



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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