ORBCOMM°

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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.

Bottom Cable Access.

Side Cable Access



Screwless mounting available with VHB tape kit.

Two-way communication Simple command set Quick deployment Compact

Rugged and environmentally sealed

AVAILABLE FROM:

WHERE DATA DRIVES DECISIONS



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



Although we strive to ensure accuracy in all of our published specifications, actual field performance can vary depending on a variety of environmental, installation and usage factors, as well as third-party factors such as cellular providers. The specifications listed are approximations, and do not constitute binding statements or modify the terms and conditions of purchase or lease including, but not limited to, product operational limitations and warranties. All specifications are subject to change without notice. Please check www.orbcomm.com to ensure you have the latest version of these specifications.

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