

# Model: EIRP-Extend Industrial PoE Ethernet Ethernet Extender

## **Features**

- ✓ IEEE802.3at 30W PoE + /PSE power for last mile applications
- ✓ Complies with UL508 and NEMA TS1 & TS2 Environmental requirements for Traffic control equipment
- ✓ Complies with IEC61000-6-2 EMC Generic standard immunity for Heavy Industrial environment
- ✓ Redundant 24 or 48 VDC Power Inputs
- ✓ Wide Operating Temperature
- ✓ Extend Ethernet up to 6232 ft (1.9 km) over standard copper wires
- ✓ Ethernet Port: PoE Plus + RJ-45 10/100Mbps Full/Half-duplex, Auto-negotiation / Auto-MDI/MDX
- ✓ Ethernet Extend Port: 1 RJ-11 and terminal block 50Mbps Full Duplex VDSL
- ✓ Extender port compatible with EIS-Extend, EIR-Extend-x, EIRM-Extend-x

# **Functional Description**

Extending Ethernet to allow the PoE+ port to reach IP cameras, IP phones, and Ethernet connected control devices is simple and reliable with B&B Electronics' Ethernet Extenders. The EIRP series extenders offer built-in PoE+ technology which allows the end device, such as an IP camera, to be powered directly from the extended Ethernet port. Used with a 2<sup>nd</sup> extender the configuration is easy. Configure one unit as the local device, and the other one as the remote device. External power supplies are required (not included).

# **Ordering Information**

Model Number	Description	
EIRP-Extend	PoE Plus DIN Rail Mount Ethernet Extender	
Accessories		
DR19RMKT	Adjustable DIN Rail 19 Inch Rack Mount Kit	
PS5R-SD24	DIN Rail Mount Power Supply, 24 VDC, 60W	
MDR-60-48	DIN Rail Mount Power Supply, 48 VDC, 60W	



# **Specifications**

Technology		Ethernet Interface	
Standards:	802.3 10BaseT 802.3u 100BaseTx 802.3x Ethernet over VDSL	Ports	PoE RJ-45, 10/100BaseTX Full/Half Duplex Auto-Negotiation Auto-MDI/MDX
Protocol	Transparent to higher level	PoE Plus	Complies with IEEE802.3af / 802.3at standard
Processing	Protocols Half-duplex: backpressure Full-duplex: 802.3x	Speed Distance Cable	10/100 Mbps 320 ft (100 m) 100Base-TX UTPCAT 5 (4 pair)

Power		Extender Interface	
Input Voltage	48 VDC – Power Jack 24 - 48 VDC Terminal Block	Port Speed Distance Cable	One RJ-11 or Terminal Block Up to 50 Mbps Up to 6,232 ft (1.9 km) 24 AWG Copper Pair (0.5mm diameter, 1 pair wire) or larger
Power Consumption	38.4 W Max, 0.8A@48VDC	*see LED Cha	rt for distance/speed combinations

Mechanical		Environment	
Case Dimensions	DIN Mount IP30 Aluminum 50mm (W) x 110mm (D) x 135mm (H)	Operating Temp	-40 to 75° C Tested to 85° C
	(1.97" (W) x 4.33" (D) x 5.31" (H))	Storage Temp	-40 to 85° C
Weight	1.76 lbs (0.8 kg)	Op Humidity	5% to 95% Non- condensing

# **LED Chart**

	LED	Speed	Distance
1	Green	1 Mbps	6232 ft (1.9 km)
	Amber	3 Mbps	5904 ft (1.8 km)
2	Green	5 Mbps	5249 ft (1.6 km)
	Amber	10 Mbps	4593 ft (1.4 km)
3	Green	15 Mbps	3936 ft (1.2 km)
	Amber	20 Mbps	3280 ft (1.0 km)
4	Green	25 Mbps	2624 ft (0.8 km)
	Amber	30 Mbps	2296 ft (0.7 km)
5	Green	40 Mbps	1968 ft (0.6 km)
	Amber	50 Mbps	984 ft (0.3 km)

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



# **Regulatory Approvals**

ISO	Manufactured in an ISO9001 facility	
Safety	UL508	
	FCC Part 15, Class A	
	• EN61000-6-4	
	■ EN55022	
	■ EN61000-3-2	
EMI	■ EN61000-3-3	
	EN61000-6-2	
	<ul> <li>EN61000-4-2 (ESD Standards)</li> </ul>	
	- Contact: + / - 4KV; Criteria B	
	- Air: + / - 8KV; Criteria B	
	EN61000-4-3 (Radiated RFI Standards)	
	- 10V/m, 80 to 1000MHz; 80% AM Criteria A	
	EN61000-4-4 (Burst Standards)	
	- Signal Ports: + / - 4KV; Criteria B	
	- D.C. Power Ports: + / - 4KV; Criteria B	
	EN61000-4-5 (Surge Standards)	
	- Signal Ports: + / - 1KV; Line-to-Line; Criteria B	
	- D.C. Power Ports: + / - 0.5KV; Line-to-earth; Criteria B	
	EN61000-4-6 (Induced RFI Standards)  Signal Porto: 10\(\text{true} \@ 0.15 \\ \text{POMLET: 80\(\text{V}\) AM Critoria A	
	- Signal Ports: 10Vrms @ 0.15 - 80MHz; 80% AM Criteria A	
	- D.C. Power Ports: 10Vrms @ 0.15 - 80MHz; 80% AM	
	- Criteria A	
EMO	EN61000-4-8 (Magnetic Field Standards)  One of the Control of	
EMS	- 30A/m @ 50, 60Hz; Criteria A	
	IEC60068-2-6 Fc (Vibration Resistance)      Applies Applies Applies Applies (Operation (Operat	
	o 5g @ 10 - 150Hz, Amplitude 0.35mm (Operation/Storage/	
	o Transport)	
	IEC60068-2-27 Ea (Shock)  25g @ 11mg (Holf Sing Shock Bulge: Operation)	
Environmental	<ul> <li>25g @ 11ms (Half-Sine Shock Pulse; Operation)</li> <li>50g @ 11ms (Half-Sine Shock Pulse; Storage/Transport)</li> </ul>	
Environmental Test	50g @ 11ms (Half-Sine Shock Pulse; Storage/Transport)     IEC60068-2-32 Ed (Free Fall)	
	484 (0.0045)	
Compliance	ο 1Μ (3.281π.)	

# Installation:

Din Rail (35mm) Panel Mount, Rack Mounting with optional DR19RMKT kit.

## **Dimensions:**



