



Model: EIR203 Series

3 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-A (Auto-negotiate)
- ✓ Supports IEEE 802.3, 802.3u, and 802.3x standards
- ✓ Industrial IP30 rated DIN rail case
- ✓ 10 to 50 VDC power input
- ✓ Store and forward mechanism
- ✓ Broadcast storm filtering
- ✓ Back-pressure and IEEE 802.3x compliant flow control
- ✓ 2K MAC addresses
- ✓ 48 K byte memory buffer

Functional Description

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).

Ordering Information

Model	10/100 ports	Multi-mode Fiber	Single-mode Fiber
EIR203	3		
EIR203-MT	2	1 (ST)	
EIR203-MC	2	1 (SC)	
EIR203-ST	2		1 (ST)
EIR203-SC	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)
EIR203-3ST	0		3 (SC)

Other port combinations, including 40 km and 80 km, are available. Call or visit www.bb-elec.com.



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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 (multi-mode or single –mode with ST or SC connectors)
LED Indicators:	Power, 10/100M (TP port) and 100M (fiber 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

Power

Input Voltage	10 – 50 VDC
Power Consumption	3.73 W @ 48 VDC
	3.75 W @ 15 VDC
	3.80 W @ 10 V DC
Input Connection	Removable Terminal Block
Protection	Reverse Polarity Protection

Environmental

Op. Temperature	0 to 55 C (32 to 131 F)
Storage Temperature	-40 to 80 C (-40 to 176 F)
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 hours
MTBF Calc. Method	Parts Count Reliability Prediction

Mechanical

Enclosure	IP30 DIN mount plastic case
Dimensions (w/ST Con)	5.0 x 1.2 x 3.5 in (12.8 x 3.0 x 9.0 cm)
Dimensions (w/SC Con)	5.0 x 1.2 x 3.1 in (12.8 x 3.0 x 8.0 cm)
Dimensions (all Copper)	5.0 x 1.2 x 3.1 in (12.8 x 3.0 x 8.0 cm)
Installation	35 mm DIN Rail Mount

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 Company
Manufacturer's Address:	PO Box 1040 707 Dayton Road Ottawa, IL 61350 USA
Model Numbers:	EIR203 series
Description:	Unmanaged Ethernet Switch
Type:	Light industrial ITE equipment
Application of Council Directive:	89/336/EEC
Standards:	EN55022 EN 61000-6-1 EN 61000 (-4-2, -4-3, -4-4, -4-5, -4-6, -4-8, -4-11)



Michael J. Fahrion, Director of Engineering

Mechanical diagram and additional information is available on B&B's Web Page. Visit www.bb-elec.com



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