



WRS504-N **BROADBAND TACTICAL RADIO**

Network Centric Warfare operational concepts require support from unified wideband communication networks able to interconnect all participating elements (people, command systems, weapons and sensors). This is especially the case for force deployments over disputed territories, where robust, high capacity wideband radio technologies are essential.

The WRS504-N broadband tactical radio, based on WiMAX technology (IEEE802.16), enables the implementation of multimedia point-to-point/point-to-multipoint high capacity radio networks in demanding military environments.

The radio operates in the 225MHz to 400MHz frequency range (NATO Band I). It features dynamic time division duplexing (TDD/TDMA) based on orthogonal frequency division multiple access (OFDMA). This provides robust, high data rate links over long paths in LOS/NLOS networks.

WRS504-N supports VLAN, VoIP and streaming video to ensure maximum high-quality throughput in all propagation conditions through use of an adaptive modulation format. It provides COMSEC (type-3 encryption) and TRANSEC (frequency hopping), and is suitable for both dismounted operations or installation in combat vehicles.



TECHNICAL CHARACTERISTICS

RF

Frequency range: 225MHz-400MHz (NATO Band I)
 Access method: time division (TDD/TDMA)
 Channel bandwidth: 1.25MHz/5MHz
 Frequency resolution: 125KHz
 RF tuning: automatic
 Max RF power: 10W (+40dBm)
 RF power control: automatic
 Modulation: adaptive; OFDMA with QPSK (with different repetition factor) / 16QAM/64QAM

Base Band

Communications services: Voice (VoIP), IP data real-time/non real-time
 Capacity: configurable depending on the type of service up to 11Mb/s (average Ethernet rate)
 Interface: 10/100 Ethernet TX

Transec

Type: frequency hopping (optional)

Comsec

Type: Type-3 encryption (AES128)

Management

Type: integrated SNMP agent

Power Supply

Input power: 28VDC \pm 20%
 Power consumption: Max 400W

Physical

Size: 170 (H) x 400 (W) x 275 (D) mm
 Weight: 18Kg

Environmental

According to MIL-STD-810F
 Operative Range: -40°C to +55°C
 Relative Humidity: 95% max with +55°C

EMI/EMC

According to MIL-STD-461E

Performance

Link coverage: up to 40km with directional antennas and appropriate installations
 Mobility: up to 90km/h

For more information please email infomarketing@selex-es.com

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