

# 9661 HF

GROUND RADIO FAMILY





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HF Software defined radio is a new generation high-performance digital radio covering 1.6-30 MHz HF Band. Software configurable architecture provides reliable secure voice, and data communications by supporting various HF radio waveforms and EPM techniques. Beyond line of sight voice/data communication is achieved with the utilization of the most advanced HF technology covered in the related NATO STANAGs and Military Standards.

HF SDR Radio establishes reliable, fast and secure voice and data links with the support of digital voice, built-in encryption and modern capabilities. Voice is digitally encoded (MELPe vocoder) in secure mode.

With the use of modern technologies such as 3rd Generation Automatic Link Establishment (3G ALE) and Automatic Channel Selection (ACS), these radios provide ease of use, reducing the need for well-trained and experienced HF radio operators. In addition to the features provided in 3G ALE mode, manual ALE operation has been featured on the radios. In this context, ALE mode on radios provides capability to the user to create manual channels and groups for communication. The radios, which are equipped with the capability of link establishment with the radios in different networks, are able to participate in different networks. PRC/ VRC 9661 HF radio enables encrypted voice and data communication in frequency hopping mode.

### 9661 HF Radio Family Configurations:

20W Manpack Configuration  
20W Vehicular Configuration  
150W Vehicular Configuration  
150 W Base Station Configuration

### General Features

- New generation Software Defined Radio covering the HF band
- Manpack, Vehicular and Fixed Station Use
- Frequency Hopping Capability
- Digital Voice and Data (Synchronous/ Asynchronous)
- Built-in Digital Modem with the latest HF technology
- Built-in Encryption
- Emergency Erase (Zeroize)
- Automatic Channel Selection (ACS)
- Channel Scanning
- Automatic Link Establishment (3G ALE)
- Modulation Types: USB, LSB, ISB, CW, AM and AME
- Number of Presets: 200 preprogrammed, 25 manually programmable
- Easy to use Man Machine Interface
- Built-in-Test Equipment (BITE): Power-up/Continuous/User Tests
- Built-in GPS receiver

### Remote Control Capability

- Tactical RC: Remote voice and data communication capability over the radio up to 3 Km with Field Cable
- IP RC: Remote voice and IP data communication capability over the radio via IP network

### Accessories/Options

- Various antennas (wideband, narrowband, NVIS)
- Loud Speaker
- Handset / Smart Handset
- GPS Antenna

### User Services

#### Voice Communication

- Analog Clear
- Digital Encrypted (600/1200/2400 STANAG 4591 MELPe Coded)
- Digital Encrypted Frequency Hopping

#### Data Communication

- Fixed Frequency: Clear or Encrypted, 75-9600 bps
- Frequency Hopping: Encrypted, 300-1200 bps (MIL-STD 188-110 B & STANAG-4539), SMS (Short Message Service), OPCODE (Operation Code)
- Automatic Link Establishment in compliance with STANAG 4538 (FLSU/CLC)
- Generation of Manuel Channel and Group in Automatic Link Establishment Mode
- External Modem Interface
- External Voice Crypto Interface
- EPM: Frequency Hopping, Built-in Encryption
- Synchronization (FH, ALE): GPS, TOD, GPS+TOD

### Technical Specifications

- Frequency Band : 1.6 - 30 MHz
- 10 Hz Frequency Steps
- Frequency Stability : 0,1 ppm (@room temperature)
- Sensitivity for 10 dB SINAD : For SSB and CW: Typically - 113 dBm  
: For AM and AME: Typically - 100 dBm
- Channel Bandwidth : 3 kHz (USB, LSB)  
: 6 kHz (ISB, AM, AME)  
: 500 Hz (CW)
- Maximum Output Power : 20W PEP (Manpack/Vehicular)  
: 150W PEP (Vehicular/Fixed)
- Environmental Spec. : MIL-STD-810D
- EMI/EMC : MIL-STD-461E (RE102)
- Dimension (HxWxD) : Manpack Radio: 9.7x26x36 cm (with battery)
- Weight : Manpack Radio: 6.2 kg (with battery)

