

PR20 - Personal role radio



PN (RN): 2350.100.01 NSN: 5820160054748

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) allows for full duplex communication in ad-hoc digital networks with no additional infrastructure required. Automatic rebroadcasting (packet routing), space diversity transmission and reception, high speed data transmission, long battery life and relay to higher level network are standard features.

Operating features

- duplex voice communication in a group of up to 30 users,
- semi-duplex voice communication without limiting the number of users,
- conference call of up to four users,
- communication in another net (via a transceiver connected to the other net),
- wireless PTT-keying,
- learning mode for wireless PTT key assigning,
- VOX keying,
- USB data interface (data expander available),
- simple operation,
- erasure of entered parameters,
- 8 presets,
- volume regulation in four steps.

Technical parameters

Frequency range	2400.0 MHz to 2483.5 MHz
Modulation type	OFDM, frequency and time hopping
Number of channels	256
Number of presets	8
Duplex data transmission simultaneously with voice	16 kbit/s
Fast data-only mode	160 kbit/s
Transmission power	100 mW +0/-6 dB EIRP
Receiver noise number	max. 4 dB
Non-linear distortion factor	max. 10 %
Audio band	300 Hz to 3000 Hz
Nominal supply voltage	3.7 V
Limit supply voltage	3.0 V to 5.2 V
BP200 battery pack capacity	4.2 Ah

Current consumption	max. 0.4 A
Operation time (transmission : reception : stand-by) 1 : 1 : 10	24 hours (with BP200 battery pack)
Operating temperature range	-30 °C to +50 °C
Immersion	to 1 m
Environmental specification	according to MIL-STD-810E
EMC	according to MIL-STD-461E
Radio dimensions including BP200 battery pack	W 78 mm x H 133 mm x D 27 mm
Dimensions of BP200 battery pack	W 78 mm x H 63 mm x D 27 mm
Weight	
• PR20 personal role radio	max. 0.23 kg
• BP200 battery pack	max. 0.22 kg

Set

Personal role radio set PR20 - (2350.000.02)

Documentation

PR20 operating instructions 2350.010.02

Accessories

Battery pack	BP200 - (7040.100.01)
Headset	HS200.22 - (2327.100.22)
Wireless PTT switch	PTT20 - (2326.100.01)
Bag	(2350.116.01)
Battery pack	PP200 - (7041.100.01)
Stationary charger set	SC200 - (7032.000.02)
Mobile charger set	MC200 - (7033.000.02)
Small mains charger set	PC200 - (7035.000.02)
Headset (COBRA)	HS200.3 - (2327.100.03)
Data cable with CD	(1050.297.01)
Data cable with CD	(1050.297.02)
Rebroadcasting cable	(1050.595.01)
PROCON configuration program with cable	(2350.600.01)