



INTELLIGENCE CONNECTING US

MANPACK TRANSCEIVER
HF/VHF/UHF

RADIO COMMUNICATION
AND DATA EXCHANGE SYSTEMS

RKP-8100



- NATO compliant,
- automatic link establishment,
- operates in a self-organizing radio network according to STANAG 4691 (MARLIN),
- easiness of new waveform uploads.

The RKP-8100 transceiver belongs to a generation of new digital transceivers compliant with STANAG 4203, STANAG 4204 and STANAG 4205.

The RKP-8100 radio is a modern manpack transceiver that provides reliable tactical communication. It offers solutions to all kinds of tactical communication and uniform and reduced logistics services.

The manpack transceiver can be also used as an exciter for the RKS-8000 transceiver family.

The universal RKP-8100 transceiver can be used as an element of a mobile communications system mounted on vehicles and caterpillar vehicles.

The digital voice transmission is compliant with STANAG 4198 and STANAG 4591. The transceiver supports the ALE (Automatic Link Establishment) function compliant with MIL-STD-188-141B App. A. and STANAG 4538.

The transceiver is adapted to establish ad hoc networks (mobile ad hoc network – MANET) compliant with STANAG 4691.

High performance and reliability of operations is guaranteed by a robust design and construction of the transceiver.



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GENERAL	
Frequency Range:	1.5 to 512MHz (HF, VHF, UHF)
Modes of Operation:	Simplex, half duplex
Frequency Stability:	$\pm 1 \times 10^{-6}$
Programmable Channels:	199
Modulations:	HF: A1A, A3E, F3E, J3E, B7E, F1B VHF/UHF: F3E, A3E, A1D, F1D, F1B, A2A
Frequency Step:	HF: 10Hz; VHF/UHF: 25 kHz
Remote Control:	RS-232 and Ethernet
Power Supply:	+28V DC (internal battery, acceptable range 22 to 32 VDC)
ENVIRONMENTAL SPECIFICATIONS	
Environmental Requirements:	N.14-0-II-A pos. NO-06-A103 (MIL-STD-810E)
EMC Compatibility:	NO-06-A200 (MIL-STD-461D)
Operating Temperature:	range -40 to +55°C
Relative Humidity:	100% at +40°C
RECEIVER	
Sensitivity:	HF-SSB: 0,5µV for 10dB SINAD VHF – F3E: 0,5µV for 20dB SINAD UHF – F3E and A3E: 2µV for 10dB SINAD
Frequency Band:	HF: range 300 to 3050 Hz in 5 steps; VHF: range 300 to 3000 Hz; UHF: range 300 to 3400 Hz
AF Input / Output:	0 dBm / 600Ω
TRANSMITTER	
Output Power On All Modes:	HF:20, 5, 1 W PEP/Average; VHF/UHF: 10, 5, 1 W
Carrier and Undesired Sideband Suppression:	40dB (ref. to PEP)
Intermodulation Products:	HF>24 dBc; VHF>30 dBc
Harmonic Suppression:	HF>40 dBc; VHF/UHF>60 dBc
ALE SPECIFICATION	
2G Compatibility:	MIL-STD-188-141B App. A
3G Compatibility:	STANAG 4538
LOAD IMPEDANCE	
Output Impedance of the Amplifier:	50Ω 1.5-512MHz (ANT 2)
Antenna Tuning Capability:	1.5-30MHz many types of antennas (ANT 1)
AVAILABLE MODEM WAVEFORM	
(max. data rate):	STANAG 4285 (3600bps), STANAG 4529 (1800bps), STANAG 4415 (75bps), STANAG 4539 (12800bps), MIL-STD-188-110B (High Data Rate 12800bps, ISB 19200bps), FSK (600bps), STANAG 4691 (48000 bps) – UHF (option)
DIMENSIONS	
W×H×D in mm:	280×81×395
Weight in kg:	7.5 (without batteries: 4.5)