernet Switch                                                       |
| Type:                             | Light industrial ITE equipment                                                  |
| Application of Council Directive: | 89/336/EEC                                                                      |
| Standards:                        | EN55022<br>EN 61000-6-1<br>EN 61000 (-4-2, -4-3, -4-4, -4-5, -4-6, -4-8, -4-11) |

  
 Michael J. Fahrion, Director of Engineering