


Iridium's second-generation satellite transceiver for truly global voice and data communications.



# Iridium 9522B

L-Band Satellite Transceiver



# Opening the lines of communication, everywhere

## Enabling Global Voice and Data

The Iridium 9522B Satellite Transceiver is Iridium's second-generation satellite transceiver for truly global voice and data communications. Compact, versatile and powerful, it's ideal for sending and receiving voice and data from equipment everywhere on the planet.

**The 9522B functionally supports all of Iridium's services, including:**

- Voice telephony
- Circuit switched data
- Short-burst data (SBD)
- Short message service (SMS)

## A Perfect Partnership

Smaller and lighter than the 9522A, the 9522B is available to registered Iridium VAMs and VARs, and is ideal for partners who need a satellite transceiver to incorporate into a final Iridium subscriber solution for a specific application or vertical market. It easily integrates into a wide variety of applications through a RS232 serial interface and AT command set.

**Iridium 9522B is ideal for sending and receiving voice and data from equipment everywhere on the planet.**

## Key Features

- Pole-to-pole global coverage
- 26-pin IDC connector
- RS232 serial interface
- SMA RF antenna connector
- Enables continuous circuit switched connection
- Connects to small omni directional L-band antennas
- GPS feed-through connector for shared antenna
- Integrated SIM card reader
- Enhanced AT command support
- DPL bus for control of external peripherals
- FCC, Industry Canada, and CE approval\*

\* Assuming an antenna with a gain of ~3dbi.



Compact, powerful,  
highly versatile – and  
ready to go to work



## The Development Deal

The 9522B can be integrated into a variety of Iridium subscriber products, or retrofitted into existing 9522A-based products. It is provided as a “black box” – core transceiver module and SIM card reader – along with a 260-way 0.1" pitch connector interface for analog audio, control/digital audio, RS232, power input and on/off. All other functions and hardware must be provided by the solution developer.

## It's About Compatibility

The 9522B is a functional replacement to the 9522A, although the mechanical design and electrical connectors differ. Connection adaptors are available to enable the 9522B to be used in place of the 9522A. A pass-through connector allows a GPS receiver to use the same antenna as the 9522B LBT.

## Specifications

### Mechanical

- Length: 6.38 in (162 mm)
- Width: 3.16 in (81 mm)
- Depth: 1.10 in (28 mm)
- Weight: ~0.93 lbs (~420 g)

### Environmental

- Operating Temp.: -30°C to +70°C
- Operating Humidity: 25 to 75% RH
- Storage Temp.: -40°C to +85°C
- Storage Humidity: ≤ 93% RH

### RF Interface

- Frequency: 1616 to 1626.5 MHz
- Duplexing: Time Domain Duplex
- Oscillator stability: ± 1.5 ppm
- Input/output impedance: 50 Ohms
- Multiplexing method: TDMA/FDMA

### DC Power Input

- Main input: +4.0 VCD to +32 VDC
- Nominal: 5 V, 12 V, 24 V
- Ripple: 40 mVpp
- Max current (call): 2.5 A @ 5 V
- Power average (call): 4W



**Only one communications company connects the entire globe**

Iridium is the world's only truly global mobile communications company, with coverage of the entire Earth, including oceans, airways and Polar Regions. Iridium voice and data products provide communications solutions that allow global companies, government agencies and individuals to stay connected, everywhere. The unique Iridium constellation of 66 Low Earth Orbiting (LEO) cross-linked satellites routes communications traffic through space and around the world, creating highly efficient and reliable connections.

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