

DIGITAL
& COMMUNICATION
TECHNOLOGY

VHF HANDHELD TRANSCEIVER

RF 1301



MESIT

DICOM

MESIT Group

- **Easy control using two switches and two buttons**
- **Internal digital voice encryption unit**
- **Easily readable backlit display**
- **FLASH – short code messages transmissions burst**
- **Built-in microphone and speaker with excellent audio quality**
- **9 preset channels**
- **Switchable squelch**
- **NiCd battery pack for 10 hours autonomy**
- **Power-on self test**
- **Channel parameters programming with Fill Gun**
- **STANAG 4204 compatible**



VHF HANDHELD TRANSCEIVERS

RF 1301



RF 1301 Transceiver is VHF handheld communication device designated for use on tactical command level at all kinds of military units. Operating modes are compatible with these of VHF tactical family RF 13.., various radios used in NATO and other radios complying with STANAG 4204.

The basic set is determined for portable use in adverse battle conditions, especially in situations where lowest possible weight and high quality communication are the main objectives. Selection of two types of antennas (0.5 m and 1.1 m) allows to achieve communication ranges between 1 km and 4 km.

Variability of use is improved using **enhanced set**, which uses other external accessories from the RF 13 family. Hang-up antenna improves communication range as far as 10 km. Power supply adapter allows supplying the radio from RF 13 manpack battery packs or vehicle mains. Headset is suitable for use in battle conditions, where the operator has to have both hands free.

Mobile set allows utilization of external antenna in the vehicles. The transceiver is fastened in the mobile accessory, which ensures supplying the radio and charging a battery at the same time. The Mobile Accessory ensures fast and easy take-out of the radio and its immediate use as a portable device outside the vehicle. Another element of the enhanced set is handheld speakerphone.

Incorporating RF 1301 into RF 13 tactical communication system guarantees compatibility in FLASH mode, secure (encrypted) voice mode and usage of wide range of accessories of this complex system (antennas, chargers, headsets, data modems, data terminals etc.)

Technical parameters

BASIC PARAMETERS

Frequency range.....	30.000 MHz to 87.975 MHz
Channel spacing.....	25 kHz
Number of channels.....	2320
Modulation type.....	F3E
Channel selection.....	rotary switch
Operation mode.....	simplex/semiduplex
A	- analog voice
D SCR	- digital encrypted voice
EXT A	- data channel
FLASH	- short code messages transmission

Voice encryption.....internal digital encryption

TRANSMITTER

Power output.....	standard 1 W (up to 3 W factory adjustable) reduced 0.1 W
Frequency stability.....	± 3.5 ppm
Harmonics suppression.....	min. 40 dB
Spurious suppression.....	min. 70 dB
Antenna impedance.....	50 Ω
Subtone.....	150 Hz

RECEIVER

Sensitivity.....	0.5 μ V at 12 dB SINAD
AF output power.....	adjustable 0.01 W \div 0.2 W
AF distortion.....	≤ 7 %
AF bandwidth.....	voice 400 Hz to 2500 Hz data 100 Hz to 9000 Hz

POWER SUPPLY

Nominal voltage.....	7.2 V
Supply voltage limits.....	6.5 V to 9.5 V
Autonomy.....	min. 10 hours (at transmit : receive : standby 1 : 1 : 8)
Battery pack capacity	
BP1301.....	1.4 Ah (NiCd batteries)
HP1301.....	2 Ah (NiMh batteries)

OTHER DATA

Backlit LCD display	
BITE	
Operating temperatures.....	-30 °C to +50 °C
Weight.....	1 kg
Dimensions.....	(91/76 x 217 x 44) mm (with battery)
Battery pack dimensions.....	(76 x 63 x 41) mm
Immersion.....	1 m depth
Mechanical resistance	
vibrations.....	(5 to 80) Hz/2 mm or 40 m.s ⁻²
multiple shocks.....	150 m.s ⁻² /(5 to 10) ms
single shocks.....	1000 m.s ⁻² /(1 to 5) ms
MTBF.....	min. 5 000 hours