

# RF13

## VHF TRANSCEIVER



- **Output power 0.2 W, 5 W, 50 W**
- **Frequency range 30 MHz to 87.975 MHz**
- **Modular design - versatility**
- **High climatic and mechanical ruggedness**
- **Keypad control from handset or transceiver front panel**
- **Flash mode**
- **Selective calling (up to 99 users)**
- **Clear override mode**
- **Semiduplex communications**
- **Built-in voice encryption**
- **Rebroadcast**
- **Nine preset channels**
- **Whisper mode (increased microphone sensitivity)**
- **Compatibility with most transceivers in use around the world**

- **Instantaneous erasure of preprogrammed data in case of imminent danger**
- **Standard or 150 Hz subtone squelch**
- **Remote control**
- **Scanning**
- **POST (Power-On Self Test)**
- **Fill gun programming**

### Additional features of mobile sets:

- **Data transmission**
- **Loud monitoring through built-in loudspeaker**
- **Wide range of antennas available**

### RF13

Integrated VHF communications system based on RF13 portable radio transceiver has been developed to offer solution to all issues of tactical communications.

All elements of the system are available from one supplier and producer MESIT defence.

Besides the production and delivery, the Company assures technical support from the very beginning by optimization of the client's system configuration, through operators and servicemen training courses, up to maintenance services.



### RF1350

RF1350 mobile systems are VHF communications devices with output power of 50 W.

Completed out of standard RF13 system elements they are determined to be built-in into practically any military vehicle.



## Technical parameters

### RF13 TRANSCEIVER

#### General data

**Frequency range** ..... 30.000 MHz to 87.975 MHz  
**Channel spacing** ..... 25 kHz  
**Number of channels** ..... 2320  
**Effective audio frequency range**  
 F3 mode ..... 300 Hz to 3 400 Hz  
 data transmission ..... 150 Hz to 9 000 Hz  
**Channel selection** ..... from handset or transceiver keypad  
**Transmission modes** ..... simplex or semiduplex telephony  
 data transmission  
**Voice encryption** ..... internal digital encryption

#### Transmitter

**Power output** ..... nominal 5 W (+1.5 dB/-1 dB)  
 reduced 0.2 W ( $\pm 2$  dB)  
**Modulation** ..... F3E  
**Harmonics suppression** ..... -60 dB

#### Receiver

**Sensitivity** ..... better than  $0.5 \mu V$  at 12 dB SINAD  
**AF output power** ..... adjustable, min. 200 mW on  $4 \Omega$  load  
**Squelch** ..... standard or 150 Hz subtone

#### Power supply

**Nominal supply voltage** ..... 12 V  
**Supply voltage range** ..... 10 V to 15 V  
**Operation time** ..... minimum 14 hours  
 at Tx/Rx/Standby ratio (1 : 1 : 10) and nominal output power

#### Other specifications

**Service temperatures** ..... -30 °C to +60 °C  
**Transceiver weight** ..... max. 2.7 kg  
 (without batteries and accessories)  
**Battery pack weight** ..... max. 2.5 kg  
**Transceiver dimensions**  
**with battery pack attached** ..... (83 x 205 x 252) mm  
**Complete set weight in carrying**  
**bag with spare battery pack** ..... less than 10.9 kg

#### Complete set dimensions

**in carrying bag** ..... (250 x 380 x 450) mm

**Immersion** ..... up to 1 m

### RF1350 TRANSCEIVERS

#### Transmitter

##### RF output power

reduced ..... 0.2 W  
 nominal ..... 5 W  
 increased ..... 50 W

#### Internal modem

**Personal computer interface** ..... RS232  
**Data transmission rate** ..... 16 kbps  
**Data modulation** ..... GMSK

#### Power supply

**Supply voltage** ..... vehicle mains 27 V  
**Supply voltage range** ..... 18 V to 33 V

##### Continuous transmission period

normal conditions ..... unlimited  
 at +50 °C ..... 30 min.

##### Current consumption (27 V):

**reception** ..... max. 0.5 A  
**transmission 0.2 W** ..... max. 1 A  
**transmission 5 W** ..... max. 1.3 A  
**transmission 50 W** ..... max. 8 A

#### Other specifications

**Operating temperatures** ..... -30 °C to +60 °C  
**Weight** ..... max. 15 kg  
**Dimensions** ..... (428 x 224 x 165) mm

### ACCESSORIES

Standard battery charger, quick battery charger, trickle charger, mobile quick charger, fill gun, accessory for remote control and rebroadcast, data modem, loudspeaker box, headsets, wide range of antennas.

