ST 6100

The next generation satellite terminal—more powerful, more versatile, more coverage.

Reliably track, monitor and control assets in some of the word's most isolated regions.

ORBCOMM's ST 6100 satellite terminal delivers complete visibility and control of industrial assets operating in remote areas. The versatile, environmentally sealed ST 6100 can be installed on mobile assets such as light-and heavy-duty commercial vehicles, railcars, fishing vessels, heavy equipment and more. And with two-way satellite connectivity, the ST 6100 is ideal for remotely monitoring and controlling fixed and portable assets used in SCADA applications such as those in the energy sector, where access may be restricted, including pipelines, flow meters, pumps, generators and tanks.

Easy integration

ORBCOMM© makes it easy to bring IoT solutions to market. The fully programmable ST 6100 includes comprehensive resources to facilitate integration into a wide range of custom solutions. The resources include development, testing and production environments, documentation, code samples, device-level configurable applications and free technical support.

Global satellite connectivity

The ST 6100 delivers reliable global communications over the IsatData Pro satellite service for uninterrupted visibility of operations and access to business-critical field data in even some of the world's most remote locations. And because of its two-way connectivity, users can remotely control assets without sending workers to the field.

Comprehensive feature set

ORBCOMM's next generation ST 6100 leverages the latest technology advancements to offer enhanced functionality at great value. The internal antenna features exceptional low elevation angle performance, allowing one device to support both terrestrial and maritime applications. The terminal also features a built-in accelerometer, expanded memory capacity, and enhanced support for global navigation systems—GPS, Glonass and Beidou.

Fully programmable

Comprehensive integration resources for quick deployment

Two-way satellite communications

Ruggedized and versatile

AVAILABLE FROM:

FREEWAVE

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: 0° to +90°
- Frequency: Rx: 1518.0 to 1559.0 MHz; Tx: 1626.5 to 1660.5 MHz; 1668.0 to 1675.0 MHz
- EIRP: <7.0 dBW

GPS/Glonass/Beidou/Galileo

- Acquisition time: Hot: 1 second; Cold: 29/30/36/29 seconds
- Accuracy: 2.0m CEP
- Sensitivity:
  - » *Acquisition: -148 dBm*
  - » *Tracking: -163 dBm*

Certification

- ST 6100 Regulatory: CE, FCC, IC, Anatel, RCM Mark, IEC 60945, C1D2, SRRC, IFT, ICASA, FFA
- ST 6101 Regulatory: CE; Pending: FCC, IC, Anatel, RCM Mark, IEC 60945, C1D2, SRRC, IFT, ICASA, FFA
- Others: Inmarsat Type Approval, IP67

Electrical

- Input voltage: 9 to 32V; Load dump protection: +150V; SAE J1455 (Sec. 4.13)
- Power consumption (typical average @12V DC, 22°C):
  - » *IDP Receive: 65 mA;*
  - » *GPS/Glonass/Beidou Receive: 22 mA;*
  - » *Transmit: 0.65 A;*
  - » *Sleep: 100 µA*

Dimensions

- 12.6 cm x 12.6 cm x 4.9 cm

External interfaces

- Inputs/outputs: 4 analog or digital in/out
- Serial: RS-232; RS-485

Environmental

- Operating temperature: -40°C to +85°C
- Dust and water ingress: IP67
- Vibration: SAE J1455 (Sec 4.9.4.2 fig 6-8); MIL-STD-810G (Sec 514.6)
- Shock: MIL-STD-810G (Sec 516.6)

Programming

- Lua scripting engine with core services. SDK with GUI development tools available. Lua software application and firmware upgradable over the air (SOTA, FOTA).
- Core services: Geofence, data logger, position reporting, accelerometer events, serial communications.
- Optional configurable device-level applications, including:
  - » *Analytics app: Notifications and reports for driver behaviour and vehicle/asset performance.*
  - » *AVL app: Facilitates integration of ST 6100 terminals into fleet management solutions.*
  - » *Garmin Dispatch app: Tracking, navigation, driver communication and dispatch using Garmin devices.*
  - » *Garmin FMI app: Fleet management support for two-way text messaging, stops, driver ID, hours of service, file-transfer, custom forms, and speeding alerts*
  - » *Sensors app extracts data from connected sensors or devices and generates reports, alarms and histograms.*
  - » *Modbus app interprets data from Modbus devices and allows data processing and alarms.*
  - » *Vessel Monitoring System (VMS) app provides location tracking, status monitoring and behavior monitoring.*

Accelerometer

- 3-axis accelerometer

Memory

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

Options

- Side or bottom connector variants

AVAILABLE FROM:

FREEWAVE

303.381.9200
www.freewave.com

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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