Tadiran CNR-9000

Advanced battle-proven VHF/FM COMSEC/ECCM radio systems for reliable voice and data communications

Elbit Systems™
C4I and Cyber

PRC-930 5W

PRC-930HP 20W

VRC-950 50W

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Driven by combat experience, the Tadiran CNR-9000's reliability, ease-of-use and flexibility make it a VHF/FM radio system of choice. Part of the family of VHF/FM radio systems and developed by Elbit Systems, the Tadiran CNR-9000 is equipped with sophisticated features. Designed with built-in growth potential, the radio system is based on software-defined radio principles and pre-planned product improvement (P3I) capabilities. The Tadiran CNR-9000's programmable hardware and modular software architecture allow for the seamless addition of new features, even in the battlefield arena.

Advanced capabilities include sophisticated features such as powerful error correction, frequency-hopping and encryption

Powerful error correction codes, automatic data rate and type adaptation are some of the key features of the Tadiran CNR-9000 that guarantee reliable communications in all operational scenarios. In addition to the CNR-9000's tactical e-mail and file transfer capabilities, its robust encryption enables superior voice and data security. In addition, its proprietary full-band ECCM synchronous orthogonal frequency-hopping assures reliable operations even in densely-jammed environments. The Tadiran CNR-9000 can also serve as a building block for advanced C⁴I systems.

VRC-980 50/5 W

VRC-990 50/50 W

Key Features

- High-speed data transmission of up to 32 Kbps in 25khz bandwidth
- Powerful error detection and correction codes
- Automatic data rate and type adaptation
- Powerful encryption (SEC)
- Synchronous orthogonal frequency-hopping mode (ECCM) without master station
- Advanced vocoder for high-quality voice reception
- Built-in GPS and AGPSR
- Scans main channel and up to three secondary channels
- Automatic indication of clear or secure signal
- Increased voice and data communication range
- Advanced algorithms to address multi-path interference

Operational Benefits

- User-friendly with innovative menu-driven MMI
- CLEAR,SEC and AJ indications
- PTT-oriented operation
- Lightweight and compact size
- Functional simplicity for minimum operator workload
- Integrated short message service (SMS) with no need for external terminal
- Variety of configurations: Man pack, airborne, ship borne , vehicular/ fixed station using a common RT

Cost effective – low MTTR and high MTBF

Ancillaries and Operational Service Applications

Using a wide range of ancillaries and operation service applications, the Tadiran CNR-9000 can be tailored to meet specific operational requirements. The radio system is integrated with numerous antennas including GPS, low profile wide band, and manpack whip antennas. Other ancillaries include handsets, hands-free headsets and
loudspeakers, as well as different types of batteries and chargers. Network planning applications are available for a variety of geographical terrains and field ranges.

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Technical Specifications

General	
Frequency	30-88/108*MHz
Modes of operation	
Fixed Frequency	Clear and COMSEC
Frequency-hopping	ECCM/COMSEC
Preset Channels	100
Scanning	Up to four pre-selected channels
Selective Call / Selective Bar	Individual and group communication
Vocoder*	2400, 4800 bps
GPS + AGPSR*	Including radio position transmission (automatic/manual)
Environmental	
Operating Temperature	-40°C to +65°C
Dynamic and Mechanical	MIL-STD-810E
Immersion	1 meter
Electromagnetic Interference	MIL-STD-461C/462
Ancillaries	Compatible with backward ancillaries
Transmitter	
Power output	
Manpack	0.25, 5W,20W
Airborne	0.25, 5, 20W
Vehicular/Base	0.25, 5, 50W
Anti-Jamming (ECCM)	
Technique	Synchronous orthogonal frequency-hopping over the entire frequency band (30-108 MHz) or partial band
Synchronization	Auto resynchronization capability with no master station and no single point of failure
Maximum Radio Silence Time	Unlimited for full synchronization
Late Entry	Fully automatic with no special procedures required
Orthogonality	Up to 64 orthogonal nets over any frequency table
Special Feature	Hailing from frequency-hopping to fixed frequency and vice versa
Encryption (COMSEC)	
Type	Digital, very long non-linear "white" sequences
Special features	CLEAR override, COMSEC alarm, auto resynchronization capability
Data Communication	
Type	Analog digital synchronous and asynchronous
	Up to 19.2 Kbps with error correction (asynchronous)*
	Up to 32 Kbps with error correction (synchronous)*

*Optional

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