

iSVP-RXL FISH TRACKING DRIFTER

- Low Cost Telemetry Solution
- Equipped with Acoustic Fish Tag Receiver
- Real-time Tracking and Monitoring



The iSVP-RXL is an innovative buoy composed of three main components: the MetOcean SVP-I-XDGS drifting buoy, Innovasea Rx-LIVE acoustic receiver, and MetOcean's asset management and tracking software, LiNC. Together, it functions as a complete asset tracking and monitoring solution that enables the users to remotely track and monitor a variety of parameters in real time. The buoy utilizes the dependable bi-directional Iridium® satellite system to communicate and to transmit essential scientific data.

The system is designed to facilitate the detection of tagged fish in the ocean by means of Surface Velocity Program (SVP) drifting buoy. Additionally, the SVP, complete with a holey sock drogue, is designed to track surface currents at a depth of 15m and is equipped with a sea surface temperature sensor, battery voltage sensor, drogue loss sensor as well as an optional barometric pressure sensor.



iSVP-RXL

TECHNICAL SPECIFICATIONS

BUOY DIMENSIONS

- Surface unit diameter: 15.50 inches (39.5 cm)
- Mass (in air): 40 lbs. (18.1 kg)

BUOY CONSTRUCTION

- Surface unit: Injection molded high impact ABS
- Tether: Plastic coated stainless steel cable
- Drogue: No rip nylon
- Hull colour: Blue

DROGUE

- Length: 210 inches (5.3m)
- Diameter: 24.00 inches (60 cm)
- Style: Holey sock
- Drogue drag area ratio: 30:1

TETHER

- Length (to center of drogue): 590.5 inches (15m)

STORAGE

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

SURVIVAL

- Temperature: -40C to +70C (-40F to 158F)
- Sea state: SS7
- Deployment free fall height: 33 ft (10m) into water

RX-LIVE ACOUSTIC RECEIVER

- Operating temperature: -5°C to +40 °C
Note: Water in which Rx-LIVE is deployed must not freeze.
- Static depth rating: 500 meters

OPERATION

- Air temperature: -20°C to 50°C (-4°F to 122°F)
- Water temperature: -2°C to +40°C (28°F to 113°F)
- Relative humidity: 0 to 100% marine environment

- Barometric pressure (optional): 800 to 1060 mbar
- Operational sea state: SS5
- Time reference: UTC and Julian hour

HARDWARE SPECIFICATION

- Telemetry: Iridium 9602N SBD Transceiver
- Battery voltage sensor: Precision Resistive Divider
- GPS receiver: Telit Jupiter F2
- Sea surface temperature sensor: US Sensor Ultra Precision Thermistor

ELECTRONICS

- MetOcean's Global Platform Transceiver Controller TM
- Navman Jupiter 32 Global Positioning System module
- Iridium 9602N 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.
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* The battery life can vary depending on how often the Rx-LIVE communicates serially with the host processor.