



STX2 Satellite Telemetry Modem

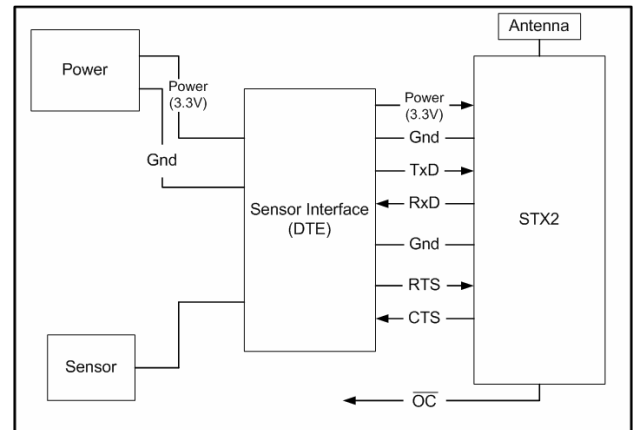
Miniature Low Power Satellite Data Link

The Simplex Transmitter Unit (STX2) is the world's smallest OEM satellite modem module, providing reliable global digital data communications for asset tracking and telemetry in a package the size of a business card you might carry in your wallet. The STX2 is a low cost, simplex modem that sends packet-switched data automatically (on a time or event driven basis) from remote locations where alternative communications systems are unavailable or prohibitively expensive. The unit can be easily incorporated into industry specific applications via standard AT commands.



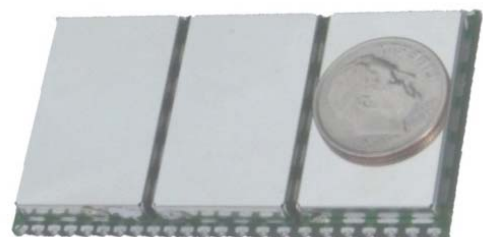
Typical Integration

A Sensor Interface card built into the end-user device supplies power to the STX2 at 3.3V. It communicates with the STX2 via the 5 wire serial interface. An external LED can be controlled by the STX2 to visualize when a transmission occurs. Optionally, this external Open Collector output can be used to perform power management on the Sensor Interface board. This example integration is shown here.



Key Features

- Superior communication reliability using direct sequence spread spectrum over the AeroAstro SENS system
- Small Physical Size 2.3 x 1.3 x 0.25" (5.8 x 3.3 x 0.6 cm)
- Low Power Consumption—6 mA sleep, 500 mA at 3.3V for 1.3s transmit time (9 bytes)
- Low Cost—\$99 or lower depending on quantity
- +18dBm output Power @ 100 bps with FEC Error Detection/Correction
- Excellent Jam and Detection Resistance (LPI/LPD)
- FCC Approved Modular Design
- Stripline Antenna Output (50 Ohms)
- 4 Frequency Channels

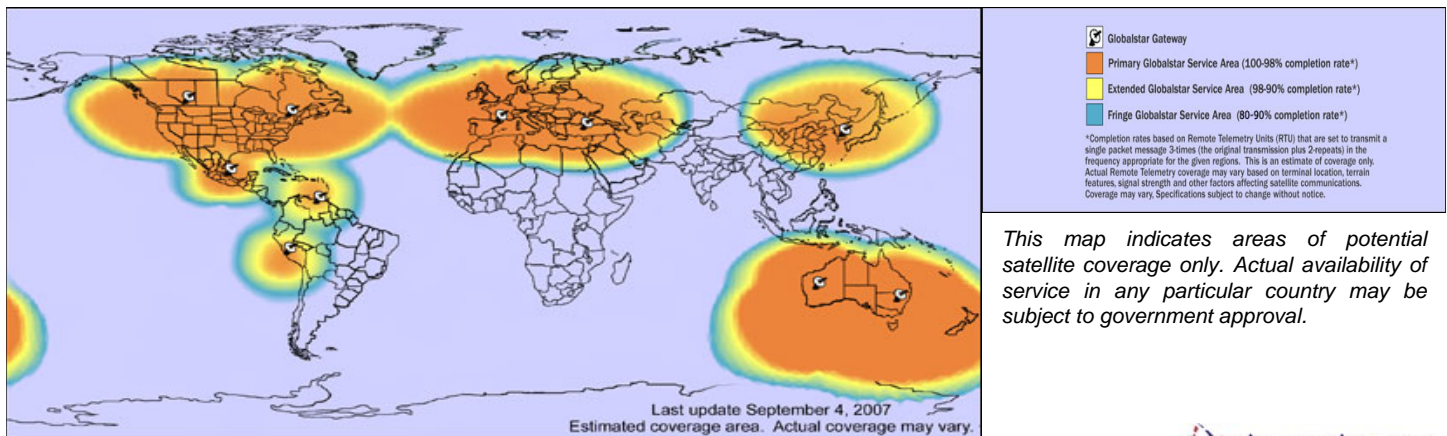


To order remote tracking hardware, transmitters, or data management services, please contact AeroAstro at 866.631.6010 or info@sensservice.com.

Make SENS of Your Data™

STX2 Specifications

Dimensions:	Board Size: Thickness:	2.30" x 1.28" 0.25"
L-Band RF:	Frequency: Protocol: Modulation: Transmit Power: Transmit Time: Packet Size:	1.615 GHz Simplex Direct Sequence Spread Spectrum (DSSS) +18 dBm EIRP 1.4 seconds (or custom) 9 bytes (or custom)
Unit ID:	Electronic Serial Number:	Each Unit Identified with Unique ESN
Power:	Voltage: Sleep Mode:	3.3V DC 6 mA draw
Antenna:	Polarization: Typical Antenna:	Left Hand Circular Polarized Ceramic Patch
User Interface:	Serial Port: Serial Parameters: Maximum Serial Packet: External LED:	Half-duplex TTL asynchronous port (UART) 9600 bps, 8 data bits, no parity, 1 stop bit 144 bytes Controlled via open collector output
Environmental:	Temperature: Humidity: Vibration and Shock: Radiated Emissions:	-30C to +60C per MIL-STD-810E Salt, Fog, Humidity Tested per MIL-STD-810E Tested per MIL-STD-810E FCC Part 15 and Part 25, ETSI



About AeroAstro

AeroAstro is the only one-stop shop offering all SENS Data Services and related products on one invoice. AeroAstro provides complete, end-to-end support for our Value Added Resellers and their market specific products. As the designer and builder of the SENS Data Service, AeroAstro is in a unique position to assist VARs in all aspects of developing, implementing, and servicing their applications, hardware, communications, and data display.



20145 Ashbrook Place
Ashburn, VA 20147
info@sensservice.com
www.aeroastro.com
www.sensservice.com

t: 703.723.9800
f: 703.723.9850

This map indicates areas of potential satellite coverage only. Actual availability of service in any particular country may be subject to government approval.