

Solar Beacon

- Beacon for polar applications
- Cutting edge technology
- Suited for extreme climates
- Cost effective solution



METOCEAN SYSTEMS

The Solar Beacon is an Iridium® equipped, data collection and processing beacon for polar applications. The Solar Beacon's primary function is to measure shortwave solar radiation at remote sites where high reliability, low power consumption, and dependable operation is critical.

The Solar Beacon features three pyranometer drop sensors (two above and one under ice). It is also equipped with our standard met sensor suite; including GPS, Barometric Pressure, Air Temperature and Sea Surface Temperature sensors. The Solar Beacon will provide 12 to 18 months of continuous unattended operation in extreme Polar climates.



metOcean™
telematics

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TECHNICAL SPECIFICATIONS

PHYSICAL

- Mast Height: 1.50 m (59 in)
- Electrical Housing: 0.75 m (29.5 in) x 0.22 m (8.66 in)
- Overall Height: 2.00 m (78.75 in)
- Mass (in air): 30 kg (66 lbs)

CONSTRUCTION

- Hull, Mast, Sonar Supports: 6061-T6 aluminum

POWER

- Battery: Tadiran Lithium battery pack (TLP-93181/D/OCN2) or alkaline

SENSORS

- Barometric Pressure: Vaisala PTB110
- Ice Surface Temp Sensor: YSI 44032
- Sea Surface Temp Sensor: YSI 44032
- Solar Radiation Sensors: Silicon-Cell Pyranometers

ELECTRONICS

- Iridium: 9602 SBD Modem
- GPS: Jupiter JF2

OPERATION

- Air Temperature: -60°C to +40°C (-76°F to +104°F)
- Sea Surface Temperature: -25°C to +15°C (-13°F to +60°F)
- Relative Humidity: 0 to 100% marine environment
- Barometric Pressure: 800 to 1060 h Pa
- Pyranometers: 0 to 1280 W/m²
- Operating Life: 12 to 18 months continuous operation
- Transmission Interval: Hourly acquisition & transmission for all sensors (OTA available to change frequency)

STORAGE

- Storage Temperature: -20°C to +30°C (-4°F to 86°F)
- Storage Life: Up to 24 Months