Ethernet Coaxial Extender for 10/100 Networks

Model EIR-EXTEND-C

B+B SmartWorx
Powered by ADVANTECH
www.advantech-bb.com

PRODUCT FEATURES

- One 10/100Base TX (TX) Ethernet port with RJ-45 connector
- Auto negotiation of speed and duplex mode on TX port
- Auto MDI/MDIX on Ethernet port
- IEEE 802.3 10BaseT and IEEE 802.3u 100BaseTX compliant
- Line port uses BNC connector or F-type connector
- Line port link is full-duplex up to 85Mbps over existing coaxial cable
- One DIP switch for configuring local or remote mode
- Status LEDs for monitoring and connection status
- Redundant power inputs with terminal block and DC jack

Model EIR-EXTEND-C is a point-to-point Ethernet extender designed to operate in harsh environments. Ethernet connections can extend up to 2600 meters (8,530 feet) using existing coaxial cable.

The perfect solution for legacy surveillance infrastructure upgrades moving from analog to IP-based, as no new cable is needed - saving time, money and labor cost.

Model EIR-EXTEND-C Ethernet extender *must* be used in pairs – one at each end of your existing coaxial cable. Each extender can easily be set to Local or Remote via a DIP switch on the top of the unit.

ORDERING INFORMATION

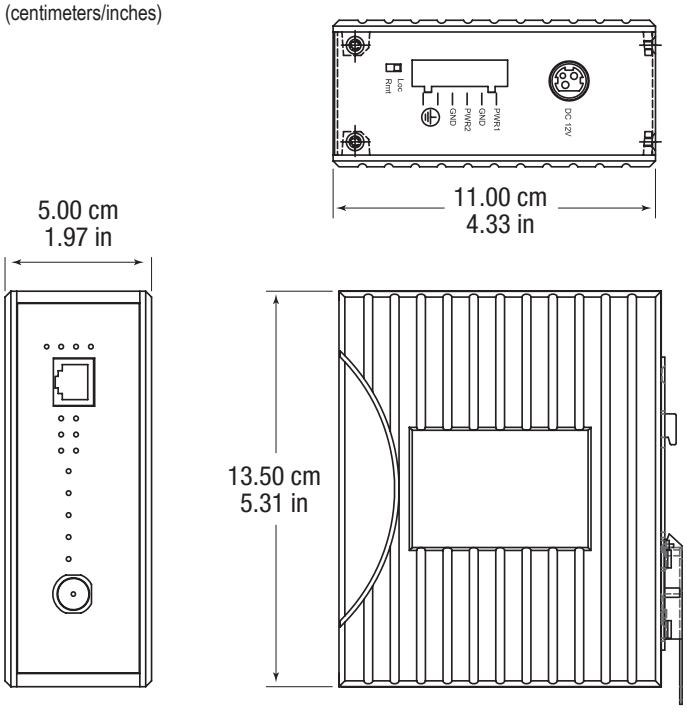
MODEL NUMBER	DESCRIPTION
EIR-EXTEND-C	Hardened 10/100Base-TX Ethernet Copper Extender over Coaxial Cable

ACCESSORIES

PS12VDC3P - Hardened AC Power Supply, 12VDC, 36W, 3A, 90-264VAC input, DC jack
MDR-20-24 - DIN rail mount power supply, 24VDC, 1.0 A output power
C5UMB3FBG - Category 5e UTP Patch Cord, Beige, 3 ft. (1 m)

MECHANICAL DIAGRAM

(centimeters/inches)



All product specifications are subject to change without notice.
EIR-EXTEND-C_3117ds

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SPECIFICATIONS

ETHERNET TECHNOLOGY	
Standards	IEEE802.3 10Base-T, IEEE802.3u 100Base-T, IEEE802.3x, Ethernet over SHDSL
Protocols	Transparent to higher layer protocols
Processing Type	Half-duplex back-pressure and IEEE802.3x Full-duplex flow control
INTERFACE	
Ethernet Port	RJ-45, 10/100Base-TX Full/Half-duplex Auto-Negotiation, Auto-MDI/MDIX
Speed	10/100 Mbps
Distance	328 ft. (100 meters)
Cable	10Base-T: UTP CAT. 3, 4, 5 (2-pair wire), 100Base-TX: UTP Category 5 (2-pair wire)
Extender Line Port	BNC Coaxial
Speed	1/5/10/20/30/40/50/60/70/75 Mbps
Distance	8,530 ft. (2,600 m)
Cable	Coaxial Cable (5C2V / RG6AU)
POWER	
Input Voltage	12 to 48 VDC (Terminal Block); 12VDC (DC Jack)
Power Consumption	7.2W Max. 0.6A@12VDC, 0.15A@48VDC
Overload Protection	Present
Reverse Polarity Protection	Present
ENVIRONMENTAL	
Operating Temperature:	-40 to 75°C (-40 to 167°F)
Storage Temperature	-40 to 85°C (-40 to 185°F)
Humidity	5 to 95% (non-condensing)
MEANTIME BEFORE FAILURE (MTBF)	
MTBF	265,154 hours
MTBF Calculation Method	Parts Count Reliability Prediction @ 25°C
MECHANICAL	
Enclosure	Aluminum case, IP30
Dimensions	5.0W x 11.0D x 13.5H cm (1.97W x 4.33D x 5.31H inches)
Weight	800 g (1.76 lbs.)
Installation	DIN rail (top hat type 35mm), Panel Rack Mounting

SPECIFICATIONS - continued

REGULATORY APPROVALS	
RoHS - Yes	
Safety	UL508
EMI	FCC Part 15, Class A EN61000-6-4 N55022, EN61000-3-2, EN61000-3-3
EMS	EN61000-6-2 EN61000-4-2 (ESD Standards) 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: + / 2KV; Criteria B D.C. Power Ports: + / 2KV; 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 Ports: 10Vrms @ 0.15~80MHz; 80% AM Criteria A D.C. Power Ports: 10Vrms @ 0.15~80MHz; 80% AM Criteria A EN61000-4-8 (Magnetic Field Standards) 30A/m @ 50, 60Hz; Criteria A
Environmental Test Compliance	IEC60068-2-6 Fc (Vibration Resistance) 5g @ 10~150KHz, Amplitude 0.35mm (Operation/Storage/Transport) IEC60068-2-27 Ea (Shock) 25g @ 11ms (Half-Sine Shock Pulse; Operation) 50g @ 11ms (Half-Sine Shock Pulse; Storage/Transport) IEC60068-2-32 Ed (Free Fall) 1m (3.281 ft.)

LEDS

FRONT PANEL LEDS (ETHERNET AND LINE CONNECTIONS)			
Port	**LEDs**	**Status**	**Description**
Ethernet (RJ-45)	Power1 Power2 Power3	Steady	Power On (Pwr stands for POWER)
		Off	Power Off
	Lnk/Act	Steady	Valid Ethernet connection established
		Flashing	Transmitting or receiving Ethernet data (ACT stands for ACTIVITY)
		Off	No valid Ethernet connection nor transmitting/receiving Ethernet data
	Fdx	Steady	Ethernet connection in full duplex mode (FDX stands for FULL-DUPLEX)
		Flashing	Collision occurred
		Off	Ethernet connection in half-duplex mode
Line (BNC)	Remote	Steady	Operating in remote mode
	Local	Steady	Operating in local mode
	Error	Steady	Error occurred
	Link	Steady	A valid connection established between local & remote

LEDS - continued

TOP LEDS (BNC LINE CONNECTIONS)			
LEDs	**Status**	**Speed**	**Distance**
1	Green	1~ 5 Mbps	up to 2600m
	Amber	6~10 Mbps	up to 2400m
2	Green	11~16 Mbps	up to 2000m
	Amber	17~20 Mbps	up to 1800m
3	Green	21~29 Mbps	up to 1600m
	Amber	30~43 Mbps	up to 1400m
4	Green	44~54 Mbps	up to 1200m
	Amber	55~63 Mbps	up to 1000m
5	Green	64~74 Mbps	up to 600m
	Amber	75~85 Mbps	up to 200m

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