



ARTCOM

aselsan

5433
V/UHF-P

NEW GENERATION TACTICAL HANDHELD
RADIO

#MilitaryCommunication



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NEW GENERATION TACTICAL HANDHELD RADIO

ARTCOM 5433 V/UHF-P 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 radio is 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 Mode (Wide Band Networking Waveform).
- Advanced Electronic Counter Counter Measure (ECCM) Techniques are applied.
- Existing waveforms can be upgraded. New waveforms and features can be added.

Features

Frequency Range: 30-512 MHz

- RF output power: 5W
- 1.77 inches color RGB TFT display
- Built in loudspeaker
- User access control with crypto ignition key
- High-speed real-time data communications
- Simultaneous voice and data communications
- Dual PTT buttons
- Built-in GNSS receiver
- Built-in camera (13 Mp)
- Built-in memory (32 GB)
- Built-in-test
- Preset channels and quick access channels by a multi position knob
- Software defined architecture
- Data and audio interface

Electronic Protection Measures

- Built-in TRANSEC & COMSEC modules
- Fast frequency hopping
- Red/black data separation
- Emergency clear

Waveforms

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
- Active-passive late entry/hailing/channel scanning
- Forward error correction
- Ethernet data transmission
- SMS
- 300 Preset channel

SK-2 VHF Professional Mode (146-174 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
- 300 Preset channel

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)
- Large number of radios in a single NET
- 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: 25 kHz
- Multi-hop voice and data service
- CNR group call and broadcast call
- Full IP services (TCP/UDP)
- Large number of radios 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

Environmental Specifications

- MIL-STD-810
- Operating : -30°C to +55°C
- Storage : -30°C to +70°C
- Humidity : %95
- Immersion : 1/2 hour@ 1 m
- Shock
- Dust

EMI/EMC

- MIL-STD 461

Mechanical Specifications

- Dimensions : W ~ 82 mm, H ~ 189 mm, D ~ 52 mm (With battery, without antenna and connectors)
- Weight : 983 gr (With battery, without antenna)

Configuration

- Receiver/transmitter
- Battery
- Battery charger
- V/UHF antenna
- UHF antenna
- GNSS antenna
- CIK (Crypto Ignition Key)
- Headset
- Data cables (USB, Ethernet)
- Carrying case

Optional Accessories

- Smart handset
- Solar charging KIT
- Vehicular KIT