

# 9661 V/UHF

PRC/VRC 9661 V/UHF GROUND  
RADIO FAMILY





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## PRC/VRC 9661 V/UHF GROUND RADIO FAMILY

PRC/VRC 9661 V/UHF Software Defined Radios are tactical radios capable to communicate in clear, encrypted and frequency hopping voice/data in VHF and UHF bands (30-512 MHz). The radios are designed to ensure electronic protection measures (TRANSEC, COMSEC and NETSEC) by encryption and frequency hopping.

Thanks to the software defined architecture,

- The radios support short and medium range tactical radio communication with CNR Waveform, Air to Ground AM/FM Waveform Modes and Full IP MANET Waveform Modes (Narrow Band Networking Waveform, Wide Band Networking Waveform modes).
- Advanced Electronic Counter Counter Measure (ECCM) Techniques are applied
- Existing waveforms can be upgraded. New waveforms and features can be added.
- Customer specific waveforms and algorithms can be developed and ported.

Frequency Range : 30-512 MHz  
RF Output Power : 10/50W \*  
Number of Preset Channels : 1300 (max)

### ECCM Techniques (TRANSEC/COMSEC)

- Built-In Crypto
- Frequency Hopping Spread Spectrum (FHSS)
- Red/Black data separation
- Emergency Clear

### Operating Modes

#### VHF/FM Low Band Mode (9600) (30-108MHz)

- Channel Spacing: 25 kHz
- Encrypted fixed frequency Voice/Data and Analog Voice
- Encrypted frequency hopping Voice and Data
- Audio-Data Relay and Retransmission
- Active-Passive Late Entry/Hailing/Channel Scanning
- Forward Error Correction
- SMS
- Serial Data Transmission
- 300 Preset Channel

#### V/UHF A-CNR Mode (9600A) (30-512 MHz)

- Channel Spacing: 25 kHz
- Encrypted fixed frequency Voice/Data and Analog Voice
- Encrypted frequency hopping Voice and Data
- Audio-Data Relay and Retransmission
- Active-Passive Late Entry/Hailing/Channel Scanning
- Forward Error Correction
- Serial Data Transmission
- SMS
- 300 Preset Channel

#### SK-2 VHF/UHF Modes (146-174 MHz, 406-470 MHz)

- Channel Spacing: 25 kHz
- Analog Voice
- Digital and Encrypted Voice Data
- Over the air key loading and radio disabling
- Selective, Group and Emergency Call
- Channel Scanning
- SMS
- Serial Data Transmission
- 600 Preset Channel

#### Have Quick II Mode (225-400 MHz) (Optional)

- STANAG-4246 compatible

#### V/UHF Air to Ground Mode (108-174 & 225-400 MHz)

- Channel Spacing: 25/12.5 kHz FM, 25/8.33 kHz AM
- AM/FM Fixed Frequency Analog Voice
- FM Fixed Frequency Digital Voice
- Encrypted Voice with External Encryption Device
- Channel Scanning
- 100 Preset Channel

#### WBNR Mode (50-512 MHz) (Optional)

- MANET (Self-forming, self-healing)
- Encrypted frequency-hopping/fixed-frequency Voice and Data
- Bandwidth: 1 MHz @FHSS, 5 MHz @FF
- Automatic and dynamic IP packet routing
- Fixed Frequency Operation Band (225-512 MHz)
- Frequency Hopping Operation Band (50-108, 108-512 MHz)
- 150 node in a single NET. Multiple Networks can be combined.
- Forward Error Correction
- Simultaneous Voice and Data Communication
- Cognitive coding and modulation for challenging environments
- 900 Kbps/link @FHSS, 4.5 Mbps/link @FF\*\*
- Full IP Services (TCP/UDP)
- Multi-Hop Voice and Data service
- Selective, CNR Group and Broadcast Call services
- Up to 25 talk groups
- QoS & Service Management for different data profiles
- Positional Location Information (PLI) support

#### NBNR Mode (30-512MHz) (Optional)

- Encrypted frequency-hopping Voice and Data
- Bandwidth: 25 kHz
- Multi-Hop Voice and Data service
- CNR Group Call and Broadcast Call
- Full IP Services (TCP/UDP)
- 25 node in a single NET. Multiple Networks can be combined.
- Data rate: up to 25 Kbps/link \*\*
- Unicast, Multicast & Broadcast Communication Service
- QoS & Service Management for different data profiles
- Positional Location Information (PLI) support

#### Future Waveforms

- ASELSAN A-NBNR (Advanced NBNR)
- APCO-25
- DMR
- SATURN (STANAG 4372 Ed.4)
- UHF SATCOM (STANAG 4681)

#### Environmental Specifications

- MIL-STD-810
- Operating : -40°C to +55°C
- Storage : -40°C to +70°C

#### EMI/EMC

- MIL-STD 461

#### Physical Interfaces

- Audio interface (Intercom and PTT)
- Data (Synchronous/Asynchronous/IP)
- Internal GPS Receiver
- External GPS
- Fillgun
- Remote Control
- External Crypto
- Zeroize

\* : Depending on the configuration and waveforms.

\*\* : Network throughput is much more than link throughput.

