ORBCOMM®

WHERE IoT POWERS ASSET INTELLIGENCE™

ST 6000

Track, monitor and control in isolated regions.

The ST 6000 satellite terminal delivers complete visibility and control of assets in remote areas. Designed with OEMs in mind, it features a small footprint with integrated antennas and extensive tools to facilitate integration into larger systems. It can track mobile assets such as light-and heavy-duty commercial vehicles, railcars, fishing vessels, marine buoys, heavy equipment and more. And with two-way connectivity, it's ideal for remotely monitoring and controlling SCADA applications such as those in the energy sector, including pipelines, flow meters, pumps, generators and tanks.

Easy integration
The fully programmable ST 6000 includes comprehensive resources to facilitate integration into a wide range of solutions, including development, testing and production environments, documentation, code samples, device-level configurable applications and free technical support.

Global satellite connectivity
The ST 6000 communicates over the OGx or IDP satellite service for uninterrupted visibility of operations and field data virtually anywhere.

Comprehensive feature set
The ST 6000 offers enhanced functionality at great value. The integrated antennas feature exceptional low elevation angle performance, allowing one device to support both terrestrial and maritime applications. It also features a built-in accelerometer, expanded memory capacity and enhanced support for GPS, Glonass and Beidou.

- **Fully programmable**

- **Comprehensive integration resources for quick deployment**

- **Two-way satellite communications**

- **Versatile satellite terminal for OEMs**

Specifications

Satellite communication
- Satellite service: two-way, Global, OGx or IsatData Pro
- Maximum message size:
  - *OGx: From-mobile 1 MB, to-mobile 1 MB*
  - *IsatData Pro: From-mobile 6.4 kB, to-mobile 10 kB*
- Typical latency: <15 sec, 100 bytes
- Elevation angle: 0° to +90°
- Frequencies:
  - *OGx: Rx 1525.0 to 1559.0 MHz; Tx 1626.5 to 1660.5 MHz*
  - *IsatData Pro: Rx 1525.0 to 1559.0 MHz; Tx 1626.5 to 1660.5 MHz*
- EIRP: <7.0 dBW

Certification
- Regulatory
  - *ST 6000: CE (R&TTE, RoHS 2, RED), FCC, IC, Anatel*
  - *ST 6001: CE., FCC, IC, Anatel*
  - *ST 6002: CE. Pending: FCC, IC, Anatel*
- Others: Inmarsat Type Approval

Dimensions
- 6.9 x 10.1 x 2.1 cm

Accelerometer
- 3-axis accelerometer

External interfaces
- Inputs/outputs: 4 analog or digital in/out
- Serial: console, auxiliary, and RS485 Ports - all 3.3V TTL

Electrical
- Input voltage: VAUX: 3.5VDC (Min) to 6VDC (Max), VIN: 5.8VDC ±3%
- Power consumption @ 5.8V and 25C (Typical Average):
  - *IDP Receive: 125 mA;*
  - *GPS/Glonass/Beidou Receive: 41 mA;*
  - *Transmit: 1.1 A;*
  - *Sleep: <150 µA*

Environmental
- Operating temperature: -40°C to +85°C
- Vibration: SAE J1455 (Sec 4.9.4.2 fig 6-8);
- MIL-STD-810G (Sec 14.6)
- Shock: MIL-STD-810G (Sec 516.6)
- Altitude: SAEJ1455 (Sec 4.9.3)
- UV Exposure: 1334 hr exposure per ASTM G154

Programming
- Lua scripting engine with core services. SDK with GUI development tools available. Lua software application upgradable over the air (SOTA).

Core services: Geofence, data logger, position reporting, accelerometer events, serial communications.
- AES 256 encryption-capable
- Optional configurable device-level applications, including:
  - ***Analytics:*** *Notifications and reports for driver behaviour and vehicle/asset performance.*
  - ***AVL:*** *Facilitates integration of ST 6000 terminals into fleet management solutions.*
  - ***Garmin Dispatch:*** *Tracking, navigation, driver communication and dispatch using Garmin devices.*
  - ***Garmin FMI:*** *Fleet management support for two-way text messaging, stops, driver ID, hours of service, file-transfer, custom forms, speeding alerts.*

Memory
- Lua Code RAM: 4MB
- Lua Code NVM: 8MB

Order codes
- **ST6000-2XX** ST 6000 terminal
- **ST6001-2XX** ST 6001 terminal
- **ST6002-2XX** ST 6002 terminal

Email: **sales@ORBCOMM.com** | Call: **1-800-ORBCOMM**

Visit our website **www.ORBCOMM.com**

ORBCOMM is a global leader in industrial IoT, delivering visibility, intelligence and efficiency to the world's most critical operations. With 30 years of innovation and more than 2.4 million connected devices, we transform data into actionable insights, driving greater efficiency, safety, resilience and sustainability. Serving customers that include the world's largest shipping lines, over-the-road trucking fleets, cold-chain transportation fleets and a global network of IoT solution provider partners, ORBCOMM is where IoT powers asset intelligence.

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