

## IDP 800 SERIES

### Satellite Communication Terminals

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



IDP-800 Terminal



IDP Remote Antenna



IDP Remote Antenna  
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.

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.

**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
- 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
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**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

**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

**Order codes and related products**

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

**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*

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