

## IDP 700 SERIES

### Satellite-Cellular Communication Terminals

## Satellite-cellular terminal for tracking vehicles, vessels and more

IDP 700 series is the first dual satellite-cellular communications terminal that supports the two-way IsatData Pro satellite data service to manage mobile assets traveling in and out of remote areas.

Fleet managers can benefit from cost savings and guaranteed communication when tracking and communicating with vehicles, vessels and more by using cellular coverage in urban centers and satellite in distant regions.

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

- **Transport Vehicles:** Gain complete visibility of vehicles moving in/out of cellular coverage, for complete tracking, text messaging, e-forms and vehicle/cargo monitoring.
- **Vessels:** Leverage lower cost cellular for near-shore communications, and satellite for guaranteed/back-up offshore communications.
- **Oil & Gas Vehicles & Fixed Equipment:** Track utility vehicles travelling in/out of remote areas to ensure timely delivery of goods and services.
- **Mining:** Track vehicle fleets traveling to/from remote mine sites, protect valuable heavy equipment and keep drivers safe with advanced behavior monitoring features.
- **SCADA Monitoring & Control:** Use the IDP-780 terminal as a back-up for oil & gas fixed equipment.



### Five Reasons To Choose IDP 700

#### 1. TWO-WAY COMMUNICATION

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

#### 2. BACK-UP BATTERY

The IDP 700 series features a backup battery option to send GPS information when no vehicle power is available.

#### 3. SAVE ON AIRTIME

Efficiently switch between cellular coverage in urban areas and satellite communication in remote areas for significant cost savings.

#### 4. FEATURE RICH

Programming capabilities, panic button, text messaging, accelerometer and sensor ports for fuel, temperature and more allow for a robust tracking and monitoring solution.

#### 5. VALUABLE ADD-ONS

Device-level applications for extracting valuable J1939/CAN bus information and using off-the-shelf Garmin personal navigation devices for dispatch, text messaging and much more.

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## 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° (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

### CELLULAR COMMUNICATION (GPRS)

- **Frequency:** 850/900/1800/1900 MHz
- **SIM:** 3.3V/1.8V SIM
- **Security:** GPRS jamming detection

### GPS

- **Acquisition Time:** Hot: 1s; Cold: 27s
- **Accuracy:** 2.5m CEP-Horizontal
- **Sensitivity:** Acquisition: -147 dBm; Tracking: -159 dBm
- **Security:** GPS signal jamming detection

### CERTIFICATION

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

### EXTERNAL INTERFACES

- **Inputs/Outputs:** 4 x Config. Analog/Digital Inputs; 7 x Digital Inputs (active low); 1 X Ignition Detect Input; 5 x Digital Outputs (sink-ground)
- **Serial:** 2 x RS-232; 1 x RS-485; 1-CAN bus
- **Accelerometer:** 3 Axis

### Start Tracking Today!

The IDP 700 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 

### ELECTRICAL

- **Input Voltage:** 9 to 48V; Load dump protection: +150V; SAE J1455 (Sec. 4.13);
- **Battery backup:** >2.5 hrs. operating time @ 1 GPS report/min

### CHARGING

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

### MASS

- **With batteries:** 1.3 Kg (with integrated antenna)

### ENVIRONMENTAL

- **Operating Temperature:** Transceiver: -25°C to +85°C; Satellite antenna: -40°C to +85°C;
- **Dust & Water Ingress:** Transceiver: IP54 (optional cable shroud); Satellite Antenna: IP67

### PROGRAMMING

Lua scripting engine with core services. SDK with GUI development tools available. Lua software application upgradable over the air (SOTA).

- **Geofencing:** 128 Polygons
- **Data Logger:** 50,000 Position Reports; Auto-upload in cellular coverage
- **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.
  - J1939 Agent** - Vehicle CAN bus connectivity for monitoring driver behavior and vehicle/asset performance.

### ORDERING CODES

SM201094-CXN	IDP-780/790 flex (GPRS, no battery)
SM201094-CXL	IDP-780/790 flex (GPRS, battery)
SM201216-HXN	IDP-780/790 flex (GPRS/HSPA, no battery)
SM201216-HXL	IDP-780/790 (GPRS/HSPA, battery)
ST901065-AFA	IDP Remote antenna
ST901066-AFA	IDP Low elevation remote antenna
ST100209-001	Development Kit (Airtime, training and support included. Terminal purchased separately).

  


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

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