

AT RF40 - Handheld Radio

AT RF40 - Handheld Radio

- ✓ 30 MHz to 512 MHz frequency range
- ✓ Multi channel radio system
- ✓ Multiple waveforms support
- ✓ Simultaneous voice and IP data
- ✓ Virtual voice channels
- ✓ True MANET network for VHF/UHF
- ✓ Position reporting system (GPS, Galileo, Glonass)
- ✓ AES based COMSEC/TRANSEC
- ✓ Up to 10 W power output
- ✓ Mission Modules support
- ✓ Backward compatibility with the RF20 radio system



The RF40 multiband, multirole VHF/UHF radio is designed for communication on the tactical level in all military branches

AT



Variety of waveforms



FM/AM - voice modes according to STANAG 4204/4205 support legacy ground-to-ground and ground-to-air communication.

WF40 - full fledged COMSEC-secured MANET-type network for voice and data communication in VHF and UHF with automatic rebroadcasting capability over several hops in only 250 kHz wide radio channel offering up to 270 kbit/s capacity for data.

HW20 - frequency agile VHF waveform secured by strong COMSEC/TRANSEC allowing backward compatibility with RF20 radio system.

This modern software defined radio platform is open for further legacy and custom waveform porting.

Mission Module

Expands the radio features according to actual mission needs. Open platform for installation of custom specific devices of different types. MM40W Mission Module type offers second independent broadband radio channel for voice and data transmission in MANET-type network. Available in L-band or S-band frequency configuration allowing data transmissions in dozens of megabits depending on the radio channel bandwidth setup.

Communication using WF40 waveform takes place in a true Mobile Ad-Hoc Networking (MANET) type of network - a network that is maintained automatically with no central node.

Each transceiver in the network is capable of automatic rebroadcasting of voice (5 hops) and IP data (7 hops).

Up to 20 users may operate in a WF40 network.

GNSS

Built-in GNSS receiver for GPS, Glonass and Galileo systems with automatic despatch of positional reports (PLI) on the background of voice or data communication - G-Track system.



Technical parameters

Frequency range	30 MHz to 512 MHz
Modulation type	FM, AM, CPM
Transmission power	5 W/10 W burst
Channel bandwidth	25 kHz, 250 kHz
Waveforms	LOS FM/AM (STANAG 4204/4205) WF40 (VHF/UHF MANET waveform) HW20 (VHF EPM waveform)
Communication encryption	AES, key length up to 384 bits
GNSS receiver	built in (GPS/Glonass/Galileo)
Data interfaces	Ethernet, USB, Serial
Mechanical and climatic resistance, EMC	
Dimensions including battery pack	75 mm x 202 mm x 41 mm

Weight including battery pack	0.9 kg
Operating temperature range	-40°C to +70°C
Environmental specification	MIL-STD-810G
EMC specification	MIL-STD-461F





AT RF40 - Handheld Radio - VHF - UHF