



IsatData Pro

Global two-way short message service for M2M communication

The challenge

The ability to track and monitor fixed or mobile assets via two-way machine-to-machine communications is becoming increasingly important. Often, the facilities and assets are located in harsh remote environments, where maintaining reliable and secure communications can be a challenge.

The requirement

A single, reliable, low data service that provides increased visibility, enhanced efficiency and greater security – while lowering operational costs.

The solution

IsatData Pro is a low data rate communication service that runs over Inmarsat’s reliable I-4 L-band satellite constellation. It’s specifically designed to support remote management and communication for fixed and mobile assets worldwide, in extremely rugged and harsh environments.



Land Terminal IDP-680



Maritime Terminal IDP-690

Key markets

The IsatData Pro supports a wide range of applications in the fast-growing M2M market, making it ideal across a number of industries such as: transportation, maritime, energy and government organizations.



Applications:

- > Asset Tracking
- > Personnel security
- > Supervisory Control and Data Acquisition (SCADA)
- > Telemetry
- > Utilities

Benefits

- > Most reliable and secure global satellite network (99.9% availability)
- > Low cost terminals with low power consumption
- > Quick and easy to install
- > Affordable and flexible price plans with large pooling data packages available
- > Fully integrated terminals with inbuilt GPS
- > Dual mode terminals operating in both cellular 3G and satellite networks

Secure, global and reliable coverage

Our award-winning global Inmarsat-4 satellites and ground network operates at 99.9% availability. With an expected operational life into the 2020s, your remote broadband requirements can be met for years to come.






Key
■ I-4 Americas ■ I-4 EMEA ■ I-4 Asia-Pacific

Pricing Options

There are two types of plans to choose from: Standard Plans and Pooled Plans. The pooled plans are designed to efficiently spread usage across a complete SCADA network. Within both plan types, there are fixed data plan options (10Kbyte, 25Kbyte and 100Kbyte) and a variable data plan option (pay-per-use). Grouped Broadcast data plans are also available to help minimize grouped terminal charges across large networks.

Hardware

The series of IDP satellite and satellite-cellular terminals offers a solution for any application:

Terminal	Applications
IDP-680 Land fixed / SCADA 	<ul style="list-style-type: none"> - Remote Alarms - Smart Grid - Flow monitoring - SCADA systems - Oil & Gas flow monitoring - Cathodic Protection - Asset Tracking
IDP-690 Maritime 	<ul style="list-style-type: none"> - Vessel Tracking - Text message/Email - Catch report logs - Vessel performance monitoring - Buoy monitoring
IDP-780 Land mobile 	<ul style="list-style-type: none"> - Integrated satellite-cellular - Workforce automation - Vehicle Location Service - Vehicle monitoring - e-driver logs

Features

- > Environmentally sealed enclosure.
- > Peripheral interfaces for connecting to analog, digital and serial devices.
- > Serial interfaces for connectivity to RS485/J1708 and all M2M interfaces (e.g. MODBUS).
- > Discrete input/output feeds.
- > Fully Integrated with Garmin GPS terminals to reduce cost for in-cab messaging.

Dual Mode IDP-780 (Satellite-cellular)

The dual mode IDP-780 is designed to ensure always-on communications by providing fully a redundant satellite and cellular communication service. While in cellular range, it operates on low cost/low availability cellular service. When the cellular network fails or is out of service area, it operates on the high availability satellite network.



Terminal Specifications

PHYSICAL	
Size (L x W x H)	126mm x 126mmx47 mm (IDP-680) 126mm x 126mmx101 mm (IDP-690)
Mass	460 g (IDP-680/690)
ENVIRONMENTAL	
Operating Temp	-40°C to +85°C (IDP-6xx) -25°C to +75°C (IDP-780)
Storage Temp	-40°C to +85°C
Dust & Water Ingress	IP67/NEMA-4X
Vibration	SAE J1455 (sec 4.9, 4.2) MIL-STD-810G (sec 514.6)
Shock (survival)	MIL-STD-810G (Sec 516.6)
Load Dump Protection	SAE J1455 (Sec 4.13)
ELECTRICAL	
Input Voltage	9 VDC to 32 VDC (IDP-6xx) 9 VDC to 48 VDC (IDP-780) Load Dump Protection: + 150V
Power Consumption (Typical @ 12VDC, 22°C)	Receive: 0.54W (0.72W with GPS) Transmit: 7W Sleep: 1.2mW
Connector	Conxall Mini-Con-X® 6282-8SG-3DC
SATELLITE COMMUNICATIONS	
Messaging	6,400 bytes (max from Mobile) 10,000 bytes (to Mobile)
Latency	<15 sec per 100 bytes
Frequency	Rx: 1525.0 to 1559.0 MHz Tx: 1626.5 to 1660.5 MHz
CELLULAR COMMUNICATIONS	
Service	GPRS
Frequency	850/900/1800/1900 MHZ
GPS	
Acquisition Time	Warm: 16 sec; Cold 36 sec
CERTIFICATIONS/COMPLIANCE	
Satellite	Inmarsat Type Approved
Regulatory	FCC, RoHS, CE Mark, Anatel. C1D2
EXTERNAL INTERFACES	
Serial	1 x RS232, 1 x RS485
Inputs/Outputs	4- Analog or Digital - Digital: 0-125Vdc, State change at 1.5Vdc - Analogue: 0-3vDC, returns mv (0-3000mv)

Call: +44 (0)20 7728 1020

Email: customer_care@inmarsat.com

www.inmarsat.com