

# Industrial DIN Rail Mount 10 /100BASE-TX Ethernet Copper Extender

**FIR2-EXTEND** 



The model EIR2-EXTEND extends your copper Ethernet connections up to 2200 meters (7218 feet) over twisted pair wire. The Ethernet Extender fully complies with IEEE 802.3 10BaseT and IEEE 802.3u 100BaseTX standards. Two EIR2-EXTEND models are required for the Ethernet extension, (one at each end of your extension points). The EIR2-EXTEND's hardened design features high shock and vibration, electrical noise immunity, a wide operating temperature range from -40°C to 75°C, and ruggedized aluminum housing. The EIR2-EXTEND is the ideal Ethernet extender for environments where connectivity is crucial. External power supplies are required (not included).

### PRODUCT FEATURES

- Hardened 10/100BSE-TX Ethernet Extender
- Extend Ethernet Copper up to 2200 meters (7218 feet) over existing copper wire (common copper, telephone, Cat5e)
- VDSL2 technology with transmission rate of 100Mbps at 400meters
- -40°C to 75°C (-40°F to 167°F) operating temperature range
- Auto -detection of Local/Remote function to reduce installation time
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- Link-Down-Relay (LDR) function to inform link loss to other side
- One 10/100Base TX (TX) Ethernet port with RJ-45 connector
- IEEE 802.3 10BaseT and IEEE 802.3u 100BaseTX compliant
- Line port uses common RJ-11 connector

### **ORDERING INFORMATION**

MODEL NUMBER DESCRIPTION

EIR2-EXTEND Industrial DIN rail mount 10/100BASE-TX Ethernet Extender,

VDSL2

#### **ACCESSORIES**

MDR-40-24 - DIN Rail Power supply 24VDC 40 Watt C5UMB3FBL - 3 ft. (1 M) - Blue - Category 5e UTP Patch Cord

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#### SPECIFICATIONS

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TECHNOLOGY		
Standards	IEEE802.3 10BASE-T, IEEE802.3u 100BASE-TX, IEEE802.3x	
Protocols	Transparent to higher layer protocols	
Processing Type	Half-duplex back-pressure and IEEE802.3x Full-duplex flow control	
Forward and Filtering Rate	14,880pps for 10Mbps; 148,810pps for 100Mbps	
INTERFACE		
	Port: One RJ-45 port	
Ethernet Port	<ul> <li>Speed: 10/100Mbps</li> <li>Distance: 100 meters (328ft.)</li> <li>Cable: 10BASE-T: UTP CAT. 3, 4, 5 (2-pair wire) 100BASE-TX: UTP CAT. 5 (4-pair wire)</li> </ul>	
	Port: One RJ-11 and Terminal Block port	
Extender Port	<ul> <li>Speed: Up to 100Mbps</li> <li>Distance: up to 2600 meters (8530 ft.)</li> <li>Cable: Telephone wire 24 AWG (0.5mm diameter, 1-pair wire) or larger</li> </ul>	
DIP Switch	DIP 1 Site: Auto/Loc DIP 2 LDR: ON/OFF	
LED Indicators	Per Unit: Power 1, 2 Per 10/100TX Port: Link/Activity, Full-duplex Line Speed: 100/80/60/40/20Mbps and Link below 20Mbps	
POWER		
Input Voltage	12 to 48VDC (Terminal Block)	
Power Consumption	4.56W max. 0.38A @ 12VDC - 0.07A @ 48VDC	
Protection	Over current protection Reverse polarity protection	
MECHANICAL		
Enclosure	Aluminum case IP30	
Dimensions	42mm (W) x 90mm (D) x 100mm (H) (1.65" (W) x 3.54" (D) x 3.94" (H))	
Weight	0.41 Kg (0.9 lbs.)	
Installation	DIN-Rail (Top hat type 35mm) mounting	

ENVIRONMENTAL		
Operating Temperature	-40°C to 75°C (-40°F to 167°F)	
Storage Temperature	-40°C to 85°C (-40 to 185°F)	
Ambient Relative Humidity	5% to 95% (non-condensing)	
REGULATORY APPROVALS		
ISO	Manufactured in an ISO9001 facility	
Safety	UL60950-1, EN60950-1, IEC60950-1	
EMI	FCC Part 15B, Class A VCCI Class A EN61000-6-4	
EMS	EN61000-6-2  • EN61000-4-2 (ESD Standards)  • EN61000-4-3 (Radiated RFI Standards)  • EN61000-4-4 (Burst Standards)  • EN61000-4-5 (Surge Standards)  • EN61000-4-6 (Induced RFI Standards)  • EN61000-4-8 (Magnetic Field Standards)	
Environmental	IEC60068-2-6 Fc (Vibration Resistance) IEC60068-2-27 Ea (Shock) FED STD 101C Method 5007.1 (Free fall w/ package)	

### **PERFORMANCE**

DISTANCE (M)	DATA RATE (MBPS)
300m (984 ft)	100
400m (1312 ft)	80
600m (1969 ft)	60
800m (2625 ft)	40
2600 m (8530 ft)	1

Note: All speed selections are Symmetrical on the DSL and Full-duplex on the Ethernet

The data rate will vary according to line quality

### **MECHANICAL DIAGRAM**







