



PSAT Series

Technology:  Archival

Product:  Tag

Sailfish (*Istiophorus platypterus*) © The Billfish Research Project 2014



Pop-up Satellite Archival Tag

The Lotek PSAT family of Pop-up Satellite Archival Tags are designed to maximise throughput of location data combined with reliability, longevity and ease of use.

Options

- The Lotek **PSATGEO** tags implement Lotek's proprietary template-fit algorithm which calculates the light geolocation position estimates onboard the tag. This allows a complete daily snapshot to be transmitted in a single Argos transmission which significantly increases the probability of receiving data for each day of the scheduled deployment.
- **PSATLIFE** tags are targeted at short to medium term post-release survival studies, or other studies requiring detailed time-series depth and temperature records.
- **PSATFLEX** tags offer full customisation of the data collection, deployment duration and data transmission to meet the requirements of any study.

Features:



Temperature



Depth



Light



Wet/dry sensor



Data Download (Satellite)

Low drag, stable design:

Maximises retention duration and minimises impact on the study animal.

Inactivity Release:

Monitors depth to determine if the tag is lying on the seabed or floating at the surface and then releases and transmits the onboard data.

Wet-start function:

Offers ease of deployment.

Product Applications

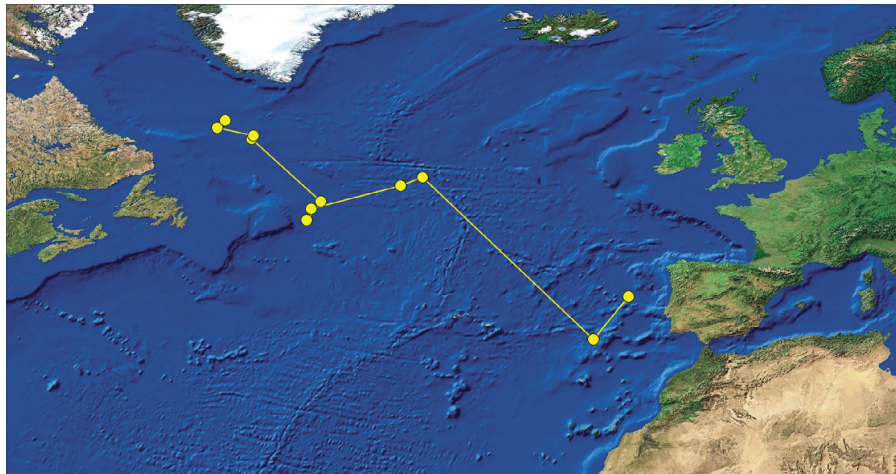
PSATGEO – long distance migration studies using light-geolocation.

PSATLIFE – studies investigating post-release survival in recreational fisheries and bycatch of non-target species in commercial fisheries

PSATFLEX – tailored configuration for any suitable study.

Model	PSATGEO	PSATLIFE	PSATFLEX
Weight (g)	87	87	87
Duration (Days)	120 / 240 / 365	14 / 28 / 53 / 85	up to 365
Size (mm)	131 x 42	131 x 42	131 x 42

Features and specifications subject to change without notice.



Filtered 3 month PSAT track of an Atlantic bluefin tuna from Spain to the Labrador Sea.
(Filter set to 2° of latitude and 1° of longitude)

Technical specifications:

Memory: 8MB

Operating temperature range: -5 °C to 60 °C

Buoyancy: minimum 8g

Inactivity Release:

- GEO/LIFE: none, 3 day / 5m, 3 day / 15m
- FLEX: 0-max depth for 0-999 days (PSATFLEX)

Clock accuracy: Better than 2 mins per year

Standard sensors:

Wet/dry sensor, External temperature, Depth, Light

Temperature sensor range: -10 °C to 45 °C

Temperature sensor accuracy: +/- 0.2 °C

Temperature sensor resolution: 0.05 °C

Depth sensor ranges: 500m, 1000m, 2000m

Depth sensor accuracy: ±1% of Full Scale

Depth sensor resolution: 0.05% of Full Scale

Warranty

PSAT tags are warranted to be free of defects in materials and workmanship under Normal Use for a duration of 50% of Estimated Life to a Maximum of 12 months. For Warranty terms and conditions, please review our [Warranty Statement](#).