



With vessels dispersed around the world: extremes of temperature (e.g. wind-chill, humidity, dry air) are all factors for devices that can experience some of the harshest conditions on the planet. This presents a particular design challenge as all elements that make up BlueTraker have been carefully thought out and our unique double shell housing is no exception.



Design to withstand the extremes of weather conditions

Temperature Extremes



All electronic equipment has particular temperature thresholds to which they work. For most electronic devices the temperature range is between -20°C and 70°C . For marine electronics those temperature ranges are very real possibilities with the extremes of weather experienced on the high seas. At BlueTraker we have clients north of the Arctic Circle but also on and around the Equator so temperatures can vary significantly.

Wind-chill

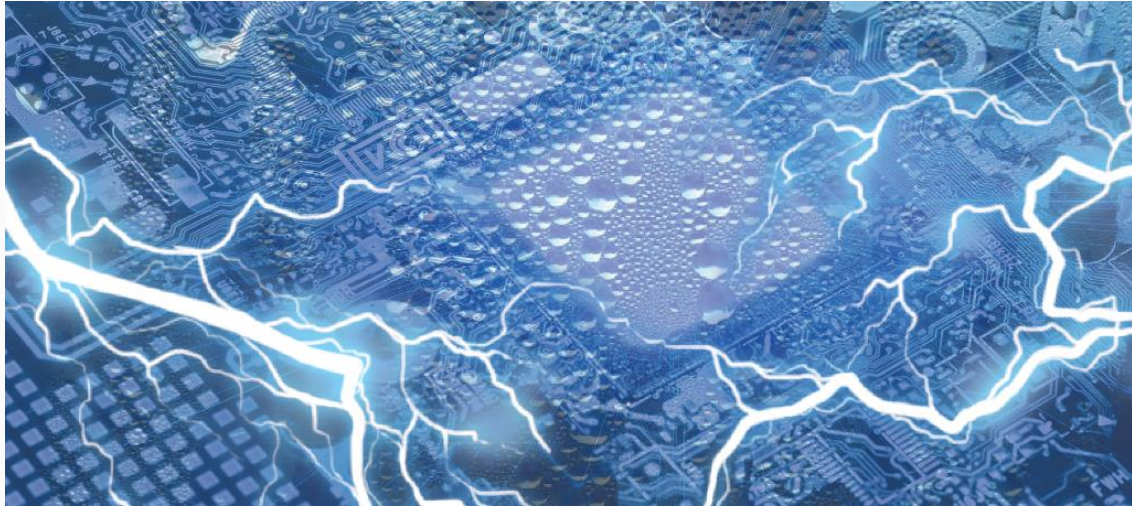
On the seas and oceans, wind speeds tend to be faster than over land because

there is little friction over the water. This means that wind-chill is also a very significant factor for exposed electronics. When wind blows across the surface of an object, it draws the heat away from it. So when the wind picks up speed, it draws more heat away, so if an object is directly exposed to the wind it would cool more quickly than it would on a still day. The surface cools down to same temperature that is measured in non-windy area but the time period of surface cooling down is significantly faster. Rapid cooling for electronics is something that can prove problematic so protecting electronics from this accelerated cooling is crucial.



Excessive and Low Humidity

BlueTraker clients are from diverse areas to Tropical, Dry, Temperate and Cold so humidity levels can significantly vary depending upon the location in the world. This is something that needs to be taken into consideration as humidity and electronics do not mix. In areas of high humidity, if water condenses on the componentry then short circuits leading to device failure. In areas of low humidity there is the potential of static electricity discharge that can cause irreversible damage to components.



So how does a BlueTraker cope with these extremes?

Componentry

Firstly, BlueTraker componentry is specifically chosen so that the temperature range is extended to provide functioning electronics between -50°C to +85°C.



Double Shell Housing

The two housings have a ventilation layer between them which acts as a thermal bridge. In high temperatures the gap acts like a vent (when exposed to heat from sunlight). In low temperatures the outer shell prevents fast moving cold wind from hitting the inner shell housing, thus eliminating the wind chill

factor.



Water and Dust Ingress and Humidity Control

BlueTraker adheres to the IP68 standard, ensuring that the water does not enter and the relative humidity is kept at a constant level. Within the device itself, silica gel desiccant is used so that any moisture within the unit is absorbed and does not condense upon the components, protecting it from any potential shorting.



At BlueTraker we have clients that use our devices both north of the Arctic Circle as well as around the Equator. Our clients continually push their BlueTraker devices to the limit, testing it in some of the most extreme environments on Earth. So when you need your BlueTraker to work...you know it will.

BlueTraker & Arion Communication Co. exhibit at Offshore Korea 2016!

We're in Korea! BlueTraker has exhibited alongside its longtime Korean partner Arion Communication (www.arionit.com) showing off our innovative LRIT & SSAS products and solutions.



BlueTraker and Arion share the same passion for delivering maritime communication solutions while providing excellent customer service.

Offshore Korea is being sponsored by the largest 3 shipyards in Korea and with many Korean shipbuilders visiting the exhibition it's an ideal place to display our solutions for both tracking and monitoring on large vessels.

온통신(주)

munication Co.,Ltd.

U310

www.arionit.com

IRIDIUM GO

아는 이리디움 위성전화 서비스는



BROADBAND PILOT

고속데이터 및 음성통신지원하는 해상용 단말기
세계가 신뢰하는 유일한 극저도 위성으로 안정적인 음성통신과
데이터 연결을 지원합니다.

- > 전세계 운영지역이 없는 연결
- > 신뢰할 수 있는 고속데이터 통신
- > 3개의 독립적인 음성화선 지원
- > 134Kbps의 Data 속도
- > 인터넷 및 카카오톡 접속 사용



603

모니터링 및

DOCKING SOLUTION BEAM DOCK

휴대형 위성단말기기를 결합하여, 실내
자유롭게 위성통신을 지원하는 솔루션



BlueTraker®

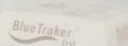
SSAS

Ship Security
Alert System



LRIT

Long Range
Identification
and Tracking



www.bluetraker.com

Vessel Tracking and Monitoring Solutions

by **elias**
WIRELESS DATA SOLUTIONS

arion

elias

