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

Due to the software defined architecture,
• Software Defined Radios support short and medium range tactical radio communication (CNR-Combat Net Radio), Wide Band Network Radio (WBNR) to provide high speed data communication and Mobile Telephone (SCRA) functionalities and advanced Electronic Counter Counter Measure (ECCM) techniques on the same platform.
• Existing waveforms can be upgraded
• New waveforms and features can be added

Frequency Range : 30-512 MHz
RF Output Power : Nominal 50W
Number of Preset Channels : 1300 (max)
9661 V/UHF
PRC/VRC 9661 V/UHF
GROUND RADIO FAMILY

Electronic Counter Counter Measure (ECCM) Techniques
(TRANSEC/COMSEC)
• Built-In Crypto
• Frequency Hopping (FHSS)
• Direct Sequence Spread Spectrum (DSSS)

Operating Modes
VHF/FM Low Band Mode (9600) (30-108MHz)
• Clear and encrypted fixed frequency Voice and Data.
• Encrypted frequency hopping Voice and Data
• Audio-Data Relay and Retransmission
• Active-Passive Late Entry/ Hailing / Channel Scanning
• Forward Error Correction (FEC)
• Synchronous Data Transmission (max.16 kbps, half duplex)
• Compatible with VHF-FM (NATO STANAG 4204) Radios in Clear Voice

VHF/FM High Band Mode (9600A ) (30-512 MHz)
• Clear and encrypted fixed frequency Voice and Data.
• Encrypted frequency hopping Voice and Data
• FM modulation with 25kHz channel spacing
• Hailing / Active-Passive Late Entry / Audio- Data Relay and Retransmission
• Forward Error Correction (FEC)
• Synchronous Data Transmission (max.16 kbps, half duplex)
• SMS

UHF/WBNR Mode (225-400 MHz)
• TDMA with 32 traffic channels 
  (each with a capacity of 5.1 kbps)
• Encrypted Voice and Data
• DQPSK modulation, DSSS
• Forward Error Correction (FEC)
• Automatic radio networking and routing
• Automatic relaying of user traffic (up to 5 hops)
• Full duplex mobile telephone communications (SCRA)
• Integrated with other Tactical/Strategic Systems and PSTN
• Automatic distribution of position information
• Simultaneous IP Data And Voice Communication
• IP Packet Data (Max 64kbps, full duplex)
• SMS

V/UHF Air to Ground Mode (108-400 MHz)
• AM/FM Fixed Frequency Clear Voice
• Encrypted Voice with External Encryption Device
• 25/12.5/8.33 KHz Channel Spacing

UHF/FM Mode (SKU) (406-470 MHz)
• Fixed Frequency Clear and Encrypted Voice and Data.
• Over the air key loading / disabling
• Group Call, Emergency Call
• Compatible with UHF-FM Radios in Clear Voice
  [EN 300 086 and EN 300 112]
• SMS
• Asynchronous Data Transmission (max 4.8 kbps, half duplex)

New WBNR Mode (50-512 MHz)
• Fixed Frequency Encrypted Voice/Data (225-512 MHz)
• Frequency Hopping Encrypted Voice/Data (50-108, 108-512 MHz)
• TDMA-based communication
• OFDM Modulation
• Simultaneous Voice and Data Communication
• Automatic Radio Network Establishment and Management
• Automatic and Dynamic IP Packet Forwarding Capability
• IP Compatible high-speed data communication
  • up to : 1 Mbps / link on freq. hopping encrypted
  • up to : 5 Mbps / link on fixed frequency encrypted
• Point to Point, Point to Multipoint and Broadcast Data Transmission
• Automatic Location Information Sharing

V/UHF NBNR Mode (30-512 MHz)
• Frequency Hopping Encrypted Voice/Data
• Advanced TDMA architecture
• Simultaneous Voice and Data Communication
• Automatic Radio Network Establishment and Management
• Automatic and Dynamic IP Packet Forwarding Capability
• IP Compatible 15-25 Kbps/link Data Rate
• Point to Point, Point to Multipoint and Broadcast Data Transmission
• Automatic Location Information Sharing

APCO 25 Mode (146-174MHz, 380-400 MHz and 406-470 MHz)
• Fixed Frequency Clear and Encrypted Voice and Data.
• Digital; Compatible with TIA/EIA 102
• Analog; Compatible with TIA/EIA 603-A
• 12.5 Khz Channel spacing

Have Quick II Mode (225-400 MHz)
• STANAG-4246 compatible

Environmental Specifications
• MIL-STD-810F

EMI/EMC
• MIL-STD 461E

Physical Interfaces
• Audio interface (Intercom and PTT)
• Data (Synchronous/ Asynchronous /IP)
• Data/GPS
• Internal GPS Receiver (Available only on Version 2 Radios)
• RS-422
• Fillgun
• Remote Control
• External Crypto
• Zeroize