

TETRA COMBINER / **SPLITTER**

Product Code: NC3104

Product Description

The BiTEA Bi-Directional combiner for fixed, mobile or portable applications allows connection of up to eight radio transceivers to one aerial.

SPECIFICATIONS

380 - 430 MHz Frequency Band

Impedance 50 Ohm

Input Power Max 5 watts per channel

TX-TX isolation 30dB **Insertion Loss** 6.5dB 26dB **Return Loss**

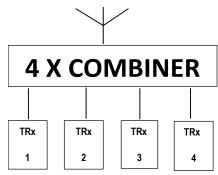
Input N type Aerial N type Connectors **Dimensions** 250mm x 80mm x 53mm

Weight 0.62kg

BENEFITS

- Only one feeder and aerial required
- Quick set up time
- Efficient low-cost solution





APPLICATIONS

- Quick set up and cost saving for fixed and temporary command & Control communications where multiple transceivers are required.
- Up to four transceivers with only one aerial feeder, one mast and one aerial.

Product Code: NC3108

Frequency Band 380 - 400 MHz

Impedance 50 Ohm

Input Power Max 5 watts per channel

TX-TX isolation 30dB minimum. Typically 40dB

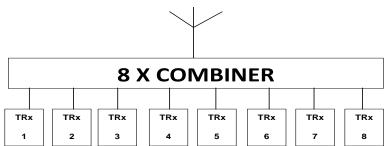
Insertion Loss 9.4dB Return Loss 28dB

Input N type Aerial N type Connectors 350mm x 133mm x 31mm

Dimensions

1.05kg Weight





POWER SPLITTER – Product Code NC3202

The BiTEA power splitter for fixed, mobile or portable applications allows connection of two aerials to one radio transceiver

SPECIFICATIONS

Frequency Band 380 – 430 MHz

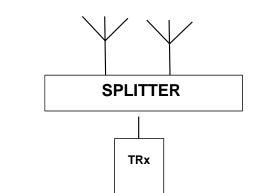
Impedance 50 Ohm
Input Power Max 10 watts

Aerial-Aerial isolation 27dB Insertion Loss 3dB Return Loss 26dB

Connectors Transceiver N type/Aerials N type

Dimensions 90mm x 30mm x 37mm

Weight 0.2kg



BENEFITS

Physically small and easy to set up solution.

APPLICATIONS

Can be used on vehicles to feed front and rear antennas to one radio transceiver.

When used with Gateway radio transceivers in buildings it permits connection of one aerial to communicate with the main network outside the building in Trunk Mode (TMO) and one aerial to communicate with radio transceivers working in Direct Mode (DMO) inside the building



Product Code: NC3901

Description: Type-N male dummy load terminator 0.25Watt, 50 ohm, 0-500 MHz

Instructions for use

1. These combiners use balanced hybrid couplers to connect up to eight transceivers to one aerial, it relies on each port being correctly terminated to maintain Tx to Tx isolation, if there are any unused ports these MUST be terminated with a 50 Ω RF termination. Available from BiTEA.

(Product Code: NC3901)

- 2. These units are not weatherproof and are intended for internal operation
- 3. These combiners may be used in any orientation.
- **4.** They can withstand high temperatures (+60°C) but should be kept as cool as possible.
- 5. These units have a DC Coaxial Inner to Ground resistance of approximately 17 Ω . Ensure there is no DC component on the Transceiver RF outputs. DC will heat the internal loads and possibly detune them.
- **6.** As with any installation proper protection against lightning must be taken into account. The case of the units should be bonded to the aerial mounting system or equipment rack either by bolting directly or by Earth bonding pigtail. If mounted in a high exposed position it is recommended that separate gas discharge lightning protectors are used.