

ST 2100

Low-cost satellite communications to monitor vehicles & industrial equipment

Designed for easy installation on mobile assets, ST 2100 delivers low-cost satellite communications in the most remote areas of the world. Intuitive, versatile, and environmentally sealed, ST 2100 can support the monitoring of vehicles, railcars, and heavy equipment as well as pipelines, generators, electrical grids, pumps, and tanks with side or bottom cable access.

With Traksat's unique platform, ST 2100 can host applications that link remote sensors, control PLCs, GPS, and third-party hardware to GIS servers and databases. With PIP (Packet Inside Packet), Traksat provides a multi-network transparent wireless pipe that can effectively link remote monitoring terminals with devices in oil and gas wells, pumping stations, mining sites, compressor stations, reservoir tanks, and more.

The IP-SCADA link can use both terrestrial and satellite networks for cost-efficient remote monitoring of critical assets; and when integrated with existing legacy systems, result in further savings. ST 2100 is perfect for fleet management and its cathodic protection ensures safety and compliance in isolated locations

Fleet Management

Always-on satellite connectivity for tracking drivers and mobile assets in the most remote areas of the world.

Cathodic Protection

Ensure safety and compliance by monitoring pipeline health in isolated locations.

SCADA

Remote monitoring and control of SCADA systems including electrical grid infrastructure and industrial assets like valves, pumps and tanks.



Two-way affordable communications

Simple command system

Quick and easy deployment

Rugged and compact

Easy integration with legacy systems



Satellite Communication

- Satellite Service: Two-way, Global, IsatData Pro
- From-Mobile Message: 6,400 bytes
- To-Mobile Message: 10,000 bytes
- Typical Latency: <15 sec, 100 bytes
- Elevation Angle: +20° to +90°
- Frequency:
 - » Rx: 1525.0 to 1559.0 MHz;
 - » Tx: 1626.5 to 1660.5 MHz
- EIRP: <7.0 dBW

GPS/GLONASS/Beidou

- Acquisition Time: Hot: 1s; Cold: 29s/30s/36s
- Accuracy: 2.0m CEP

Certification

- Regulatory: CE, FCC, IC

- Other: Inmarsat Type Approval, IP67, Anatel

Electrical

- Input Voltage: 9 to 32V; Load dump protection: +150V; SAE J1455 (Sec. 4.13);
- Supercapacitor: 5F, 5V
- Power consumption (Typical @12V DC, 23°C)
 - » IDP receive: 75 mA;
 - » IDP transmit: 570 mA;
 - » GPS/Glonass/Beidou: 35 mA;
 - » Sleep: 280 µA

Dimensions

- 12.5 cm x 8.5 cm x 3.6 cm

External interfaces

- Inputs/Outputs:

- » Event Notification: Indicates that one or more ST 2100 events have occurred
- » 1PPS: One pulse per second output timed by GPS
- » Reset in: Allows external device to reset the ST 2100
- » Reset out: Allows the ST 2100 to reset an external device
- Serial: 1 x RS-232 (AT Command set)

Environmental

- Operating Temperature: -40°C to +85°C
- Dust & Water Ingress: IP67
- Vibration: SAE J1455 (Sec 4.9.4.2 fig 6-8); MIL-STD-810G (Sec 514.6, 514.6C-1)
- Shock: MIL-STD-810G (Sec 516.6)

