

# iSPHERE

- Oil spill and current tracking buoy
- Bi-directional communication
- Low cost telemetry solution
- Robust design



The iSPHERE is an expendable, low cost, bi-directional spherical drifting buoy. The drifter was developed to meet the demanding needs of the offshore oil industry, ocean freight industry and the oceanographic scientific community. The buoy was designed specifically to track and monitor oil spill incidences. The iSPHERE drifter also provides the user with essential real-time sea surface temperature data and GPS positional data.

The robust design of the iSPHERE allows the buoy to be deployed effortlessly from a vessel or an oil platform. The standard operating life of the buoy is approximately 6-12 months.



## Quick Specifications

Size (diameter)	15.50 inches (395 mm)
Mass (in air)	10.9 kg (24 lbs.)
Operating Life	180-365 days
Data Transmission	Iridium® (bi-directional)



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# iSPHERE

## TECHNICAL SPECIFICATIONS

### BUOY DIMENSIONS

- Surface Unit Diameter: 15.50 inches (395 mm)
- Mass (in air): 18.1 kg (40 lbs)

### BUOY CONSTRUCTION

- Surface Unit: Injection molded high impact ABS
- Tether: Plastic coated stainless steel cable
- Drogue: No rip nylon

### OPERATION

- Air temperature: -20°C to 50°C (-4°F to 122°F)
- Water temperature: -2°C to +45°C (28°F to 113°F)
- Relative humidity: 0 to 100% marine environment
- Barometric pressure (optional): 800 to 1060 mbar
- Sea state: SS5
- Operating life: Up to 18 months\*
- Storage life: Up to 24 months
- Storage temperature: -20C to +55C (-4F to 131F)
- Time reference: UTC and Julian hour

### STORAGE

- Storage temperature: -20°C to +55°C (-4°F to 131°F)
- Storage life: Up to 24 months

### SURVIVAL

- Temperature: -40°C to +70°C (-40°F to 158°F)
- Sea state: SS6
- Deployment free fall height: 10m (33 ft) into water

### ELECTRONICS

- MetOcean's Global Platform Transceiver Controller TM
- Navman Jupiter 32 Global Positioning System module
- Iridium 9601 Short Burst Data transceiver
- Strain gauge drogue presence system

### DATA COLLECTION

- As per the Drifting Buoy Cooperative Panel DBCP-2 format (standard), can be customized depending upon customer requirement (optional)

### DATA TRANSMISSION

- Bidirectional communication ability allows the end user to select on demand Iridium transmission interval to suit operational requirement.
- Transmissions can be set up at predetermined schedule intervals and/or poll the unit for immediate results. Data latency is less than 60 seconds from start of transmission

**metOcean**<sup>™</sup>  
telematics

 **iridium**<sup>®</sup>

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