

RF-7800B-VU104

LAND MOBILE BGAN TERMINAL

*Assured mobile connectivity across
extended battlespace*

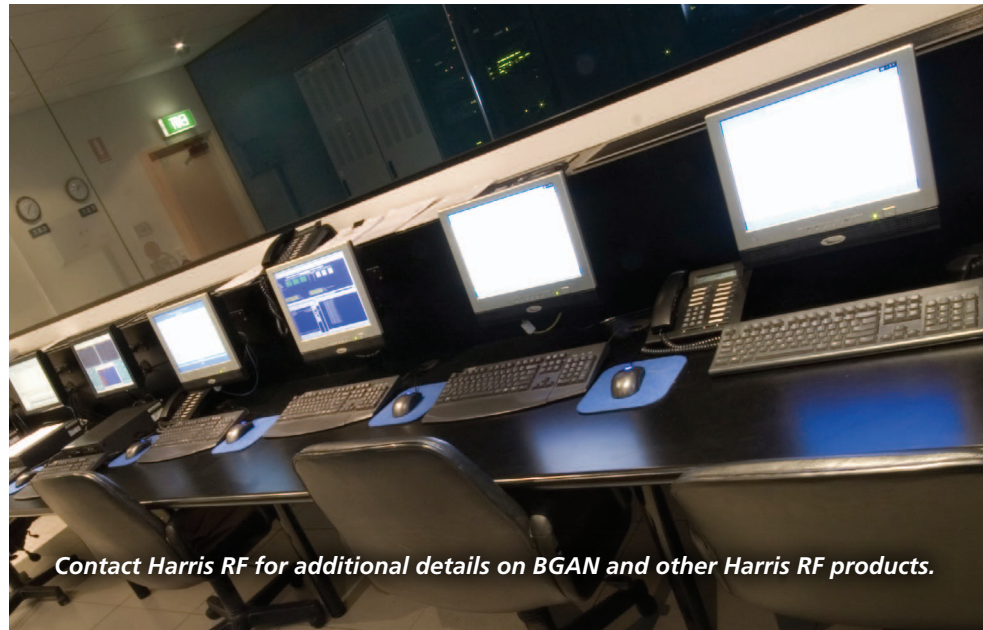


The RF-7800B-VU104 Land Mobile Broadband Global Area Network (BGAN) SATCOM Terminal provides a tactical radio network capability that enhances the FALCON III® multiband radio family. The RF-7800B-VU104 is a Class 10 BGAN SATCOM-on-the-Move (SOTM) Terminal that provides data rates of up to 492 kbps while on the move. The RF-7800B-VU104 is the only rugged BGAN SOTM terminal available today.

The RF-7800B-VU104 antenna may be permanently mounted on a vehicle and continuously tracks with the INMARSAT satellite for successful communications. The RF-7800B-VU104 can be considered for global network connectivity solutions when used with a computer for standalone terminal applications such as law enforcement, homeland security, or humanitarian and disaster relief efforts.

When used with the AN/PRC-117G(V)1(C) or the RF-7800M-MP manpack radios, the terminal provides a multi-mode system that utilizes ad-hoc networking to automatically route between mobile wideband networked line-of-sight (LOS) nodes, adding global beyond-line-of-sight (BLOS) satellite connectivity. The Falcon III integrated system manages Inmarsat subscriber costs through the automated routing between ANW2 LOS and BLOS nodes. The system is designed to ensure a seamless tactical network-centric BLOS connectivity to the existing FALCON III tactical networks, providing secure IP data transfer capability and increased communications reliability. When used with the Falcon III manpack radios, the Harris BGAN terminals can provide an increased effective throughput of up to 2 Mbps over the Inmarsat network due to TCP/IP acceleration and compression algorithms within the ANW2 waveform further reducing Inmarsat subscriber costs.

The Harris BGAN Terminal IP data is encrypted by the Sierra II™ Type-1 algorithms in the AN/PRC-117G or the Acropolis™ II AES encryption algorithms in the RF-7800M-MP. The embedded software of the manpack radio provides the ability to fully configure, remotely control and provide status and fault monitoring of the RF-7800B-VU104 BGAN Terminal using the radio's front panel, making it the easiest BGAN terminal to set up and operate.



Contact Harris RF for additional details on BGAN and other Harris RF products.

Specifications for the RF-7800B-VU104

Capabilities

| | |
|---|---|
| Full IP Capability | Email, Web browsing, FTP, etc. |
| Inmarsat Certified | <ul style="list-style-type: none"> Land Mobile User Equipment Class 10 BGAN Background user data rates up to 492 kbps BGAN Streaming QoS: User data rates of 32, 64, 128, 256* kbps Global coverage <p><i>* 256 kbps is only available at elevation angles > 45°</i></p> |
| Multi-user capability of up to 11 simultaneous primary user contexts/sessions | |
| IP network bridging mode & modem mode support | |
| FCC, C5, GMPCS/ITM Certified | |

Specifications

| | |
|---|--|
| BGAN Satellite L-Band Frequency Operation | <ul style="list-style-type: none"> TX: 1626.5-1660.5 MHz RX: 1525-1559 MHz Full-duplex, BLOS operation |
| Dimensions | 20 D x 8 H in. (51 x 20 cm) |
| Weight | 28 lbs. (12.6 kg) |
| Power Options | <ul style="list-style-type: none"> Internal MIL-STD-1275 power supply 120/240 AC power supply Standard vehicle DC adapter |
| Continuous Tracking with Vehicle Motion Changes of: | <ul style="list-style-type: none"> Angular velocity of 100°/s (azimuth & elevation) Angular acceleration of 100°/s² (azimuth & elevation) 360° continuous field of view in azimuth 5°-90° continuous field of view in elevation Travel speeds up to 70 mph |

Environmental

| | |
|------------|--------------|
| Rugged | MIL-STD-810F |
| Immersion | 1 meter |
| EMI | MIL-STD-461E |
| Compliance | ROHS |

Interfaces

| | |
|------------------------------------|--------------------------------|
| Data | Ethernet, USB |
| ISDN | Voice (4 kbps), data (64 kbps) |
| DC Power | 10-34 VDC |
| User-removable SIM card slot | |
| Simultaneous use of all interfaces | |

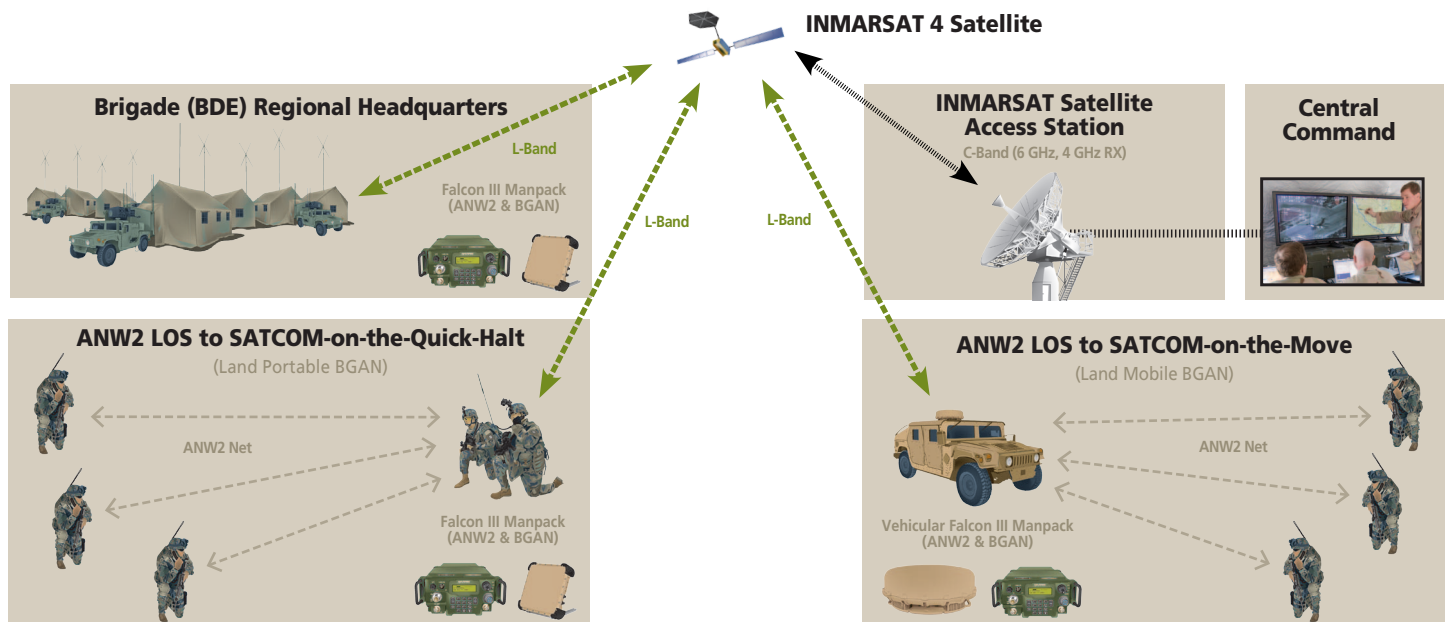
Included Accessories

| | |
|-----------------|-------------------------------|
| 12043-0843-A015 | Automobile 12 VDC Power Cable |
| 12043-0833-A010 | Standalone Ethernet Cable |

Optional Accessories

| | |
|-----------------|---|
| 12091-0070-01 | AN/PRC-117G, RF-7800M-MP Land Mobile Ancillary Kit |
| 12043-0830 | AN/PRC-117G, RF-7800M-MP Black Ethernet Cable |
| 12043-0831 | AN/PRC-117G, RF-7800M-MP Black Ethernet & ISDN Cable |
| 12043-0834-A010 | Standalone Ethernet & ISDN Cable |
| 12043-0835-A010 | Standalone ISDN Cable |
| 12043-0836-A010 | Standalone USB & ISDN Cable |
| 12043-0837-A015 | Data Extension Cable, Ethernet & ISDN |
| 12043-0844-A1 | AC/DC Power Supply |
| 12043-0841 | BGAN DC Power to RF-505X PS |
| 12043-0845-A015 | Power Extension Cable |
| 12043-0840 | BGAN DC Power to 4 Leads / RF-7800B-VU Remote On/Off |
| 12043-0846-A015 | BGAN DC Power to 2 Leads |
| 12043-0842 | BGAN DC Power to RF-505X PS / RF-7800B-VU Remote On/Off |
| 12091-4200-01 | HF/VHF/UHF CoSite Low Pass Filter Kit for L-Band |
| 12091-4160-01 | ISDN to POTS Converter |

Tactical Area Communications System Utilizing the RF-7800B Terminals



RF Communications | 1680 University Ave. | Rochester, NY USA 14610 | 585.244.5830 | www.harris.com

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