The L3Harris RF-7800B-VU104 Land Mobile Broadband Global Area Network (BGAN) Terminal provides critical high-speed SATCOM capabilities to forces on the move. When paired with the L3Harris Falcon III® Manpack Vehicular Amplifier Adapter, the terminal extends the range of wideband networks beyond the limitations of ground-based Line-Of-Sight (LOS) communications. Ruggedized for extreme conditions, the L3Harris RF-7800B-VU104 is the only Class 10 BGAN SATCOM-On-The-Move terminal available today.

The L3Harris Land Mobile BGAN Terminal is ideal for law enforcement, homeland security or humanitarian and disaster-relief forces operating in harsh environments. It features a permanently mounted vehicular antenna that continuously tracks with INMARSAT satellites, providing seamless Beyond-Line-Of-Sight (BLOS) connectivity. When used with the L3Harris Falcon III® AN/PRC-117G(V)1(C) or RF-7800M-MP manpacks, the terminal harnesses ANW2®C ad-hoc networking capabilities to automatically route between mobile wideband LOS and BLOS communication nodes. This, along with abilities for increased data throughput of up to two Mbps over an INMARSAT satellite, helps users better manage subscriber time and related costs.

The L3Harris RF-7800B-VU104 is engineered for rapid set up and operation. Users can configure, remotely control and provide status and fault monitoring for the RF-7800B-VU104 using the front panel of a L3Harris Falcon III manpack radio.
L3Harris RF-7800B-VU104 Land Mobile BGAN Terminal
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L3Harris Technologies is an agile global aerospace and defense technology innovator, delivering end-to-end solutions that meet customers’ mission-critical needs. The company provides advanced defense and commercial technologies across air, land, sea, space and cyber domains.

TACTICAL AREA COMMUNICATIONS SYSTEM UTILIZING RF-7800 TERMINALS

GENERAL

Full IP Capability
Email, Web browsing, FTP, etc.

INMARSAT Certified
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. Data rate 256 kbps is only available at elevation angles > 45°, Global coverage

Multi-user capability of up to 11 simultaneous primary user contexts/sessions

IP network bridging mode and modem mode support

FCC, C5, GMPCS/ITM certified

SPECIFICATIONS

Dimensions
8 H x 20 D in (20 H x 51 D cm)

Weight
28 lbs (12.6 kg)

BGAN Satellite
TX: 1626.5-1660.5 MHz and 1668-1675 MHz (Alphasat satellite only)

L-Band Frequency
RX: 1525-1559 MHz and 1518-1559 MHz (Alphasat satellite only)

Operation
Full-duplex, BLOS operation

Power Options
Internal MIL-STD-1275 power supply, 120/240 AC power supply, standard vehicle DC adapter

Continuous Tracking with Vehicle Motion Changes
Angular velocity of 100°/s (azimuth and elevation), angular acceleration of 100°/s² (azimuth and elevation), 360° continuous field of view in azimuth, 5°–90° continuous field of view in elevation, travel speeds up to 70 mph

ENVIRONMENTAL

Ruggedness
MIL-STD-810F

Immersion
1 meter (3 ft)

EMI
MIL-STD-461E

Compliance
ROHS

INTERFACES

Data
Ethernet, USB

ISDN
Voice (4 kbps), data (64 kbps)

DC Power
12/24 VDC

User-removable SIM card slot
Simultaneous use of all interfaces

STANDARD ACCESSORIES

12043-0843-A015
Automobile 12 VDC Power Cable

12043-0833-A010
Standalone Ethernet cable

12091-0070-01
AN/PRC-117G, RF-7800M-MP Land Portable Ancillary Kit

12043-0830
Battery Box and Cover Kit

12043-0831
AN/PRC-117G, RF-7800M-MP Black Ethernet Cable

12043-0834-A010
AN/PRC-117G, RF-7800M-MP Black Ethernet and ISDN Cable

12043-0835-A010
Standalone Ethernet and ISDN Cable

12043-0836-A010
Standalone ISDN Cable

12043-0837-A015
Standalone USB and ISDN Cable

12043-0890-A015
Data Extension Cable, Ethernet and ISDN

12043-0891-A015
Battery Box Cable

12043-0892-A015
BGAN DC Power to RF-505X PS

12043-0894-A1
Automobile 12 VDC Power Cable

12043-0895-A015
Power Extension Cable

12043-0896-A015
BGAN DC Power to 2 Leads

12091-4160-01
ISDN to POTS Converter

12091-4200-01
HF/VHF/UHF CoSite Low Pass Filter Kit for L-Band

ANW2®C LOS to SATCOM-on-the-Quick-Halt
(Land Portable BGAN)

INMARSAT Satellite

ANW2®C LOS to SATCOM-on-the-Move
(Land Mobile BGAN)

Central Command

INMARSAT Satellite Access Station

C-Band (6 GHz, 4 GHz Rx)

Falcon III Manpack
(ANW2®C & BGAN)

Falcon III Manpack
(ANW2®C & BGAN)

Falcon III Manpack
(ANW2®C & BGAN)

Falcon III Manpack
(ANW2®C & BGAN)

ANW2®C Net

ANW2®C Net

Vehicular Falcon III Manpack
(ANW2®C & BGAN)

Vehicular Falcon III Manpack
(ANW2®C & BGAN)

ANW2®C Net

ANW2®C Net

L-Band

L-Band

L-Band

L-Band

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