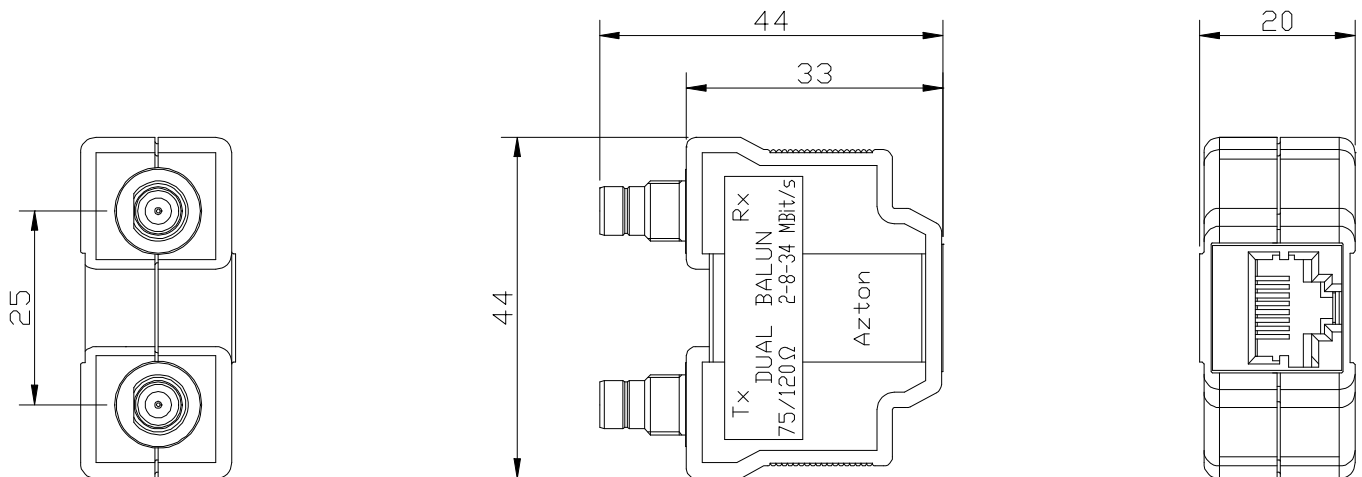


## Dual Balun, 75/120W, 2-8-34Mbit/s, Shielded Type43 (m) to RJ45 (f)



### PRODUCT DESCRIPTION

This Dual Balun converts a G.703 E1, E2 or E3 Tx and Rx pair from unbalanced 75Ω coaxial to balanced 120Ω twisted pair transmissions. A bi-directional device requiring no external power, it allows the user to connect telecommunications equipment with mismatched interfaces or convert to twisted pair distribution wiring. Designed for use stand alone or in Azton's Modular Balun Panel this product offers the following features:-

- coax to twisted pair conversion
- exceeds G.703 requirements
- > 30dB return loss 0.3 to 10MHz
- shielded construction
- mount stand alone or in MXX20
- BT43 (m) connector to BS9210
- 75Ω to 120Ω impedances
- < 0.35dB E1 insertion loss
- > 1.25μm of gold plating on pin
- designed for long life
- small size
- 2, 8 and 34Mbit/s data rates
- > 65dB cross talk
- teflon coaxial insulators
- built for high reliability

### OPERATING CONDITIONS

|                      |  |
|----------------------|--|
| Matching Impedance:  | 75 ohm unbalanced coaxial to 120 ohm balanced twisted pair             |
| Bit Rate:            | 2Mbit/s (E1), 8Mbit/s (E2) and 34Mbit/s (E3) per ITU-T G.703 Line Code |
| Signal Level:        | 2.37V p-p (2&8Mbit/s), 1V p-p (34Mbit/s) at the coaxial end per G.703  |
| Working Temperature: | -30°C to 75°C  |

### ELECTRICAL SPECIFICATIONS

|                    |  |
|--------------------|--|
| Insertion Loss:    | < 0.35dB from 51kHz to 51.55MHz and in both directions<br>< 0.15dB for 2&8Mbit/s fundamental, < 0.2dB for 34Mbit/s fundamental as per G.703  |
| Return Loss:       | Exceeds G.703 requirements in both directions<br>> 21dB from 51kHz to 102kHz<br>> 26dB from 102kHz to 17.184MHz<br>> 21dB from 17.184MHz to 34.368MHz and<br>> 19dB from 34.368MHz to 51.55MHz |
| Pulse Shape:       | Exceeds G.703 requirements for 2Mbit/s, 8Mbit/s and 34Mbit/s   |
| Cross Talk:        | > 65dB from 51kHz to 51.55MHz between channels   |
| Isolation Voltage: | < 250V DC  |

### MECHANICAL SPECIFICATIONS

|                    |  |
|--------------------|--|
| Coaxial Connector: | Type43 male to BS9210 F0022<br>Outer Contact: Brass, Plated Cu/Ni5/Au0.8<br>Pin: Brass, Plated Cu/Ni5/Au1.25<br>Insulator: Teflon<br>Mating Cycles: 500min |
| RJ45 Connector:    | Contacts: Phosphor Bronze, Plated Ni/Au<br>Moulding: PBT Glass Filled, Black<br>Shield: Brass, Plated Sn   |
| Mouldings:         | ABS-PC, Black  |

### ACCESSORIES

|                  |  |
|------------------|--|
| Mounting Frames: | For 19", 21" and 23" racks                   |
| Brackets:        | For vertical and horizontal surface mounting |

