

# EIR203 Series

## 3 Port Unmanaged Industrial Ethernet Switch

- ✓ 10 to 48 VDC External Power Input
- ✓ Store and Forward
- ✓ Broadcast Storm Filtering
- ✓ Back Pressure and 802.3x Flow Control
- ✓ 2K MAC Address Table
- ✓ Three Flexible Ports for virtually any fiber and copper combination



PRODUCT INFORMATION

Designed to fit many applications, The EIR203 series are entry-level, plug-and-play industrial Ethernet Switches. With a compact IP30 DIN rail case, LEDs for power and activity, 10 to 50 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 three fiber ports, three copper ports, or any combination. 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).

B&B ELECTRONICS

| Model Number | Ordering Information |                  |                   |
|--------------|----------------------|------------------|-------------------|
|              | 10/100 Copper        | Multi-Mode Fiber | Single-mode Fiber |
| EIR203       | 3                    |                  |                   |
| EIR203-1MT   | 2                    | 1 (ST)           |                   |
| EIR203-1MC   | 2                    | 1 (SC)           |                   |
| EIR203-1ST   | 2                    |                  | 1 (ST)            |
| EIR203-1SC   | 2                    |                  | 1 (SC)            |
| EIR203-2MT   | 1                    | 2 (ST)           |                   |
| EIR203-2MC   | 1                    | 2 (SC)           |                   |
| EIR203-2ST   | 1                    |                  | 2 (ST)            |
| EIR203-2SC   | 1                    |                  | 2 (SC)            |
| EIR203-3MT   | 0                    | 3 (ST)           |                   |
| EIR203-3MC   | 0                    | 3 (SC)           |                   |
| EIR203-3ST   | 0                    |                  | 3 (ST)            |
| EIR203-3SC   | 0                    |                  | 3 (SC)            |

These are only our most popular variations. Visit [www.bb-elec.com/ElinxConfigurator](http://www.bb-elec.com/ElinxConfigurator) to configure to configure your switch with virtually any port combination

| Accessory Items |  |
|-----------------|--|
| MDR-20-24       | DIN Rail Mount, 24 VDC, 1 A Power Supply   |
| MDR-40-24       | DIN Rail Mount, 24 VDC, 1.7 A Power Supply |
| DRPM25          | Panel Mount Adapter                        |

**We also offer a full line of Fiber Optic and RJ-45 Patch Cables**

## 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: | 48 K bytes   |
| Address Table Size    | 2K MAC Addresses   |

### Interface

|                 |   |
|-----------------|---|
| RJ45 Ports:     | 10/100BaseT(x) auto negation, Full/Half duplex, auto MDI/MDI-connection |
| Fiber Ports:    | 100BaseFX ports (multi-mode or single-mode with ST or SC connector)     |
| LED Indicators: | Power and activity  |

### Fiber Optics

| Model       | Distance | Wavelength  | Output Power   | Sensitivity |
|-------------|----------|-------------|----------------|-------------|
| EIR102-Mx   | 2 km     | 1310 nm     | -19 to -30 dBm | ≤ - 32 dBm  |
| EIR102-Sx   | 15 km    | 1310 nm FP  | -15 to -8 dBm  | ≤ - 32 dBm  |
| EIR102-Sx40 | 40 km    | 1310 nm FP  | -5 to 0 dBm    | ≤ - 34 dBm  |
| EIR102-Sx80 | 80 km    | 1550 nm DFB | -5 to 0 dBm    | ≤ - 34 dBm  |

Note: Specifications for mixed fiber optic models are combinations of the above

### Power

|                    |   |
|--------------------|---|
| Input Voltage      | 10 to 48 VDC  |
| Power Use          | 3.8 W   |
| Input Connection   | Removable Terminal Block  |
| Protection         | Reverse Polarity Protection   |
| Wiring Information | 14 to 22 AWG, Solid<br>Copper, 1.7 lb-in torque,<br>Wire temp rating 105 C<br>Minimum, sized for 60 C<br>Ampacity |

### Environmental

|                     |                                       |
|---------------------|---------------------------------------|
| Op. Temperature     | 32 to 140 °F (0 to 60°C)              |
| Storage Temperature | -40 to 176 °F (-40 to 80 °C)          |
| Op. Humidity        | 0 to 95% Non-condensing               |
| MTBF 3 CU           | 289389 hours                          |
| MTBF 2 CU 1 FO      | 273117 hours                          |
| MTBF 1 CU 2 FO      | 254161 hours                          |
| MTBF 3 FO           | 233149                                |
| MTBF Calc Method    | Parts Count Reliability<br>Prediction |

### Mechanical

|                 |                                  |
|-----------------|----------------------------------|
| Enclosure       | IP 30 Plastic Case               |
| Dimensions (ST) | 5.0x1.2x3.5 in (12.8x3.0x9.0 cm) |
| Dimensions (SC) | 5.0x1.2x3.1 in (12.8x3.0x8.0 cm) |
| Installation    | 35mm DIN Rail Mount              |

### Regulatory Approvals

|                                   |
|-----------------------------------|
| CE, FCC, UL                       |
| CE/FCC DoC Available for Download |
| UL File – E222870                 |
| RoHS - Yes                        |

