RAFAEL
ADVANCED DEFENSE SYSTEMS LTD.



SMART AND TO THE POINT.

BNET Family™

Broadband IP Software Defined Radio

The Future of Tactical Communications

The BNET family is an advanced Broadband IP MANET (Mobile Ad-hoc NETwork) Software Defined Radio for tactical operations. It supports the modern digital battlefield's needs with high-speed, low delay, reliable connectivity for data, voice and video on-the-move. Modular, multi-band and multi-channel, BNET is a net-centric, spectrum aware, system for vehicular and airborne platforms, headquarters, and dismounted soldiers. Rafael's patented Multi Channel Reception (MCR) technology enabls unprecedented network capacity in terms of data rates, number of users, and minimal delay, BNET enables all radios of land, sea and air units to participate in a single, seamless, scalable MANET network.

Benefits

- High Scalability +1000 Users
- Multi-Band, IP, Software Defined Radio S.C.A. 2.2.2 Compliant
- Multi-Channel Reception MANET Waveform
- Ultra-High Capacity
- High-Speed, Low Delay
- Efficiency and full utilization of the limited spectrum resource
- Operational simplicity and ease of operation
- Simple maintenance and logistic survivability
- Open architecture using IP technology, allowing smooth, cost-effective integration with existing and future applications.







Main Capabilities

- Diverse wideband voice, video & various IP data services, transmitted over seamless wireless networks
- Communication continuity in all conditions, and system survivability
- Support for delay-sensitive applications (i.e., closing sensor-to-shooter cycles)
- Support for "flat" networks with thousands of members in changing traffic and variable link conditions (mountainous, alpine, urban, hilly, sub-alpine, forested, etc.)
- Interoperability between branches and between military and para-military forces ("blue light" forces)
- Fast network forming and healing
- Networking ECCM capabilities; frequency hopping spread spectrum techniques.



BNET-AR
Airborne SDR



BNET-V
Vehicular SDR



BNET-MP
Man-Pack SDR



BNET-HH
Hand Held SDR



NANO BNET

BNET Family	BNET-AR Airborne	BNET-V Vehicular	BNET-MP Manpack Soldier	BNET-HH Hand Held	NANO BNET
RF Head	Up to 3	Up to 3	2	1	1
Tx Power (Max)	Up to 50W	Up to 50W	Up to 2X10W	Up to 5W	Up to 1W
Weight	10Kg	<15Kg	<4Kg	700gr (without battery)	330gr
Frequency Range (MHz)	30-512 MHz Instantaneous Bandwidth S/L bands optional				1300-2500 MHz S band (L band - optional) Instantaneous Bandwidth - 50MHz
Supported WF's	BNET-WB-MCR:MCR Wideband MANET (channel spacing 1.25/2.5/5 Mhz) BNET-NB-MCR: MCR Narrowband MANET (channel spacing 25 KHz) AM,FM UHF Satcom Custom WF supported				BNET-WB-MCR:MCR Wideband MANET (channel spacing 1.25/2.5/5 Mhz) Custom WF supported
BNET Waveform Network Capability	More than 100Mbps Overall capacity , Up to 10Mbps Upload Rate Per User				Up to 8Mbps Upload Rate Per User (Depending on spectrum), Up to 50Mbps Download Rate

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UNC. 8/27643/09-01.21 8K/26215405 V1 ENG/ Studio | MSS