

DIGITAL
& COMMUNICATION
TECHNOLOGY

PR20 PERSONAL ROLE RADIO



DICOM

MESIT Group

- **Frequency-time-spatial 2x2 MIMO diversity system**
- **Decentralized ad-hoc topology**
- **Full-duplex voice communication in a group up to 30 users**
- **Unlimited number of semi-duplex users**
- **Conference call up to four speakers**
- **Wireless PTT-keying**
- **Syllabic VOX**
- **Simultaneous voice and data**
- **Automatic voice and data rebroadcast**
- **USB data interface (data expander available)**
- **Tactical network access inclusive rebroadcast**
- **Easy to integrate with any tactical radio**
- **8 presets**
- **Emergency erase**
- **Lightweight, easy to use**
- **24 hours operational time**
- **AA battery holder available**

The PR20 personal role radio operates in 2.4 GHz frequency band using spread spectrum waveform - combination of time hopping, frequency hopping and OFDM (Orthogonal Frequency Division Multiplex). It is primarily designed for operation groups of up to 30 persons, but it also supports networks with unlimited number of participants. It allows for full duplex communication inclusive conference call in ad-hoc digital networks with no additional infrastructure required. Automatic packet rebroadcasting, frequency-time-space diversity, high speed data transmission, long battery life and relay to the tactical network are standard features.



Technical parameters

Frequency range	2400.0 to 2483.5 MHz
Modulation type	OFDM, frequency and time hopping
Number of channels	8 (optional 256)
Number of presets	8
Data transmission	
parallel to the voice	16 kbit/s
data-only mode	160 kbit/s
Transmission power	100 mW EIRP
Receiver noise number.....	max. 4 dB
Audio distortion.....	max. 10 %
Audio bandwidth	300 to 3000 Hz
Supply voltage range.....	3 to 5.2 V
Battery pack capacity	4.2 Ah
Current consumption	max. 0.4 A
Battery life	24 hours
Temperature range	-30 to +50 °C
Immersion.....	to 1 m
Environmental specification.....	according to MIL-STD-810E
EMC.....	according to MIL-STD-461E
Dimensions*	78 x 133 x 27 mm [w x h x d]
Weight*	max. 450 g

* including battery pack