

## IDP 600 Series

Rugged satellite terminals for reliably tracking vehicles, vessels and industrial fixed equipment

Track fixed and mobile assets over land and sea, no matter how remote



IDP 600 series terminals enable remote management of fixed and mobile industrial assets anywhere in the world. Whether managing trucks, fishing vessels, oil and gas and mining equipment, or remote installations and personnel, the IDP 600 series increases productivity, lowers operating costs and enables compliance with government regulations.

Fleet managers and systems integrators choose the IDP 600 terminals as a cost-effective global tracking solution for managing equipment, vehicles, vessels and protecting cargo over land and sea.

Fully programmable and environmentally sealed, IDP 600 series terminals use the global, two-way Inmarsat IsatData Pro satellite service to provide visibility and communications with people and equipment even in the world's harshest environments.

IDP 600 series terminals include device-level applications, tools and unparalleled customer support designed to quicken time to market and reduce implementation costs. With ORBCOMM's competitive hardware and airtime pricing packages, businesses can accurately budget communication costs without roaming charges, and equip fleet and asset management groups regardless of location.

### Sample applications

- Vehicle, rail a trailer/container tracking: Locate and protect cargo over land, rail and sea with cost-effective, global coverage.
- Vessels and buoys: Lower operational costs, ensure regulatory compliance and enable vital ship-to-shore communications
- Oil and gas: Remotely monitor and control pipelines, flow meters and enable workforce through SCADA monitoring systems.
- Water and utilities: Cost effectively monitor remote water infrastructure, tanks and personnel.
- Mining assets: Reliably connect fixed and mobile mining assets to central offices.
- Public sector: Track and monitor mission-critical data, personnel and equipment in remote regions.

Send more data, more quickly

Two-way communication

Feature rich

Quick deployment

Fully programmable



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### 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° (IDP-680); -15° to +90° (IDP-690)
- Frequency: Rx: 1525.0 to 1559.0 MHz; Tx: 1626.5 to 1660.5 MHz
- EIRP: <7.0 dBW (IDP-680); 5.0 dBW (IDP-690)

### GPS/Glonass

- Acquisition time: Hot: 1 second; Cold: 29/30 seconds
- Accuracy: 2.5m/4.0m CEP-Horizontal
- Sensitivity:
  - » Acquisition: -148 dBm (IDP-680); -140dBm (IDP-690)
  - » Tracking: -162 dBm (IDP-680); -158dBm (IDP-690)

### Certification

- Regulatory: CE (R&TTE, RoHS 2), FCC, IC, Anatel compliant, MSS Russia, SRRC (IDP-690 only), RCM Mark, IEC 60945, C1D2
- Others: Inmarsat Type Approval, IP67

### Electrical

- Input voltage: 9 to 32V; Load dump protection: +150V; SAE J1455 (Sec. 4.13)
- Power Consumption (Typical @12V DC, 22°C):
  - » Average receive: 8.3 mA;
  - » Receive with GPS/GLONASS: 40 mA;
  - » Transmit: 0.75 A;
  - » Sleep: 100 µA;
  - » Power off: 12 µA

### Order codes and related products

- SM201205-SXG/BXG** IDP-680 (side/bottom)
- SM201206-SXG/BXG** IDP-690 (side/bottom)
- SM201291-BXG** IDP-680 (bottom mount, C1D2)
- SM201292-BXG** IDP-690 (bottom mount, C1D2)
- ST100325-001** 1-Wire Adapter
- ST100231-001** Development kit (Airtime, training and support included. Terminal sold separately).

### Dimensions

- IDP 680: 12.6 cm x 12.6 cm x 4.9 cm
- IDP 690: 12.6 cm x 12.6 cm x 10.1 cm

### External interfaces

- Inputs/outputs: 4 x analog or digital in/out
- Serial: 1 x RS-232; 1 x RS-485
- Accessories: 1-Wire adapter via RS-232 port

### 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 upgradable over the air (SOTA).
- Core services: Geofence, data logger, position reporting
- User data memory: 2MB for user services, data files, including data logger
- Optional configurable device-level applications:
  - » *Analytics Agent - Notifications and reports for driver behaviour and vehicle/asset performance.*
  - » *AVL Agent - Facilitates integration of IDP terminals into fleet management solutions.*
  - » *Garmin Dispatch Agent - Tracking, navigation, driver communication and dispatch using Garmin devices.*

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ORBCOMM Inc. (Nasdaq: ORBC) is a leading global provider of Machine-to-Machine (M2M) communication solutions and the only commercial satellite network dedicated to M2M. ORBCOMM's unique combination of global satellite, cellular and dual-mode network connectivity, hardware, web reporting applications and software is the M2M industry's most complete service offering. Our solutions are designed to remotely track, monitor, and control fixed and mobile assets in core vertical markets including transportation & distribution, heavy equipment, industrial fixed assets, oil & gas, maritime and government. © ORBCOMM 2017. All Rights Reserved.

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