AT RF13 Portable VHF Transceiver with Scrambler

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The system based on the AT RF13 portable transceiver and the derived mobile sets AT RF1325 and AT RF1350 offers fixed frequency radio voice or data communication in VHF band. The RF13 portable transceiver is designed for radio voice or data communication on tactical level in all military branches. It features voice communication via built-in encryption unit, sending of short encrypted messages, selective communication, selectable output power 5 W/0,2 W, up to 9 channel presets, automatic preset scanning and control of most function from a handset. AT RF1325 and AT RF1350 mobile sets are assembled from mutually connected AT RF13 system components. Suitable for vehicle installations or fixed posts and in situations where additional features are not provided by AT RF13 set, namely substantially increased range, are required. Power output is 25 W or 50 W. Actual components are specified by the user. All operation features of the AT RF13 base transceiver can be used during operation.

The ATRF13 transceiver with built-in digital scrambler is a portable VHF transceiver, which is used for tactical communication. It is carried and operated by one person. The set includes the transceiver and accessories for common use. These accessories can be carried in a bag together with the transceiver.

Operating features

The transceiver set in the bag can be transported by train, car, in tracked vehicles and by air. The phonic operation of this transceiver in the frequency range 30.000 MHz to 87.975 MHz is interoperable with all VHF transceivers currently in use in modern armed forces worldwide.

Other operating features include: whisper operation with increased microphone sensitivity, normal or sub tone (150 Hz) inhabitable squelch, 9 preset channels storage, programming using fill gun or mutual programming of stations (cloning), priority scanning of 9 preset channels, selective calling, FLASH - 3 digits code quick transmission, switch for instant erasure of memory in





case of emergency, clear override operation, display backlight, voice encryption mode with individual choice of code number for each channel (with scrambler option transceiver only), built-in test equipment (BITE). The electronic modules - power supply, receiver, receiver synthesizer, transmitter synthesizer, transmitter, peripheral circuits, P control, AF and mother board - are mounted in a light alloy waterproof case. The transceiver's color is olive green (other hues can be agreed upon). The VHF transceiver is the basic module of 30 MHz to 88 MHz frequency range communication systems, including mobile sets AT RF1305, AT RF1325 and AT RF1350.

Technical parameters

Frequency range	30.000 MHz to 87.975 MHz
Channel spacing	25 kHz
Number of channels	2320
Channel selection	digital, from transceiver keyboard
Operating modes	simplex or semiduplex telephony data transmission channel max. 16 kbit/s
Modulation	FM, max. deviation 5.6 kHz
RF power output	0.2 W reduced, 5 W nominal
Receiver sensitivity	better than 0.5 μV at 12 dB SINAD
AF output power	controllable, min. 200 mW/4 Ω
Power supply voltage	12 V
Power supply voltage range	10 V to 15 V
Operating time from RF13.1	min. 14 hours at 1 : 1 : 10 Tx/Rx/Standby ratio and nominal output power
Operating temperatures	-30 °C to +60 °C
Dimensions	W 204.5 mm x H 82.5 mm x D 174.5 mm
Weight	max. 2.5 kg max. 2.7 kg

Accessories

- Rechargeable battery pack RF13.1
- Short tape antenna 0.5 m AS1301
- ✓ Long tape antenna 1.5 m AL13
- Hang-up antenna RF13.8
- Handset with control RF13.2
- Manpack bag
- ✓ Light fabric cover
- Carrying straps
 - Extension cable

- Spare parts set
- Rechargeable battery pack RF13.13
- Power supply set SZ13.2
- Quick battery charger set RN13.1
- Trickle charger set NK13
- Standard battery charger set NS13
- Universal charger set NU13

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