iSurface

- Surface rated Iridium® beacon
- Asset tracking in the open ocean
- Heat resistant construction
- Robust, durable design

TRACKING & MONITORING

> NOVATECH™ products have been proven throughout the world's oceans and trusted around the globe for over 40 years.

The NOVATECH™ iSurface is a lightweight, self-contained, user serviceable, bi-directional GPS satellite beacon that utilizes the features and functionality of the Iridium satellite network. The iSurface offers global, pole-to-pole coverage for surface mooring and buoy monitoring requirements. The easy to install beacon uses standard "D" cell batteries and is designed to operate for approximately 1.5 years after installation and report up to 4,500 Short Burst Data (SBD) messages.

The iSurface is suitable for long duration deployments and is designed for asset tracking on the open ocean. Manufactured and tested in Atlantic Canada, the iSurface was designed with harsh marine environments in mind.

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iSurface

TECHNICAL SPECIFICATIONS

TEMPERATURE

Operating Temperature (excluding batteries)	-30 to +70 C
Storage Temperature (excluding batteries)	-40 to +85 C

BATTERY TEMPERATURE

Applies to version with internal batteries.

Battery Type	Alkaline
Operating Temperature	-18 to +55 C typical (batt. depndnt)
Storage Temperature	-40 to +50 C typical (batt. depndnt)

ELECTRICAL

Power Supply

Batteries (iSurface)	7x Alkaline D-cells
Power Supply Voltage (iSurface-RH)	7 to 28 VDC

POWER CONSUMPTION

Typical values at room temperature w/ a supply voltage of 12 VDC.

Mode of Operation	Condition	Current
Sleep	7 to 28 VDC	< 20 µA
GPS Location Acquisition	First fix	24 mA
Iridium SBD Transmission	Avg. current trans.	135 mA
	Peak, 10 ms bursts	1000 mA

INRUSH CURRENTS

Typical inrush currents with a supply voltage of 12 VDC

Peak in-rush current	TBD
In-rush current pulse duration	TBD

REVERSE VOLTAGE INPUT

Reverse Polarity Protection	-40 VDC maximum

GPS RECEIVER

Receiver type	48-channel L1 SiRFstarIVTM receiver
Frequency Range	1616 to 1626.5 MHz
Sensitivity	-117 dBm

ANTENNA

Type	Dual band GPS/Iridium ceramic patch

OPERATION

On/OFF control is achieved via a magnetic reed switch. When an external magnet is present, the unit is forced into a low-power sleep mode to conserve energy.

CONNECTIVITY

Local	Bluetooth SPP (Serial Port Profile)
Remote	Iridium SBD

CONFIGURATION INTERFACE

Local Configuration	Bluetooth SPP communications using a Windows Application
Over-The-Air Configuration	Bi-directional Iridium SBD communications using Relay (Asset Management Website)

PHYSICAL

Weight:	2.2 kg (4.85 lbs)
Overall Length:	52 cm (20.47″)
Hull Width:	4.8 cm (1.89″)
Head Unit Width:	6.7 cm (2.63″)
Hull Material:	Anodized Aluminum
Cap:	Delrin

HEAD OFFICE

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