








BNET-MPS (Man Pack System) Broadband IP Radio



KEY BENEFITS

-  True IP Radio
-  MANET- Self Forming-Self Healing Network
-  Ultra High Capacity
-  Low Delays
-  High Scalability – +400 Users
-  Lightweight
-  Software Defined Radio S.C.A 2.2.2 Compliant

RAFAEL Broadband IP Radio for Ground Forces (The BNET)

The BNET MPS is a multi-branch, Multi waveform, broadband IP software defined radio solution for tactical users and commanders.

BNET brings its technological advancements to the modern battlefield in the form of ultra-high throughput allowing communication of several voice, data and video to every user.

The BNET is superior in its flexibility, robustness, bandwidth, spectrum utilization, immunity, & more.

BNET hand held gives the tactical edge to forces that need a light weight and robust radio with bandwidth for several voice, data and video streams.

Specifications for BNET-MPS

GENERAL

Frequency Range	Narrow Band: 30-512 MHz Wide Band: 225-512MHz Optional L-band, S-band
Main Waveforms	Narrow Band: SC ; Channel spacing: 25, 50 KHz (12.5KHz optional) Wide Band: OFDM , SC ; Channel spacing: 250 KHz, 1.25, 2.5, 5 MHz (0.625MHz optional) UHF SATCOM, Custom WF's supported
Sensitivity	NB QPSK: Typical -112 dBm WB QPSK: Typical -103 dBm
BNET Waveform Tx Capability	Up to 2 Wideband waveforms simultaneously
BNET Waveform Rx Capability	Up to 20 Mbps
Modulation	QPSK, 64 QAM, 16QAM, AM, FM Other modulations supported
ECCM	Frequency Hopping Spread Spectrum techniques Networking ECCM capabilities Error detection and correction
COMSEC	Built in AES - 256 encryption /integration with costumer encryption measures
Net Presets	100 Fully Programmable System Presets
Embedded GPS	Yes
Software Architecture	Software Defined Radio, SCA 2.2.2 compliant
Vocoders	MELP and other Vocoders

TRANSMITTER

RF Heads	2
Power Output	Up to 20 Watt
Self Protection	VSWR, Over temperature Power reduction (automatic)

POWER

Power Input	17.4 Ah Li-Ion Battery
Battery life	12 hours

SPECIFICATIONS

Dimensions (with battery) WxHxD	20X37X8 [cm]
Weight (with battery & antenna)	6 kg

ENVIRONMENTAL

Operating Temperature	-40° ÷ +55° C according to MIL-STD-810F
Storage Temperature	-40° ÷ +71° C according to MIL-STD-810F
Standards	Comply to MIL-STD-810F IP 67, MIL-STD-461E/F

INTERFACES

External Data	USB 2.0, 10/100 Ethernet, RS232/422
Control	Front panel, SNMP
Antenna Port	VHF/UHF: TNC, GPS: SMA
Audio	Standard Audio Analog & Digital (VoIP) Standard MIL-DTL-55116 connector, 6W