



# TETRA COMBINER / SPLITTER

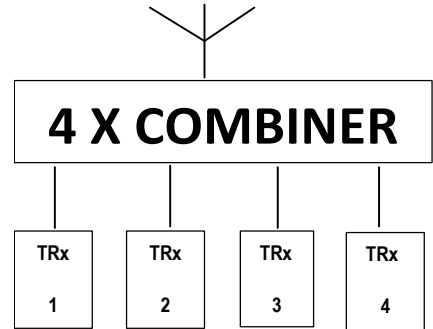
**Product Code: NC3104**

## 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

Frequency Band	380 – 430 MHz
Impedance	50 Ohm
Input Power	Max 5 watts per channel
TX-TX isolation	30dB
Insertion Loss	6.5dB
Return Loss	26dB
Connectors	Input N type Aerial N type
Dimensions	250mm x 80mm x 53mm
Weight	0.62kg



## BENEFITS

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

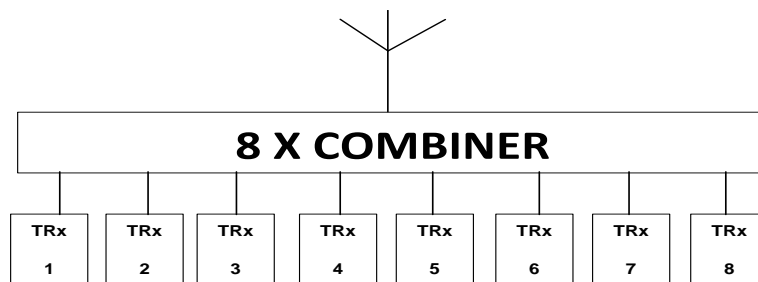


## APPLICATIONS

- 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
Connectors	Input N type Aerial N type
Dimensions	350mm x 133mm x 31mm
Weight	1.05kg

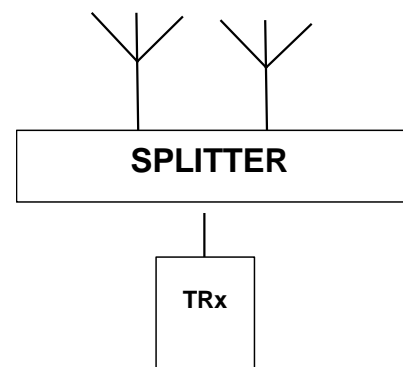


## POWER SPLITTER – Product Code NC3202

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 50Ω 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.