



# SIMPLEX TRANSMITTER UNIT



## Technical Specifications:

### Data Interfaces:

- Application specific sensor interface
- RS232 or TTL levels at serial interface between the sensor and the simplex transmitting unit
- Programmable bistate transmit power level

### Environmental Specifications & Certifications:

- Operational Temperature: -30°C to 60°C
- Storage Temperature: -30°C to 60°C
- FCC, ETSI

### Communications:

- Transmit Frequency: 1610 MHz-1620 MHz
- Transmit EIRP: 159 mW min
- Data Rate: 100 bps Uplink

### Power:

- Requires a regulated power source of 5 VDC, ± 5%
- Minimum Battery Life: 3.5 years (for twice daily transmissions)
  - Transmit: 0.5 A (typical)
  - Sleep: 6 µA

### Operation Modes:

- Transmit: communication with satellite
- Sleep: waits for external input from the sensor

### Physical Specifications:

- Size: approximately 3" x 3" x 0.75"

The Globalstar Simplex Transmitter Unit (STU) is designed to deliver reliable digital data communications for remote sensing and monitoring applications. The STU is a low cost, simplex device that allows packet-switched data to be sent automatically (on a time or event driven basis) from remote locations where alternative communications systems are unavailable or prohibitively expensive. Housed on a stationary or mobile platform, the unit can monitor a wide range of assets including LPG tanks, water tanks, pipelines, electricity meters and sea and land containers.

The STU is provided on an OEM basis and can be easily incorporated into a Remote Telemetry Unit.

### Remote Telemetry Unit (RTU) consists of:

- Simplex transmitting unit (STU)
- Application specific sensor
- Sensor interface card
- Batteries
- Real time clock
- Optional GPS functionality (additional board required for mobile applications)
- RF/EMI protection

### Typical Remote Telemetry Unit (RTU) Features:

- Globalstar satellite simplex data service
- Small physical footprint
- Very low-power transmit, sleep & standby mode operation
- Integrated L-band antenna (needs to be mounted with sky visibility)
- Customer application specific sensor interface
- Programmable time of transmission (eg, hourly, daily, weekly, etc.) or event driven transmission
- Customer interface to the remote telemetry data through Internet
- Quick and easy installation in the field

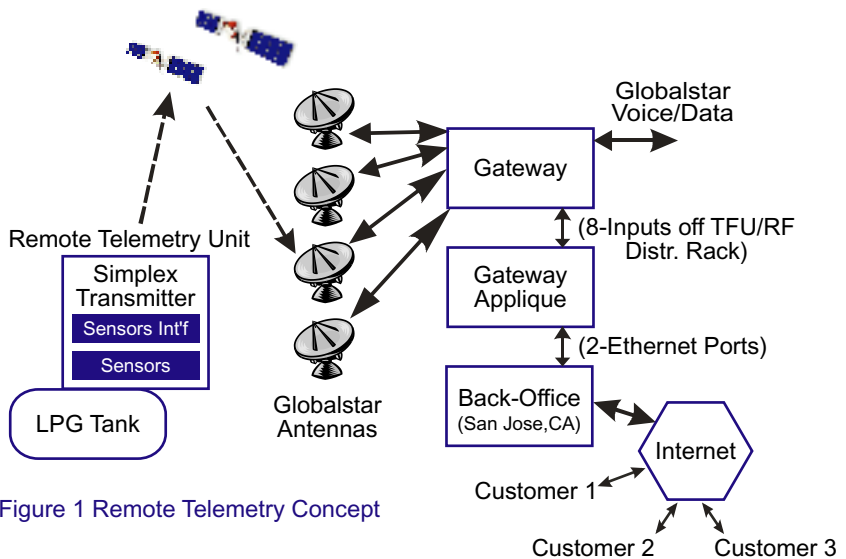


Figure 1 Remote Telemetry Concept

Note: Specification are subject to change without notice. Customer should contact Globalstar to obtain final specifications at the time of order

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