



RTK-1

Radiotelephone For Tactical Use

Radiotelephone RTK-1 made by KenBIT is a Digital Personal Mobile Radio designated especially for dedicated user such as armed forces, police, fire brigades, etc.

RTK-1 is dedicated in particular for dismantled groups of troops (*or the crew*) leaving combat vehicle. Once the combat unit is equipped with RTK -1, it is possible to make local connections with the crew members within in the framework of the intercom, as well as distance connections with VHF/HF radio network users, telephone subscribers of STORCZYK system, ISDN and VoIP.

The dismantled members of the crew can access the Internet using RTK-1 and PC terminal when the parent vehicle is connected to Ethernet network.

Audio transmission

Voice transmission realized by RTK-1 is entirely digital using 2400 bps vocoder, both simplex and duplex in one frequency (*TDMA*). Simplex radio communications is enriched in the distinctive priority connections, which allows supervisor (*dispatcher*) to stop less important exchange of information.

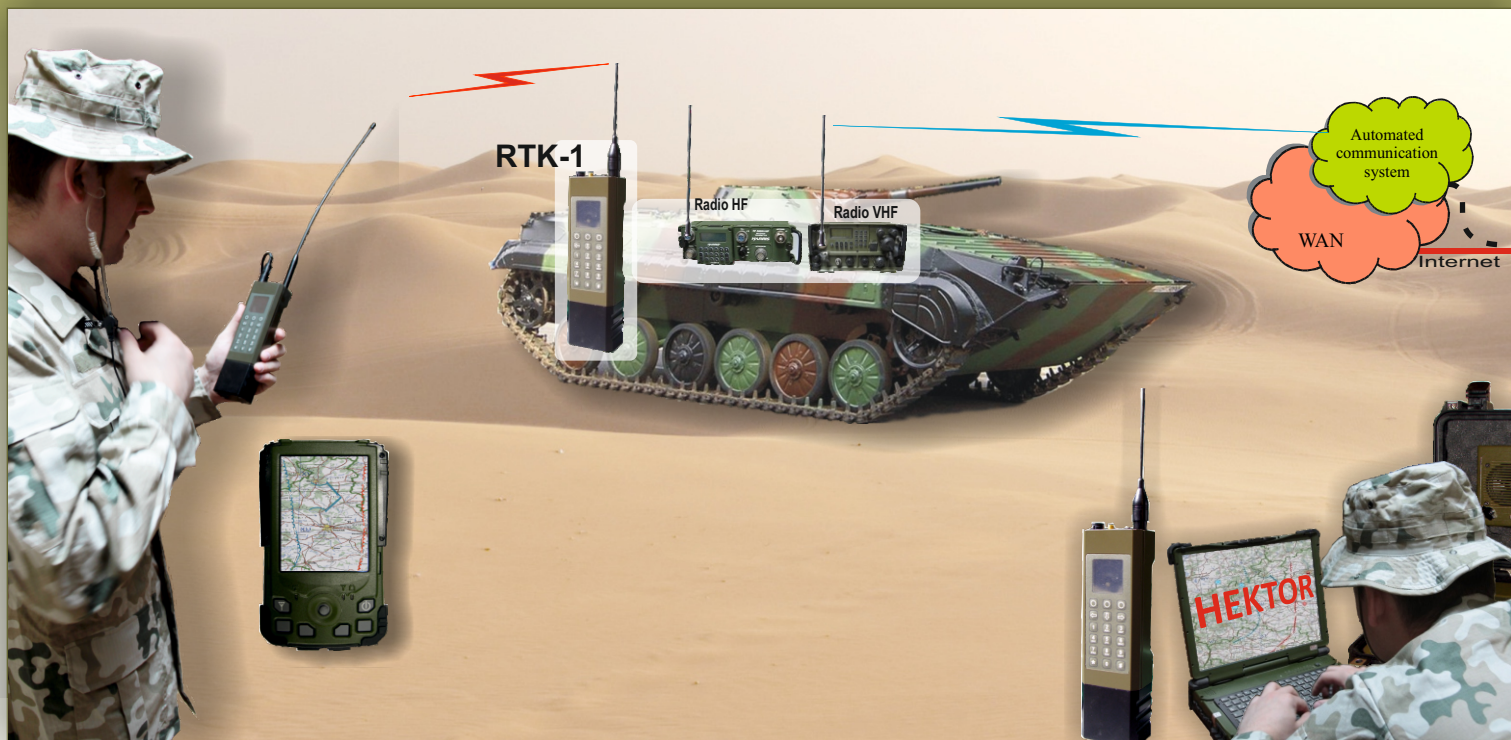
Data exchange

Data exchange using RTK-1 is possible after connecting the terminal data (*such as PDA or PC*) through the RS-232C or USB 2.0 interfaces. Maximum data transmission speed for the user is 4800b/s or 64 kb/s in point to point connection. RTK-1 performs automatic retransmission of voice and data packets by all radiotelephones in direct or indirect radio reach of broadcasters. This allows to provide a range of communication practically in all operational area of the particular group of users.

FEATURES

- No base station required.
- TDMA operation mode.
- Built-in GPS.
- RS-232C or USB 2.0 interface.
- Automatic retransmission of audio and data packets.
- Scrambling of transmission.
- Short text messages and alarm signal transmission.





Text messages and alarm signals

RTK-1 has the capability for transmission of text messages SMS and alarm signals (10 types). Alarm signals have the highest priority (stop any other transmission).

The device also works in remote control through RS-232C and USB 2.0 interfaces and allows the execution of the services available for users from the keyboard.

In order to protect the information from disclosure (*interception*) RTK-1 performs scrambling, which is accomplished by using a 64-bit key, entered by the user.

Localisation

RTK-1 has a built-in GPS receiver that allows to read the actual own position, as well as the other remaining radiotelephones in the radio network. This information is routed automatically to each of the radiotelephones. It is possible to visualize the position on the map application in the handheld PDA or PC terminal.

Operational capabilities

- Audio digital transmission (*simplex or duplex*).
- Data transmission (*RS-232 or USB*).
- Short text messages and alarm signal transmission.
- Hardware flow control data.
- Data and voice retransmission.
- Automatic connection with the STORCZYK system.
- Connections with other VHF/HF radio network subscribers.
- Off-site information about radio network subscribers.
- Audio signaling of selected events.
- Remote control and data transmission through the USB or RS-232 link.
- GPS data distribution in radio network.
- Cooperation with Hektor Battle Management System.

Technical data

- Frequency range: 400÷463 MHz or 300÷347 MHz - according to user requirement.
- Transmitter output power, adjustable: 0,2, 0,5, 1 lub 2 W.
- Direct communication distance range: up to 1,5 km.
- Operation in the radio channel with time division (*TDMA*).
- FSK modulation, bandwidth 250 kHz.
- Channel full speed 80 kb/s (*optional up to 256 kb/s*).
- Self synchronization, no base station.
- Operational temperature: od -30 °C do +50 °C.
- Time of operation: min. 12 h.
- Power supply: 6 AA, rechargeable.