# ARTCOM
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9661 V/UHF 10-MP, 10-V, 50-V, 50-G, (UHF SATCOM, A-NBNR, WBNR, NBNR)

**ARTCOM 9661 V/UHF GROUND RADIO FAMILY**

#MilitaryCommunication



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# 9661 V/UHF 10-MP, 10-V, 50-V, 50-G, (UHF SATCOM, A-NBNR, WBNR, NBNR)

## ARTCOM 9661 V/UHF GROUND RADIO FAMILY

ARTCom 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
- Up to 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: Up to 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.
- Data rate: up to 25 Kbps/link **
- Unicast, multicast & broadcast communication service
- QoS & service management for different data profiles
- Positional location information (PLI) support
- MANET (Self-forming, self-healing)
- Automatic and dynamic IP packet routing
- Simultaneous voice and data communication
- Cognitive coding and modulation for challenging environments

**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.

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