# **IDP 800 SERIES**

# **Satellite Communication** Terminals.

Low-profile, battery-powered satellite terminal for tracking low-power assets.



Low Elevation

IDP-800 is the first low-profile satellite communications terminal with an integrated battery compartment that uses the two-way IsatData Pro satellite data service for remotely tracking and managing fixed and mobile assets anytime, anywhere.

This slim profile terminal is ideal for tracking trailers, containers, vehicles and vessels, and can either be powered by non-rechargeable or rechargeable batteries, or by vehicle power. The IDP-800 can also be purchased with optional remote antenna.

Fully customizable and environmentally sealed, IsatData Pro terminals are specifically designed to provide visibility and communications with people and equipment even in the world's harshest environments. IsatData Pro offers enhanced reliability and the ability to deliver up to 37 times more data in seconds - more than other satellite-based machine-to-machine (M2M) services in the market.

ORBCOMM-based solutions include applications, tools and unparalleled customer support designed to guicken 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

- Trailers & Containers: Track the location and temperature of containers and trailers, enhance cargo security and prevent theft.
- · Railcars: Locate railcars, improve operational efficiency, workflow, asset distribution, and realize cost savings.
- · Vehicles: Keep track of operational status, fuel levels, driver behavior and location of valuable cargo.
- Vessels & Barges: Enable reliable ship-to-shore communications and use as a vessel safety device with panic button.
- · Heavy Equipment: Monitor equipment usage and status to detect misuse and enable preventative maintenance.

Uses batteries or vehicle power

Two-way communication

Save on airtime

Slim profile

**Protect cargo and drivers** 



## 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</li>
- Elevation Angle: +20° to +90° (Integrated or remote antenna); -15° to +90° (Low elevation antenna)
- Frequency: Rx: 1525.0 to 1559.0 MHz;
   Tx: 1626.5 to 1660.5 MHz
- EIRP: 7.0 dBW

#### **GPS/Glonass**

- Acquisition Time: Hot: 1s; Cold: 29s/30s
- · Accuracy: 2.5m/4.0m CEP-Horizontal
- Sensitivity (Tracking): -162 dBm/-158 dBm

#### Certification

- Regulatory: CE (R&TTE, RoHS 2), FCC, IC, Inmarsat Type
- Approval
- · Others: IP67

## Electrical

- Input Voltage: 9 to 32V; Load dump protection: +150V; SAE J1455 (Sec. 4.13); Auto Switchover
- 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
- Battery Cells: 12 AA Cells
- Battery Chemistry: Rechargeable: NiMH; Nonrechargeable: LiFeS2

## Charging

Current: 1.33 A (at 12V)

# Order codes and related products

SM201225-CXX Integrated Antenna SM201225-DXX Integrated Antenna SM201226-CXX Integrated Antenna SM201226-DXX Integrated Antenna SM201227-CXX Remote Antenna SM201227-DXX Remote Antenna Remote Antenna SM201228-CXX SM201228-DXX Remote Antenna ST100325-001 1-Wire Adapter

**Dimensions** 

- IDP 800: 43.2 cm x 14.7 cm x 2.5 cm
- IDP Remote Antenna: 12.6 cm x 9.3 cm x 7.4 cm
- IDP Remote Antenna Low Elevation: 12.6 cm x 9.3 cm x 2.5 cm

#### Mass

• With batteries: 1.3 Kg (with integrated antenna)

## **External interfaces**

- Inputs/Outputs: 3 x Analog or Digital In/Out
- Serial: 1 x RS-232
- · Accessories: 1-Wire adapter via RS-232 port

## **Environmental**

- Operating Temperature: -40°C to +85°C (batteries not included); -40°C to +60°C (Non-rechargeable); -10°C to +50°C (Rechargeable)
- Dust & 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).
- User Data Memory: 3.5 MB
- · Geofencing: 128 Polygons
- Data Logger: 50,000 Position Reports
- Optional, Configurable Device-Level Applications:
  - » Analytics Agent Notifications and reports for driver behaviour and vehicle/asset performance.
  - » AVL Agent Faciliates integration of IDP terminals into fleet management solutions.
  - » Garmin Dispatch Agent Tracking, navigation, driver communication and dispatch using Garmin devices

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ST100231-001 Development Kit (Airtime, training and support included. Terminal purchased separately).

# CALL: 1.800.ORBCOMM EMAIL: SALES@ORBCOMM.COM

VISIT: WWW.ORBCOMM.COM

ORBCOMM (Nasdaq: ORBC) 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.