

## IDP 800 SERIES

### Satellite Communication Terminals

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

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.

SkyWave-based solutions include applications, tools and unparalleled customer support designed to quicken time to market and reduce implementation costs. With SkyWave'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 behaviour 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.



### Five Reasons To Choose IDP-800

#### 1. NO POWER? NO PROBLEM!

The IDP-800 terminal uses regular or rechargeable batteries or vehicle power. Three year battery life with once a day reporting on main or back-up battery power.

#### 2. TWO-WAY COMMUNICATION

Using the global Inmarsat constellation, with lifetime beyond 2023, IsatData Pro provides messaging capabilities to/from terminal.

#### 3. SAVE ON AIRTIME

Onboard geofencing and accelerometer that detects motion to transmit only when moving, resulting in significant cost savings.

#### 4. SLIM PROFILE DESIGN

Easy installation and slim profile design make it ideal and unobtrusive for tracking and monitoring trailers, trucks, railcars, containers, heavy equipment, vessels and barges.

#### 5. PROTECT CARGO AND DRIVERS

Monitor container doors and hatches to detect theft, prevent hijacking through the use of panic button, power cut detection and GPS jamming. Track stolen vehicles using GPS location.

# IDP 800 SERIES

## Technical Specifications

### 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° (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; Non-rechargeable: LiFeS2

### Start Tracking Today!

The IDP-800 Development Kit has everything you need to start experiencing the benefits of SkyWave-enabled satellite tracking and monitoring solutions.



[www.skywave.com/TryIt](http://www.skywave.com/TryIt)

Positioning technology provided by 

### CHARGING

- **Current:** 1.33 A (at 12V)

### 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** - Facilitates integration of IDP terminals into fleet management solutions.  
**Garmin Dispatch Agent** - Tracking, navigation, driver communication and dispatch using Garmin devices.

### ORDERING CODES

Integrated Antenna	Remote Antenna	Batteries/Type
SM201225-CXX	SM201227-CXX	Not Included/Non-Rechargeable
SM201225-DXX	SM201227-DXX	Included/Non-Rechargeable
SM201226-CXX	SM201228-CXX	Not Included/Rechargeable
SM201226-DXX	SM201228-DXX	Included/Rechargeable
ST100325-001	1-Wire Adapter	
ST100231-001	Development Kit (Airtime, training and support included. Terminal purchased separately).	

**SkyWave**  
an **ORBCOMM**™ Company

LEARN MORE AT [WWW.SKYWAVE.COM](http://WWW.SKYWAVE.COM)

SKYWAVE MOBILE COMMUNICATIONS INC.  
750 Palladium Drive, Suite 368  
Ottawa, Ontario K2V 1C7 CANADA  
T + 1. 613. 836.4844 | F + 1. 613. 836.1088 | E [info@skywave.com](mailto:info@skywave.com)

© 2014 SkyWave Mobile Communications Inc. All rights reserved. All trademarks or registered trademarks are the property of their respective owners. SkyWave reserves the right to make changes to products and or specifications without notice. IsatData Pro is a service delivered by SkyWave Mobile Communications through the Inmarsat network and is a trademark of Inmarsat Global Limited.