



# Product Data Sheet: Semaphore 600 Series



IDP-680 Land Terminal



IDP-690 Maritime Terminal



IDP-680 C1D2 Terminal



IDP-690 C1D2 Terminal

The IDP 600 series terminals use the two-way Inmarsat IsatData Pro satellite service for remotely managing fixed and mobile assets anywhere in the world.

### SATELLITE COMMUNICATION

Satellite Service	Two-way, IsatData Pro
Coverage	Global
From-Mobile Message	6,400 bytes
To-Mobile Message	10,000 bytes
Typical Latency	<15 sec, 100 bytes
Elevation Angle (IDP-680)	+20° to +90°
Elevation Angle (IDP-690)	-15° to +90°
Frequency	Rx:1525.0 to 1559.0 MHz Tx:1626.5 to 1660.5 MHz
EIRP (IDP-680/IDP-690)	7.0 dBW/5.0 dBW

### GPS/GLONASS

Acquisition Time	Hot: 1 s; Cold: 29 s/30 s
Accuracy	2.5 m/4.0 m (Horizontal CEP)
Sensitivity	Acquisition: -148 dBm/-140 dBm Tracking: -162 dBm/-158 dBm

### EXTERNAL INTERFACES

Inputs/Outputs	4 – Analog or Digital In/Out
Serial	1 - RS232, 1 - RS485

### ELECTRICAL

Input Voltage	+9 to 32V Load Dump Protection: +150V
Power Consumption (Typical@12VDC, 22°C)	Receive : 8.3 mA GPS : 40 mA Transmit: 0.75 A Sleep: 100 µA

### PROGRAMMING

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

Core Services	Geofence, Data Logger, Position Reporting
User Data Memory	2 MByte for Users services, data files including data logger

### ENVIRONMENTAL

Operating Temperature	-40 °C to +85 °C
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)
Load Dump Protection	SAE J1455 (Sec 4.13)

### CERTIFICATION

Satellite	Inmarsat Type Approved
Other	CE Mark, FCC, IC, RoHS, Anatel compliant, SRRC (IDP-690 only), MSS Russia, RCM Mark, IEC 60945 (IDP 600), IP67, C1D2

### ORDERING CODES

SM201205-SXG/BXG	IDP-680 (side/bottom)
SM201206-SXG/BXG	IDP-690 (side/bottom)
SM201261-BXG	IDP-680, Bottom mount, C1D2
SM201262-BXG	IDP-690, Bottom mount, C1D2
ST100231-001	Development kit which includes airtime, training and support. Order terminal separately.

IsatData Pro is a trade mark of Inmarsat and is a service delivered by SkyWave Mobile Communications through the Inmarsat network.

Positioning technology provided by u-blox