

RF40 - Handheld transceiver



PN (RN): 2400.100.01

The RF40 Thoroughbred Radio System is a versatile system for secure tactical radio data and voice communication in VHF and UHF bands.

Its main features are excellent RF parameters, efficient utilization of the available frequency spectrum, high data rate throughput even in low VHF band, voice and data true MANET capabilities, dual voice stream with data in one channel, second physical radio channel with tactical Ethernet broadband data/voice Mission Module, optional SATCOM-on-the-move communication module and vehicular amplifier with jerk-and-run capability of the handheld radio.

Operating features

- multi-channel radio system
- simultaneous voice and IP data transmissions including video support
- decentralized, auto-forming, true multi-hop MANET network for voice and data
- multiple voice streams in one channel (virtual channels)
- bandwidth saving 250 kHz channel with up to 270 kbit/s data rate in low VHF
- highly secure AES based COMSEC
- native position reporting system (GPS, Galileo, Glonass)
- up to 10 W RF power output (handheld)
- 50 W vehicular amplifier with jerk-and-run support

Technical parameters

General

Frequency range	30 - 512 MHz
Modulation	FM, AM, CPM
Transmitting power	5 W / 10 W burst
Channel bandwidth	25 kHz, 250 kHz
Waveforms	LOS FM/AM (STANAG 4204/4205) WF40 (V/UHF MANET WF, native IP capable) HW20 (VHF EPM WF, IP capable via MIL-STD-188-220)
Encryption	AES based, key length up to 384 bits
GNSS receiver	built-in (GPS/Glonass/Galileo)
Data interfaces	Ethernet, USB, Serial

Mechanical, Climatic and EMC

Dimension incl. battery	(74 x 202 x 41) mm
Weight incl. battery	0.9 kg
Temperature range	-40 °C to +70 °C

MIL-STD-810F	low/high temperature, humidity, low pressure, 1 m immersion, icing / freezing rain, salt fog, sand and dust, vibration, shock, bench handling
MIL-STD-461F	CE102, CS101, CS114, RE102, RS103

Accessories

Battery	LP40 - (7400.100.01, 7400.100.02)
Stationary charger	SC40 - (7410.100.01)
Simple charger	PC40 - (7411.100.01)
Vehicle charger	VC40 - (7412.100.01)
Fillgun	FG40 - (2420.100.01)
Mission module	MM40WR - (2401.100.01)
Vehicle amplifier	VA40 - (2410.100.01)