

IDP-782

Cellular and satellite-cellular terminals for fleet management applications

The fully programmable, feature-rich IDP-782 delivers connectivity to assets over cellular and satellite networks.



Fleet managers get the best of both worlds: lower cost data transmission in areas with cellular coverage, and reliable, always-on satellite communications over the two-way IsatData Pro satellite network in remote locations—all from a single-source provider.

As part of a comprehensive fleet management solution, the IDP-782 can be used in security applications to track vehicle location, driver behavior, for text messaging, e-forms and more. This device can also be used in SCADA applications to monitor and control fixed oil and gas equipment.

Flexible Programming

IDP-782 supports the development of custom applications for more complex solutions as well as configurable software applications for simpler deployments and quicker time to market.

Airtime savings

Use cellular or automatically switch between cellular and satellite connectivity for significant cost savings.

Continuous operation

The IDP-782 features a backup battery option that enables reporting for up to 12 hours when no vehicle power is available.

Feature-rich

Standard features include built-in 1-Wire, CANbus, accelerometer, dual SIM and sensor ports. The device also supports HSPA/GPRS.

Vehicle and driver safety

Improve driver, vehicle and cargo security with reliable, always-on backup satellite communications.

Get started

From first message to complete solution: get up and running—quickly!

Cellular and satellite-cellular options

Flexible programming environment

Low cost of ownership

Feature-rich and versatile





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 frequencies: 850/900/1800/1900 MHz
- HSPA frequencies: 800/850/900/1900/2100 MHz
- SIM: 3.3V/1.8V SIM
- Security: jamming detection

GPS

- Acquisition time: hot: 1 second; cold: 27 seconds
- Accuracy: 2.5m CEP-horizontal
- Sensitivity: acquisition: -148 dBm; tracking: -159 dBm
- Security: GPS signal jamming detection

CERTIFICATION

- Regulatory: CE (R&TTE, RoHS 2), FCC, IC, PTCRB (HSPA only)
- Other: Inmarsat type approval

EXTERNAL INTERFACES

- Inputs/outputs: 4 x config. Analog/digital inputs/outputs
2 x dedicated outputs (sink-ground)
- Serial: 2 x RS-232; 1 x RS-485; 1-CAN bus; 1-Wire
- Accelerometer: 3 axis

ELECTRICAL

- Input voltage: 9 to 32V; load dump protection: +150V; SAE J1455 (Sec. 4.13);

- Battery backup: >12 hours operation with 1-minute cellular reporting or 10-minute satellite reporting

ENVIRONMENTAL

- Operating temperature: transceiver and antenna: -40°C to +85°C; back-up battery: -10°C to +60°C;
- Dust and water ingress: transceiver: IP40 (IP65 with optional shroud); satellite antenna: IP67; GPS antenna: IP67
- Vibration: SAE J1455 (Sec 4.9.4.2 fig 6-8); MIL-STD-810G
- 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).
- Geofencing: 128 Polygons
- Data Logger: 50,000 position reports; auto-upload in cellular coverage
- Optional, configurable device-level applications:
- 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.
- ARC Agent - asset alarms, periodic reports and remote control.
- Analytics Agent - notifications and reports for driver behaviour and vehicle/asset performance.

