



Product Data Sheet: Semaphore 780



IDP-780a Dual-mode Satellite-Cellular Terminal



Remote Satellite Antenna

The IDP-780a terminal is equipped with both IsatData Pro satellite and cellular modem to allow asset owners to locate, communicate and remotely manage their assets anywhere, anytime.

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	+20 to +90°
Frequency	Rx:1525.0 to 1559.0 MHz Tx:1626.5 to 1660.5 MHz
EIRP	< 7.0 dBW

GPS

Acquisition Time	Warm/Cold: 36 s Hot: 1 s
Sensitivity	Tracking: -159 dBm Reacquisition: -159 dBm
Accuracy	2.5 m CEP
Security	GPS signal jamming detection

CELLULAR COMMUNICATION

Service	GPRS
Frequency	850/900/1800/1900 MHz
SIM	3.3V /1.8V SIM Dual-SIM capable Tamper proof access

EXTERNAL INTERFACES

Inputs/Outputs	4 – Configurable analog / digital in (active low or high) 7 – Dedicated digital in (active low) 1 – Ignition detection in 5 – Dedicated digital out (sink to ground)
Serial	2 - RS232 1 - RS485
Vehicle Diagnostics	1 – CANbus

ELECTRICAL

Input Voltage	+7-48V SAE J1455 load dump protection
Mating Connector	Two Tyco Elect. MULTILOCK White connector PN (316371-1) Grey connector PN (316372-6) Contacts PN (175265-1)

PROGRAMMING

Lua application framework with core services. SDK with GUI development tools available.	
Geofencing	128 polygons
Data Logger	50,000 positions Auto upload in cellular coverage

ENVIRONMENTAL (PENDING)

Operating Temperature	-40° C to +85° C
Storage Temperature	-40° C to +85° C
Dust & Water Ingress	Remote Satellite Antenna: IP67

CERTIFICATION (PENDING)

Satellite	Inmarsat Type Approval
Regulatory	CE Mark, RoHS

ORDERING CODES

Contact your account representative.
 IsatData Pro is a trade mark of Inmarsat and is a service delivered by SkyWave Mobile Communications through the Inmarsat network.
 Product details subject to change.

