The Harris RF-7800B-DU024 Land Portable Broadband Global Area Network (BGAN) SATCOM Terminal provides tactical radio network capability that enhances the FALCON III® multiband radio family. The RF-7800B-DU024 is a Class 2 BGAN Land Portable Terminal that provides data rates of up to 432 kbps. The RF-7800B-DU024 BGAN Terminal is designed for operation in harsh environmental conditions.

The RF-7800B-DU024 terminal is a manually pointed antenna system capable of rapid deployment for sending and receiving data once pointed at the satellite. 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-DU024 BGAN Terminal using the radio’s front panel, making it the easiest BGAN Terminal to set up and operate.

The RF-7800B-DU024 can be considered for global network connectivity solutions when used as a standalone terminal with a computer for applications such as law enforcement, homeland security, or humanitarian and disaster relief efforts.
# Specifications for the RF-7800B-DU024

## Capabilities
- **Full IP Capability**: Email, Web browsing, FTP, etc.
- **Inmarsat Certified**: Land Mobile User Equipment Class 2
- **BGAN Background user data rates up to 432 kbps**
- **BGAN Streaming QoS**: User data rates of 32, 64, 128 kbps
- **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**
- **Frequency**: TX: 1626.5-1660.5 MHz
- **RX**: 1525-1559 MHz
- **Operation**: Full-duplex, BLOS operation

**Dimensions**: 9.5 D x 9.5 H x 2.5 W in. (24 x 24 x 6.5 cm)

**Weight**: 6.2 lbs. (2.8 kg)

**Power Options**:
- Single BA-5590 Style battery
- 120VAC power supply
- Standard vehicle DC adapter

**Interfaces**
- **Data**: Ethernet, USB
- **ISDN**: Voice (4 kbps), data (64 kbps)
- **DC Power**: 10–34 VDC

**User-removable SIM card slot**

**Environmental**
- **Rugged**: MIL-STD-810F
- **Immersion**: 1 meter
- **EMI**: MIL-STD-461E
- **Compliance**: ROHS

## Included Accessories
- 12043-0844-A1 AC/DC Power Supply
- 12043-0833-A010 Standalone Ethernet Cable

## Optional Accessories
- 12091-0060-01 AN/PRC-117G, RF-7800M-MP Land Portable Ancillary Kit
- 12091-4010-01 Battery Box & Cover 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
- 12043-0850-A006 Battery Box Cable
- 12043-0841 BGAN DC Power to RF-505X PS
- 12043-0843-A015 Automobile 12 VDC Power Cable
- 12043-0845 Power Extension Cable
- 12043-0846 BGAN DC Power to 2 Leads
- 12091-4160-01 ISDN to POTS Converter
- 12091-4150-01 BGAN Land Portable Fixed Mounting Kit

## Tactical Area Communications System Utilizing the RF-7800B Terminals

- **ANW2 LOS to SATCOM-on-the-Quick-Halt** (Land Portable BGAN)
- **INMARSAT 4 Satellite**
- **Central Command**
- **INMARSAT Satellite Access Station** (L-Band 6 GHz, 4 GHz RX)
- **ANW2 LOS to SATCOM-on-the-Move** (Land Mobile BGAN)

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