



Balun Adapter



DATA SHEET

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Balun Adapter

Webb's dual balun adapter is a miniature G.703 balun that allows 75 ohm coax hardware to communicate with 120 ohm twisted pair equipment.

It supports E1 data rates to 2.048 Mbps and E2 to 8.448 Mbps. The dual balun receives 75 ohm signals and converts them to 120 ohm for transmission over a network. The signals output by dual balun are scaled to match the pulse shape requirements specified by the CCITT G.703 standard.

Features

- No AC power or batteries required
- Link to data isolation: 250V Bi-directional signal conversion
- Operating temperature: 0 to 75°C
- Compact design

Specifications

2-8 Mbit/s speed version for E1 (T1) data streams

- Impedance: 75 ohm to 120 ohm/100 ohm
- Insertion loss: Max. 0.2dB (2Mbps); Max. 0.3dB(8Mbps)
- Return loss: -29dB(2Mbps); -21dB(8Mbps)
- Cross talk: better than -80dB from 0.1 to 12MHz between any 2 baluns mounted distance up to 15mm

2-8-34 Mbit/s speed version for E2 (T2) data streams

- Impedance: 75 ohm to 120 ohm/100 ohm
- Insertion loss: Max. 0.3dB (8Mbps); Max. 0.9dB from 0.2-70MHz
- Return loss: -21B(8Mbps); -15dB from 1 to 70 MHz
- Cross talk: better than -60dB from 1MHz to 70MHz between any 2 baluns mounted distance up to 15mm

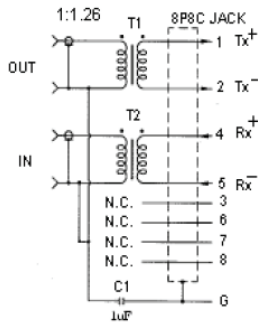
34 to 155 Mbit/s speed version for E3 (T3) and higher data streams

- Impedance: 75 ohm to 120 ohm/100 ohm
- Insertion loss: Max. 0.8dB from 860 KHz to 52 MHz Max. 1.5dB from 50KHz to 240 MHz
- Return loss: Max. 15dB from 1MHz to 240 MHz
- Cross talk: -80dB from 1MHz to 240MH

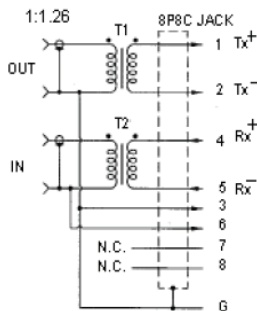
**Specifications are subject to change without notice based on technical recommendations and related product enhancements*

Typical Schematic Diagrams

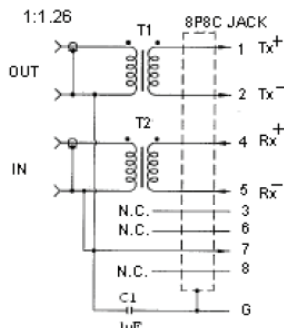
- **Type A:** Coaxial Tx/Rx shields connected to RJ45 overall foil shield.



- **Type B:** Coaxial Tx shield connected to RJ45 Tx pair shield and to RJ45 overall foil shield.
Coaxial Rx shield connected to RJ45 Rx pair shield.



- **Type C:** Coaxial Tx/Rx shield connected to RJ45 overall foil shield and to RJ45 pin 7.



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Ordering Information

Part number	Description
C.10.BA.RJ45.F-BNCF	Adapter Balun G703 RJ45 Female to BNC Female
C.10.BA.RJ45.F-BNCM	Adapter Balun G703 RJ45 Female to BNC Male

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