

# EIS-EXTEND-C

## Ethernet Coaxial Extender for 10/100 Networks

Extend Ethernet Coaxial Connections Up to 8530 Feet

### 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 LED's for monitoring and connection status
- ✓ External AC to DC power adaptor included
- ✓ Used as a stand-alone device or with a 19 inch rack chassis
- ✓ Hot-swappable when used in 19 inch rack chassis



### Functional Description

The model EIS-EXTEND-C allows your existing coaxial cable to be used to extend Ethernet connections up to 8530 feet. The Ethernet Extender fully complies with IEEE 802.3 10BaseT and IEEE 802.3u 100BaseTX standards. Two EIS-EXTEND-C models are required for the Ethernet extension, (one at each end of your extension points). This product can be used with included power supply or in the EIS-RACK-16, 19 inch rack mount chassis, which can house up to 16 EIS-EXTEND-C units or EIS Media Converters.

### Ordering Information

Model Number	Description
EIS-EXTEND-C	10/100-TX Ethernet Copper Extender w/USA Power Adaptor
EIS-EXTEND-C-UK	10/100-TX Ethernet Copper Extender w/USA Power Adaptor
EIS-EXTEND-C-EU	10/100-TX Ethernet Copper Extender w/EU Power Adaptor
EIS-RACK-16	16-Slot Media Converter, 19" 2U Rack Chassis
EIS-RACK-PS	Power Supply for EIS-RACK-16, 84 Watts

## Specifications

### Technology

Standards: IEEE802.3 10Base-T, IEEE802.3u 100Base-TX, IEEE802.3x, Ethernet over VDSL  
Protocols: Transparent to higher layer protocols  
Processing Type: IEEE802.3x Full-duplex flow control

### Interface

**Ethernet Port:** RJ-45, 10/100Base-TX Full/Half-duplex Auto-Negotiation, Auto-MDI/MDIX  
Speed: 10/100Mbps  
Distance: 328ft. (100meters)  
Cable: 10Base-T: UTP CAT. 3, 4, 5 (2-pair wire), 100Base-TX: UTP CAT. 5 (2-pair wire)  
**Extender Line Port:** BNC Coaxial  
Speed: 1/5/10/20/30/40/50/60/70/75Mbps  
Distance: 8,530ft. (2,600meters)  
Cable: Coaxial Cable (5C2V / RG6AU)

### Power

Input Voltage: 12 VDC  
Power Consumption: 5.76W Max. 0.48A@12VDC

### Environmental

Operating Temperature: -10°C to 60°C (14°F to 140°F)  
Storage Temperature: -20°C to 70°C (-4°F to 158°F)  
Humidity: 5% to 95% (non-condensing)  
MTBF: 57,515 hours

MTBF Calculation: Parts count reliability prediction

### Mechanical

Enclosure: Aluminum case  
Dimensions: 3.16" (W) x 4.30" (D) x 0.94" (H), 80.3mm (W) x 109.2mm (D) x 23.8mm (H)  
Weight: 0.33 lb., (150g)

### Regulatory Approvals

RoHS - Yes

Safety:

UL60950-1, EN60950-1, IEC60950-1

EMI:

FCC Part 15, Class A

VCCI, Class A

EN61000-6-3

EN55022, 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)

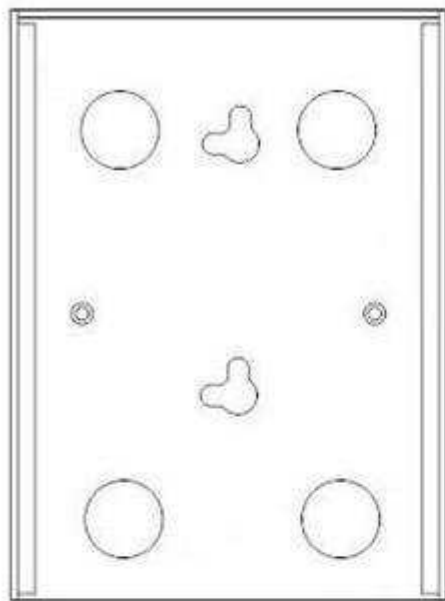
IEC60068-2-32 Ed (Free Fall) 1M (3.281ft.)

## LED Indicators

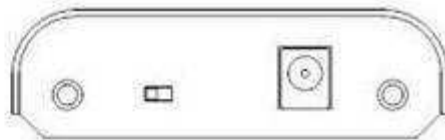
Front Panel LEDs (Ethernet and Line Connections)			
Port	LEDs	Status	Description
Ethernet (RJ-45)	Pwr	Steady	Power on (Pwr stands for POWER)
		Off	Power off
	Lnk/Act	Steady	Valid Ethernet connection established (Lnk stands for LINK)
		Flashing	Transmitting or receiving Ethernet data (Act stands for ACTIVITY)
		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)	Rmt	Steady
Loc		Steady	The device operates in local mode
Err		Steady	Error occurred
Lnk		Steady	A valid connection established between local & remote units

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

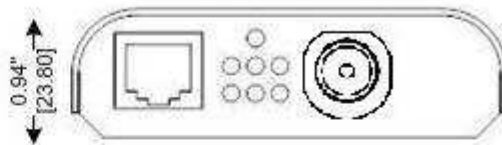
### Diagrams



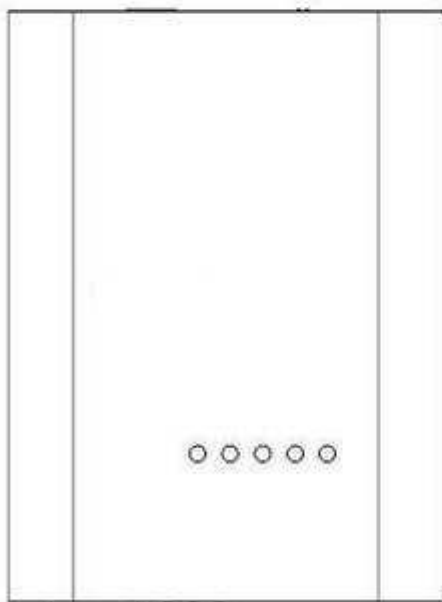
BOTTOM



BACK



FRONT



3.16" [80.30mm]

TOP

4.30" [109.20mm]



0.94" [23.80]

SIDE