



## 9522B L-Band Transceiver

The 9522B is a second-generation L-Band Transceiver (LBT) designed to be embedded into a range of mobile satellite terminals by an approved Iridium® value-added manufacturer (VAM) or reseller (VAR), packaged with an external power supply, antenna and other components. The compact, lightweight LBT unit with built-in SIM card reader supports all Iridium-based services, including voice telephony, circuit-switched data, short-burst data (SBD) and short message service (SMS).

A 26-pin IDC connector interface with external keypads, displays, phone handsets, microphones, speakers and processor units. An RS232 serial interface supports data and voice applications. The DPL bus is used for external peripherals. An SMA connector is provided for connection to the antenna. An SMA connector is provided to feed the antenna to a GPS receiver when a shared antenna is used.

Like all Iridium devices, the 9522B leverages Iridium's global gap-free coverage, high network reliability and low-latency satellite links to provide a wide range of voice and data solutions for mobile users outside the reach of landlines and terrestrial wireless networks. The rugged unit has been tested to provide reliable operation under extreme environmental conditions, and is FCC, IC and CE approved.

### Features

- 26-pin IDC connector for user interfaces
- RS232 serial interface for data and voice applications

- SMA RF antenna connector
- GPS feed-through connector for shared antenna
- Integrated SIM card reader
- Enhanced AT command support
- DPL bus for control of external peripherals



## Capabilities

- Voice service
- Circuit switched data service
- SBD service
- SMS
- Low uniform global latency
- Global coverage in areas not served by cellular

## Specifications

### Mechanical

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

### Environmental

- Operating Temperature Range:  $-30^{\circ}\text{C}$  to  $+70^{\circ}\text{C}$
- Operating Humidity Range: 25 to 75% RH

- Storage Temperature Range:  $-40^{\circ}\text{C}$  to  $+85^{\circ}\text{C}$
- Storage Humidity Range:  $\leq 93\%$  RH



### RF Interface

- Frequency range: 1616 MHz to 1626.5 MHz
- Duplexing method: TDD (Time Domain Duplex)
- Oscillator stability:  $\pm 1.5$  ppm
- Input/output impedance: 50 Ohms
- Multiplexing method: TDMA/FDMA

### DC Power Input

- Main input voltage – range: +4.0 VDC to +32 VDC
- Main input voltage – nominal: 5 V, 12 V, 24 V
- Main input voltage – ripple: 40 mVpp
- Max current (during call): 2.5 A @ 5 V
- Power average (during call): 4 W

Iridium limits distribution of the Transceiver equipment to approved VAMs and VARs.

Specifications are subject to change without notice. Additional information to that contained herein may be required in order to fully develop an operational unit incorporating the 9522B. The specifications provided here are for information purposes only.



Corporate Headquarters:  
6707 Democracy Boulevard, Suite 300  
Bethesda, Maryland, USA 20817  
[T] +1.301.571.6200 • [F] +1.301.571.6250  
www.iridium.com

Business Operations:  
8440 South River Parkway  
Tempe, Arizona, USA 85284  
[T]: +1.480.752.5155 • [F]: +1.480.752.1105  
Toll Free: +1.866.947.4348