HUGHES
An EchoStar Company

2021
HUGHES BGAN
TERMINAL & ACCESSORIES
CATALOG

BGAN.Hughes.com

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PORTABLE TERMINAL KITS
(9211, 9202M)

9211 Terminal Kit (Part Number: 3500841-0002)
The rugged and lightweight Hughes 9211 is a budget-friendly, high-data-rate terminal, ideal for media, governments, NGOs, mobile healthcare providers, and more. It includes built-in Ethernet, a replaceable battery pack, RJ11 for voice or fax, an external port to connect a tracking antenna, and a built-in 802.11 Wi-Fi access point.

9202M Terminal Kit (Part Number: 3500566-0004)
A broadband satellite IP terminal with built-in Ethernet, a replaceable battery pack, RJ11 for voice or fax, an external port to connect a tracking antenna, and a built-in 802.11 Wi-Fi access point

**Both Portable Terminal kits (9211/9202M) include:*

Hughes Land Portable Terminal (9211 or 9202M)
Rechargeable Lithium-Ion Battery Pack
5 m Ethernet Cable
AC/DC Adapter
Three Power Cables: - *US Power Cord* - *EU Power Cord* - *UK Power Cord*

PORTABLE TERMINAL ACCESSORIES
(for 9211, 9202M)

DC/DC Adapter (Part Number: 3500099-0003)
DC/DC Car Converter

AC/DC Adapter (Part Number: 3500411-0008)
AC/DC Power Adapter
Input: 120 V-240 V, 50/60 Hz, 1.5 A
Output: 20 V, 2.7 A,
Indoor use only

Spare Battery (Part Number: 3501192-0001)
Rechargeable Lithium-Ion
7.2 V, 6.4 Ah, 45 Wh

Other general information
BGAN.Hughes.com

US Power Cord (Part Number: 3500637-0001)
Power Cord for AC/DC Adapter

EU Power Cord (Part Number: 3500637-0002)
Power Cord for AC/DC Adapter

UK Power Cord (Part Number: 3500637-0003)
Power Cord for AC/DC Adapter

Australian Power Cord (Part Number: 3500637-0004)
Power Cord for AC/DC Adapter

Radio Frequency Pigtail (Part Number: 9505964-0001)
Required to connect the external (C10 or C11) tracking antenna to the portable terminal

C10 Antenna Kit (Part Number: 3501057-0001)
External Antenna Kit for 9211 and 9202M Terminals

C11 Antenna Kit (Part Number: 3501058-0001)
External Antenna Kit for 9211 and 9202M Terminals

**Both Antenna kits (C10, C11) include:*

Tracking Antenna (Class 10 or Class 11)
Magnetic Mount Set
10 m Radio Frequency Cable
Radio Frequency Pigtail

C11 MOBILE 9450 KITS
(9450TW, 9450E, 9450LW, and 9450L)

Customers can connect at IP broadband speeds of up to 464 kbps while on the move using the world's smallest C11 mobile BGAN terminal–the Hughes 9450-C11. Four different versions of the 9450 are available depending on the customer's interface requirements.

Hughes 9450 Features by Model	L	LW	TW	E
Use a BGAN or M2M SIM card	Y	Y	Y	Y
Built-in 802.11 b/g/n Wi-Fi Access Point	N	Y	Y	N
Two RJ11 ports for telephony and fax	N	N	Y	Y
Built-in Four Port Ethernet	Y	Y	Y	Y
Four Port PoE	N	N	Y	Y
Attach a C10 or C11 antenna	Y	Y	Y	Y
C10 background IP up to 492/492 kbps	Y	Y	Y	Y
C10 streaming QoS up to 265 kbps	Y	Y	Y	Y
C11 background IP up to 464/464 kbps	Y	Y	Y	Y
C11 streaming QoS up to 128 kbps	Y	Y	Y	Y

9450TW-C11 Terminal Kit (Part Number: 3500497-0021)
PoE Ethernet, Wi-Fi, RJ11, and Fax

9450E-C11 Terminal Kit (Part Number: 3500497-0008)
PoE Ethernet, RJ11, Fax, and ISDN

9450L-C11 Terminal Kit (Part Number: 3500497-0015)
Ethernet (No PoE)

9450LW-C11 Terminal Kit (Part Number: 3500497-0019)
Ethernet (No PoE) and Wi-Fi

**All 9450-C11 Terminal kits (9450TW, 9450E, 9450L, and 9450LW) include:*

Hughes 9450 Mobile Terminal (9450TW, 9450E, 9450L, 9450LW)
Power Cable
10 m Radio Frequency Cable
Class 11 Tracking Antenna

Other general information
BGAN.Hughes.com

C10 MOBILE 9450 KITS
(9450TW, 9450E, 9450LW, 9450L)

Customers can connect with IP broadband speeds of up to 942 kbps while on the move using the reliable 9450-C10. Four different versions of the 9450 are available depending on the customer's interface requirements.

9450TW-C10 Terminal Kit (Part Number: 3500497-0020)
PoE Ethernet, Wi-Fi, RJ11, and Fax

9450E-C10 Terminal Kit (Part Number: 3500497-0012)
PoE Ethernet, RJ11, Fax, and ISDN

9450L-C10 Terminal Kit (Part Number: 3500497-0014)
Ethernet (No PoE)

9450LW-C10 Terminal Kit (Part Number: 3500497-0018)
Ethernet (No PoE) and Wi-Fi

**All 9450-C10 Terminal kits (9450TW, 9450E, 9450L, 9450LW) include:*

Hughes 9450 Mobile Terminal (9450TW or 9450E or 9450L or 9450LW)
Power Cable
10 m Radio Frequency Cable
Set of 3 Magnetic Mounts
Class 10 Tracking Antenna

Other general information
BGAN.Hughes.com

9450 RF Cable (P/N: 3501053-0001)
Coaxial 10 m Radio Frequency Cable, TNC-TNC

9450 Power Cable (P/N: 3500472-0001)
Used with all the 9450 Modems for permanent installation in vehicle

9450 Power Cable, Cigarette Lighter (P/N: 3500472-0002)
Used with all the 9450 Modems for temporary installation in vehicle (cigarette lighter)

9450 AC/DC 150 W Power Adapter (P/N: 3501318-0001)
Used with all 9450 modems
Input: 120–240 V, 50/60 Hz, 2.0 A
Output: 24 V, 6.25 A
Indoor use only
Certified for use worldwide, including in Mexico, India, and Brazil

WLAN Antenna (P/N: 9506197-0001)
Used with the 9450TW and 9450LW Modems

C11 Spare Antenna (P/N: 1504875-0003)

C10 Spare Antenna (P/N: 1504876-0001)
**The C10 Spare Antenna includes:*

Set of 3 Magnetic Mounts

Magnetic Mounts (P/N: 3501152-0002)
Used with the C11 Antenna kit

Magnetic Mounts (P/N: 3501152-0001)
Used with the C10 Antenna kit

9410 MOBILE TERMINAL KITS

The 9410 is a fully Integrated Land Mobile C11 Satellite Terminal with Ethernet and WLAN interfaces. The terminal operates with a BGAN or BGAN M2M SIM and can be used for primary communications or as an LTE failover backup across a range of deployment scenarios, with or without human interaction. Two different options are available depending on the customer's interface requirements.

9410LW Terminal Kit (P/N: 3501431-0001)
Ethernet, Wi-Fi

9410L Terminal Kit (P/N: 3501431-0002)
Ethernet

9410 MOBILE TERMINAL ACCESSORIES

Power and Data Cable, Blunt Wire, 5 m (P/N: 3501314-0002)

Power and Data Cable, Blunt Wire, 10 m (P/N: 3501314-0003)

Power and Data Cable, Cigarette Lighter Plug, and RJ45 Socket, 5 m (P/N: 3501314-0004)

RJ45 Wiring Block (P/N: 9510250-0002)

Magnetic Mounts (P/N: 3501152-0002)

Mating Power and Data Connector, Bare (P/N: 9509554-0001)

Custom Power and Data Cable, 8.5 mm OD, 100 m (P/N: 9509897-0001)
The bulk cable and solder-ready barrel connector allow for custom cable installations

9502 Kit (P/N: 3500509-0001)

The Hughes 9502 IP satellite terminal provides reliable connectivity for IP SCADA and Machine-to-Machine (M2M) applications. The terminal consists of an Indoor Unit (IDU), an external antenna, and an RF cable.

9502 Kit, C1/D2-Compliant (P/N: 3500509-0004)

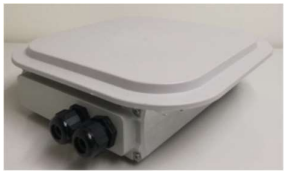
Note: This version of hardware is C1/D2- and ATEX-compliant for hazardous locations

**All 9502 kits include:*

Hughes 9502 Modem
Power Cable
10 m Radio Frequency Cable
Class 2 External Antenna

9502 One-Piece (P/N: 3500753-0021)

Introduced as an alternative to the external antenna version of the 9502, this product integrates the 9502 Modem with a compact antenna to create a single-piece, integrated, rugged terminal that can withstand the most extreme weather conditions



9502 One-Piece, C1/D2-Compliant (P/N: 3500753-0022)

Note: This version is C1/D2- and ATEX-compliant for hazardous locations

**All 9502 One-Piece assemblies include:*

Hughes 9502 Chassis
IP-66 Housing with End Caps
Flat-Panel Antenna

Spare 9502 Antenna Assembly (P/N: 3500638-0002)

External Antenna for 9502

**The assembly includes:*

N Type Connector
10 m Radio Frequency Cable

Front

Back

Basic Fixed Mount Kit (P/N: 3004066-0004)

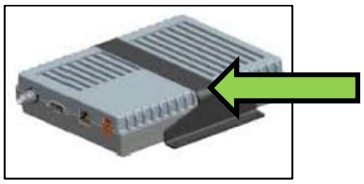
Used to mount the 9502 External Antenna or 9502-1 One-Piece Terminal

**The kit includes:*

Fixed Mount Stand
Ground Cable
Level
Azimuth Elevation Bracket
Hex Screw, quantity 4
Washer, quantity 4
Installation Guide

9502 IDU Strap (P/N: 3500617-0001)

Used for permanently mounting the Hughes 9502 IDU



Spare 9502 IDU (P/N: 3500563-0008)

Spare 9502 IDU C1/D2 and ATEX Compliant (P/N: 3500563-0006)

**The interfaces used for all of the 9502 IDUs are:*

Ethernet
USB
SIM Card
TNC-Type Radio Frequency Connector
2-Line Power
Function Button

Azimuth Canister Bracket (P/N: 1022994-0022)

Used with the External Antenna and 9502-1 One-Piece Terminal:
The Azimuth Canister Bracket is used to mount the External Antenna or 9502-1 One-Piece Terminal onto a 4 cm (1.6") diameter pole

Azimuth Canister Bracket (P/N: 1022994-0024)

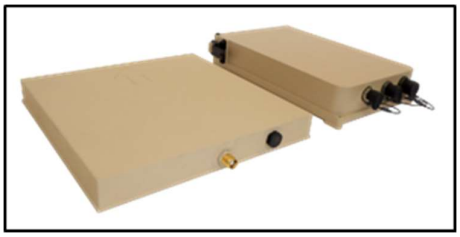
Used with the External Antenna or 9502-1 One-Piece Terminal:
The Azimuth Canister Bracket is used to mount the External Antenna or 9502-1 One-Piece Terminal onto a 5 cm (2.0") diameter pole

Spare Parts Kit, 9502 One-Piece (P/N: 3500795-0001)

LOW-PROFILE TERMINAL KITS
(LPB)

Low-Profile BGAN (LPB) (P/N: 3500910-0001)

The Hughes Low-Profile BGAN (LPB) Terminal consists of a modem and antenna that are IP-67 rated for outdoor use and can be installed below ground-surface for inconspicuous operation



The kit includes:

Hughes LPB Modem
LPB Antenna
3 m Radio Frequency Cable, Right Angle
3 m Radio Frequency Cable, Straight
Pointing Wedge
Power Cable
Ethernet Cable

LOW-PROFILE TERMINAL ACCESSORIES
(LPB)

Antenna LPB (P/N: 3500873-0001)

LPB 3 m Radio Frequency Cable, Right Angle TNC (P/N: 3500873-0003)

LPB 3 m Radio Frequency Cable, Straight TNC (P/N: 3500873-0002)

LPB 6-Pin Ethernet Cable (P/N: 9505473-0001)

LPB 3-Pin Power Cable, 6 ft. (P/N: 9505472-0001)