

# ST2000



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Embedded Iridium SBD Transceiver

Globe Operating Capability

Quad-band GSM/GPRS/EDGE

RS485 Bus Compatible Custom Accessories

Multiple Digital I/O and Anlage Input

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ST2000 is a GPS location service supplier for vehicle and ship. It has iridium SBD transceiver, which provides globe service, supplies satellite communications where no GSM signal coverage. ST2000 provides superior sensitivity GPS application, and supports quad-Band GSM frequencies. The device could be monitored by backend server or other specified terminals.

ST2000 has multiple I/O interfaces that can be used to monitor vehicle status or control external device. it has RS485 bus, support fuel sensor, camera and other custom accessories. User can setup device working parameter by PC setup program base on personality application.

## Advantages:

- ◇ Iridium SBD transceiver, Truly Globe coverage
- ◇ Dual-Band GSM/GPRS/EDGE and dual-band UMTS/HSPA
- ◇ High sensitivity -165 dBm (Tracking), Fast TTFF
- ◇ RS485 Bus Compatible Custom Accessories
- ◇ Multiple Digital Input, Anlage Input and Output
- ◇ Backup Battery, 3.7V, 500mAh
- ◇ SOS Button Optional
- ◇ WCDMA Version Optional
- ◇ DC Tolerance voltage, from 8V to 32V

### ◇ Iridium SBD Technical Specifications

Transmit\Receive Frequency	1616-1625MHz
Transmit power	1.6W
Message size	Tx 340bytes Rx 270bytes
latency	20 sec (typical)

### ◇ GSM Specifications

Frequency	GSM 850/900/1800/1900 MHz Compliant to GSM phase 2/2+ -Class 4 (2 W @ 850/900MHz) -Class 1 (1 W @ 1800/1900MHz)
Receive sensitivity	GSM850,EGSM900 < -109dBm DCS1800,PCS1900 < -109dBm
Stability of Frequency	<2.5ppm

### ◇ GPS Specifications

GPS chipset	MT3337 GPS chipset
Receiver Accuracy	Without aid:3.0 M 2D-RMS DGPS(WAAS, EGNOS, MSAS, RTCM):2.5 M
Time to First Fix	Hot start < 1 sec. Warm start < 30 sec. Cold start < 31 sec.
Sensitivity	- 165 dBm (Tracking)

### ◇ Interfaces

GPS antenna	External Activity Antenna Gain:3 dB
GSM antenna	External, SMA connector Gain: 3-5 dbi
Iridium SBD antenna	Frequency (MHz): 1616-1626 Gain:3dBi
Indicator LEDs	GPS,GSM, Power status
Digital Input	2
Anlage Input	1
Output	1
RS485 Bus	Camera, RFID reader and Compatible Custom Accessories
PC Setup Interface	Update firmware and setup device

### ◇ General Specifications

Device Mechanics	120mm(L)*103mm(W)*28mm(H)
Weight(g)	215
DC Tolerance	8V to 32V
Battery	Li-Po 3.7V 500mAh
Current	GPRS online 40mA GPRS transmit 80mA GPRS peak 120mA
Operating temperature	-20 to 60 °C

### ◇ Communication Protocol

Transmit protocol	TCP,SMS
Alarm Report	ACC trigger Power cut Tow report Speeding Idle report
Special Report	PTO Fuel level Flow meter
Picture upload	FTP protocol
Firmware Update	Over the Air