

# BE-1

Coax to Twisted Pair Converter for E1



data communications  
The Access Company

- Conversion between coax interface and twisted pairs for E1 applications (2.048 Mbps)
- Enables standard ISDN primary rate installation over existing coax cables
- No AC or DC power required
- Insensitive to signal direction
- Immediate installation
- Miniature, lightweight Balun

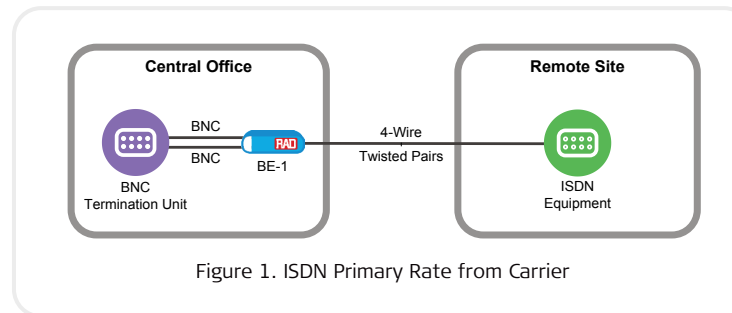


Figure 1. ISDN Primary Rate from Carrier

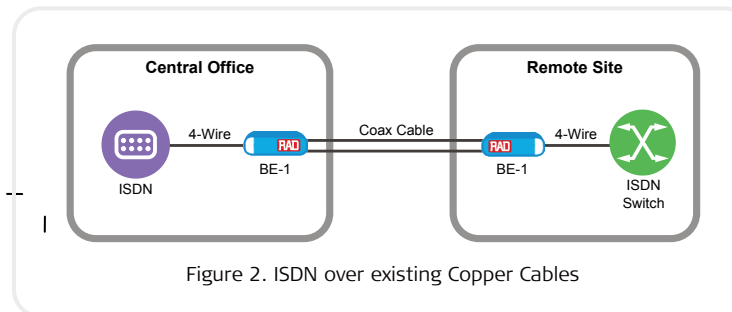


Figure 2. ISDN over existing Copper Cables

The BE-1 Balun (coax to twisted pair converter) enables any E1 equipment with coax interface to operate over two twisted pairs (4-wire interface), as shown in *Figure 1*.

Two BE-1 units back-to-back allow 4-wire ISDN equipment to operate over existing coax cables (see *Figure 2*).

BE-1 is insensitive to the direction of the signal, allowing transmit and receive lines to be reversed without affecting operation.

BE-1 is a miniature, lightweight Balun. It operates without AC or DC power and provides up to 1000V isolation voltage for protection against AC and DC overvoltage on the line.

## Specifications

### Standards

Supports ITU G.703 pulse mask on unbalanced and balanced sides

### Data rate

2.048 Mbps

### Unbalanced Interface

Line impedance: 75Ω, unbalanced

Connectors: 2 x BNC (female or male) (see *Ordering*)

### Balanced Interface

Line impedance: 120Ω, balanced

Connector: RJ-45, 8-pin

### Pinout

RJ-45	BNC-1	GND	BNC-2
1			Shield
2			Core
3,6		GND	
4	Shield		
5	Core		
7,8	(Not connected)		

### Power

Operates without external power supply

**Physical**

Length: 50 mm/2.0 in  
Width: 50 mm/2.0 in  
Height: 24 mm/0.9 in  
Weight: 50g/1.8 oz

**Environment**

Temperature: 0-50°C / 32-122°F  
Humidity: up to 90%, non-condensing

## Ordering

BE-1/\*

### *Legend*

- \* Connectors:
  - F BNC female
  - M BNC male

#### **International Headquarters**

24 Raoul Wallenberg Street  
Tel Aviv 69719, Israel  
Tel. 972-3-6458181  
Fax 972-3-6498250, 6474436  
E-mail market@rad.com

#### **North America Headquarters**

900 Corporate Drive  
Mahwah, NJ 07430, USA  
Tel. 201-5291100  
Toll free 1-800-4447234  
Fax 201-5295777  
E-mail market@radusa.com

Order this publication by Catalog  
No. 801196



**data communications**

**The Access Company**

**www.rad.com**

271-100-11/12 Specifications are subject to change without prior notice. © 1988-2011 RAD Data Communications Ltd.  
The RAD name, logo, logotype, and the terms EtherAccess, TDMoIP and TDMoIP Driver, and the product names Optimum