Linet Product catalog

CCITT G.703 Dual Balun Patch Panel

(Max 20 Ports)

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Description:

The CCITT G.703 Balun panel matches multiple sets of dual 75 ohm coax connections to multiple 120 ohm twisted pair connections. Supporting data stream to three speed versions, 2-8 Mbit/s for E1/T1 and E2/T2, 2-8-34 Mbit/s for E1/T1 to E3, 34 to 155 Mbit/s for E3 and higher, the patch panel bi-directionally matches, not only signal impedance, but also the pulse shapes of the signals according to the CCITT G.703 standard.

A 1U 19" Panel which can be populated with 16 Dual Coax to RJ45 Baluns, or 16 Single Path BNC to RJ45 Baluns, or 16 BNC to RJ45 Composite Video Baluns, or 16 Shielded RJ45 Through Couplers, or, a combination of all of these.

Features:

1. Connects 75 ohm dual coax to 120 ohm twisted pair
2. Bi-directional signal conversion according to CCITT G.703
3. Three speed versions as below:
   2-8 Mbit/s for E1/T1 and E2/T2 data streams
   2-8-34 Mbit/s for E1/T1 to E3 data streams
   34 to 155 Mbit/s for E3 and higher data streams
4. Low profile design
5. Mounts in standard 19" Rack

Specification:

2-8 Mbit/s speed version for E1 (T1), E2 (T2) data streams

Impedance: 75 ohm to 120 ohm/100 ohm

Insertion loss: Max. 0.2dB (2Mbps); Max. 0.3dB(8Mbps)

Return loss: -29dB(2Mpbs); -21dB(8Mpbs)

Cross talk: better than -80dB from 0.1 to 12MHz between any 2 baluns mounted distance up to 15mm

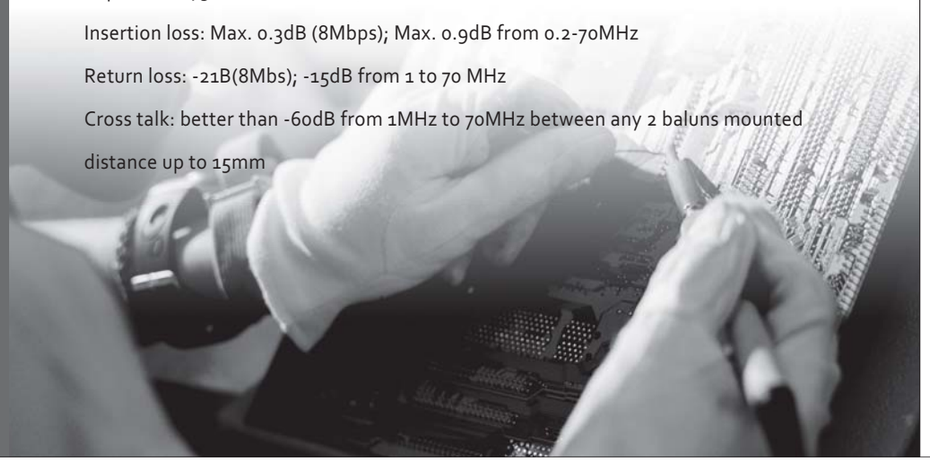
2-8-34 Mbit/s speed version for E1 (T1) to E3 (T3) data streams

Impedance: 75 ohm to 120 ohm/100 ohm

Insertion loss: Max. 0.3dB (8Mbps); Max. 0.9dB from 0.2-70MHz

Return loss: -21B(8Mbs); -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

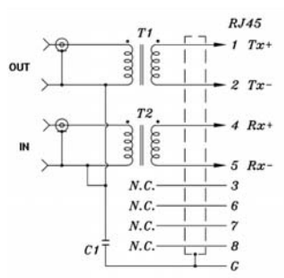
Impedance: 75 ohm to 120 ohm/100 ohm

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

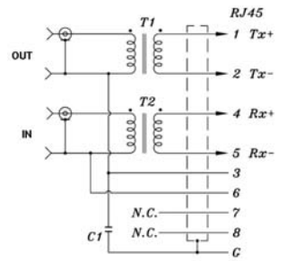
Cross talk: -80dB from 1MHz to 240MH

Typical schematic diagrams



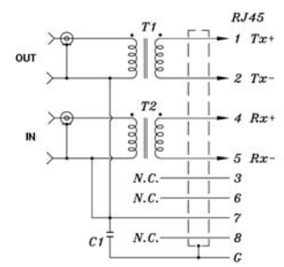
A type:

Coaxial Tx/Rx shields connected to RJ45 overall foil shield.



B type:

- Coaxial Tx shield connected to RJ45 Tx pair shield and to RJ45 overall foil shield.
- Coaxial Rx shield connected to RJ45 Rx pair shield.



C type:

Coaxial Tx/Rx shield connected to RJ45 overall foil shield and to RJ45 Pin 7