



# TETRA Antenna Combiner

Operate up to 4 TETRA radios through a single antenna



## Key features

- ▶ reduce network survey time by operating up to 4 different radio terminals simultaneously
- ▶ inherently adaptable allowing many different configurations
- ▶ single antenna ensures that all radio terminals have the ideal radiation pattern
- ▶ provides high levels of isolation between terminals with no degradation of signal

## What is the TETRA Antenna Combiner?

The TETRA Antenna Combiner is designed to work with the Gemini survey tool allowing up to 4 TETRA class 3 (3W) radio terminals to be connected to a single antenna whilst meeting all ETSI requirements for intermodulation products.

The Combiner includes an ultra-linear wide-band TETRA amplifier to compensate for combining losses as well as specially designed receiver amplifiers to eliminate wide-band noise interference between terminals, thereby ensuring that there is absolutely no reduction in performance for any radio terminal.

Two models are available:

- ▶ Model A: up to two class 3 radio terminals may be configured for 0dB gain whilst the other two radio terminals must operate with 11dB loss.
- ▶ Model B; wide-band amplifier not included. All terminals operate with 11dB loss.

Terminals with 11dB loss simulate the performance of a hand-portable antenna and further attenuation of 5dB or 15dB may be added to simulate building losses.

The combiner also includes a switch to insert a further 5dB attenuation into the transmit path to simulate the transmit power of a class 4 (1W) hand-portable.

## Specifications

Frequency:	Tx 380-385MHz Rx 390-395MHz
Tx Insertion Loss:	Model A: Ports 1 & 2: 0dB Ports 3 & 4: 11dB Model B: All Ports: 11dB
Rx Gain:	Configured to be identical to Tx path loss for each port
Port to Port Isolation (Tx Band):	>60dB
Port to Port Isolation (Rx Band):	>65dB
Antenna to Port Isolation (Tx Band):	>60dB
Intermod products:	< -36dBm in transmit band < -110dBm in receive band
LNA noise figure:	3dB at 2dB gain
VSWR:	1.5:1
Connectors:	BNC
Power Supply:	12V @ 15A (Model A) 1A (Model B)
Dimensions:	6u 19" rack (266 x 483 x 470)

For further information on the TETRA Antenna Combiner please contact us:

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