HARDWARE · DATASHEET

ORBCOMM

IDP-782

Cellular and satellitecellular 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! The IDP-782 Starter Kit includes the hardware, software development tools, documentation, accessories and support that you need to evaluate your IDP-782.

Cellular and satellitecellular 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);

Order codes and related products

SM201329-HNUIDP-782 Transceiver with cellular antenna (HSPA)SM201329-HBUIDP-782 Transceiver with cellular antenna (HSPA, Battery)ST901065-AFAIDP Remote antennaST901066-AFAIDP Low elevation remote antennaSM201361-001IDP-782 Starter Kit (USA)SM201361-002IDP-782 Starter Kit (Rest of World)SM201361-003IDP-782 Starter Kit (Canada)

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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.

STARTER KIT: Scan the QR code for complete details of the IDP-782 Starter Kit. It's everything you need to evaluate your IDP-782 in one box.



ST100340-001 IDP-782 Development Kit
ST100382 IDP-782 terminal shroud, IP65
SM201455-HBA IDP-782 cellular, battery, AT&T
SM201455-HNA IDP-782 cellular, AT&T
SM201455-HBV IDP-782 cellular, battery, Vodafone
SM201455-HNV IDP-782 cellular, Vodafone
ST100445-001 IDP-782 cellular antenna kit
ST100446-001 IDP-782 cellular external gps/gsm combo antenna

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ORBCOMM Inc. (Nasdaq: ORBC) is a leading global provider of Machine-to-Machine (M2M) communication solutions and the only commercial satellite network dedicated to M2M. ORBCOMM's unique combination of global satellite, cellular and dual-mode network connectivity, hardware, web reporting applications and software is the M2M industry's most complete service offering. Our solutions are designed to remotely track, monitor, and control fixed and mobile assets in core vertical markets including transportation & distribution, heavy equipment, industrial fixed assets, oil & gas, maritime and government.

CONNECTING THE WORLD'S ASSETS