








BNET-MPV (Man Pack Vehicle) Broadband IP Radio



KEY BENEFITS

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

RAFAEL Broadband IP Radio for Ground Forces (The BNET)

The BNET MPV is a multi-branch, Multi waveform, broadband IP software defined radio solution for tanks, vehicles, & man pack.

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, and more.

BNET man pack vehicle gives the tactical edge to forces that need a multi branch and robust radio that has a bandwidth capable to run several voice, data & 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	Up to 2
Power Output	Up to 50 Watt
Self Protection	VSWR, Over temperature Power reduction (automatic)

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

POWER

Power Input	24 VDC/ 15A (typical) according to MIL-STD-1275D/E
Power Consumption	500W Max

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

SPECIFICATIONS

Dimensions WxHxD	37X37X16 [cm]
Weight	<15 kg