# ST 2100

## Low-cost, easy-to-integrate satellite communications for monitoring vehicles and industrial equipment.

The ORBCOMM® ST 2100 provides reliable, global satellite connectivity to the most remote areas of the world. The versatile, environmentally sealed ST 2100 can be installed on mobile assets like light-and heavy-duty commercial vehicles, railcars, heavy equipment and more. It is also well-suited to monitoring fixed assets like pipelines, pumps, generators and tanks used in industrial and utilities environments.

The ST 2100 delivers a simplified architecture for off-the-shelf, low-cost satellite messaging. Unlike the ST 6100, it is not programmable and does not support ORBCOMM applications or Lua scripting. An intuitive AT Command set is available for quick integration with external PLCs and general-purpose controllers. The ST 2100 can be installed with side or bottom cable access.

### 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 communication**
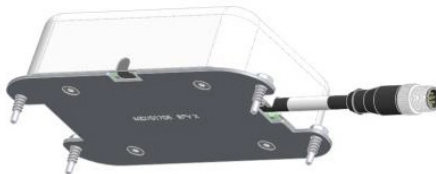
**Simple command set**

**Quick deployment**

**Compact**

**Rugged and environmentally sealed**

*Bottom Cable Access.*

*Side Cable Access.*

*Screwless mounting available with VHB tape kit.*

## 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)

## Ordering Codes
- **ST2100-P2X** ST 2100 with super capacitor
- **ST2100-PXX** ST 2100 without super capacitor
- **ST100990-001** Bottom Cable Access Mount Kit
- **ST100991-001** Side Cable Access Mount Kit
- **ST101004-001** ST 2100 Development Kit
- **ST101349-001** ST 2100 Blunt Cut Cable, 5m
- **840-00193** Extension Cable

**CALL: 1.800.ORBCOMM     EMAIL: SALES@ORBCOMM.COM     VISIT: WWW.ORBCOMM.COM**

ORBCOMM is a global leader and innovator in the industrial Internet of Things, providing solutions that connect businesses to their assets to deliver increased visibility and operational efficiency. The company offers a broad set of asset monitoring and control solutions, including seamless satellite and cellular connectivity, unique hardware and powerful applications, all backed by end-to-end customer support, from installation to deployment to customer care. ORBCOMM has a diverse customer base including premier OEMs, solutions customers and channel partners spanning transportation, supply chain, warehousing and inventory, heavy equipment, maritime, natural resources, and government. For more information, visit www.orbcomm.com.

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