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# SPLASH10-F TAG PRODUCT SHEET

SPLASH10-F (Fastloc®) tags are data-archiving, satellite transmitting tags designed for tracking vertical and horizontal movements of free-range marine animals. A SPLASH10-F tag works best for researchers conducting fine-scale movement studies on diving animals like cetaceans, sea turtles and pinnipeds. The SPLASH10-F comes in a variety of shapes for a variety of attachments—whatever works best for your animal.

Fastloc technology is what sets this tag apart. Fastloc uses GPS to provide highly accurate locations in under a second. Fastloc allows for fine-scale locations on animals that surface too quickly for a traditional GPS or Argos fix—Fastloc acquires positions every few minutes compared to a maximum of a few dozen a day with Argos-only tags.

## **Key Benefits of Fastloc:**

- Highly accurate—precise to 20 m.
- Fast acquisition—even after prolonged sleep, a location can be achieved in a fraction of a second. Very little surface exposure is needed.
- Validation pre-storing—only successful locations are saved and transmitted to allow for dynamic scheduling in case of failure.
- Flexible scheduling—fixes can be scheduled at regular intervals or duty cycled depending on the day or season.
- Many locations possible—hundreds achievable per day for a higher resolution track.



#### **Available Data Products**

Available Data Products	SPLASH 10-F
Depth Archive	Χ
Temperature Archive	Χ
Light Archive	Χ
Wet/Dry (0-255) Archive	Χ
Light Level Geolocation (GPE3)	Χ
Argos Locations	Χ
Fastloc—Most Recent and Post-dive	Χ
Haulout Duration & Location	Χ
Depth Time Series	Χ
Temperature Time Series	Χ
Profile of Depth & Temperature (PDT)	Χ
Dive PDT	Χ
Time-At-Temperature Histogram (TAT)	Χ
Time-At-Depth Histogram (TAD)	Χ
Behavior Log	Χ
Maximum Dive Depth Histogram	Χ
Dive Duration Histogram	Χ
Percent-Dry Timeline	Χ
20-Minute Dry Timeline	Χ
Dry-Deep-Neither Timeline	Χ
Additional Data Products Available	
Acceleration 3-Axis Archive	
Stomach Temperature	

# SPLASH10-F TAG PRODUCT SHEET - CONTINUED

#### OTHER KEY FEATURES AVAILABLE IN SPLASH10-F CONFIGURATIONS

**Highly Customizable Data Collection and Transmitting Schedule**—researchers have the power to customize and prioritize data transmission to capture the information that is most significant for the project. Deployments can be tailored to achieve unique experimental objectives. Flexible transmissions provide the ability to extend the life of the tag by focusing on specific seasons or times of the year.

**Full Data Archive Available on Recovery**—SPLASH10-F tags contain one GB of onboard memory for archiving data. This means when you recover your tag, your full data set is available, even if the battery is dead—data are maintained in the archive for up to 25 years.

**Specialized Shapes**—SPLASH10-F tags come in over 60 shapes and configurations. They contain an array of sensors that gather a myriad of data products.

The Portal Advantage—SPLASH10-F tags are supported by the Wildlife Computers Data Portal, a collection of data management tools and services. Developed specifically for the display and investigation of data from Wildlife Computers tags, the data portal streamlines the processes of acquiring, preserving, and sharing data services. The portal helps collect, prepare, and analyze the data returned from the tag—via Argos or the archive. Data are easily sorted, filtered, searched, uploaded, and shared. You can see a Google Earth display of your deployment track, color-coded to show the relative age of each location. You can also set up a live KMZ to get data into your own monitoring system.

#### **TECHNICAL SPECIFICATIONS**

Sensors	Depth, Temperature, Wet/Dry, Fastloc (light and accelerometer options)**
Depth Sensor Range	0-2000 m**
Depth Sensor Resolution	0.5 m**
Depth Sensor Accuracy	±1% of reading
Temperature Sensor Range	-40 °C to 60 °C
Temperature Sensor Resolution	0.05 °C
Temperature Sensor Accuracy	±0.1 °C
Light Sensor (When Installed)	5 x 10 <sup>-12</sup> W cm <sup>-2</sup> to 5 x 10 <sup>-2</sup> W cm <sup>-2</sup>
Operating Temperature Rating (°C)	-20° C to 50° C
Recommended Storage Temperature Range (°C)	-20° C to 5° C
Conductivity Operational Limits	0.1 to 5 S/m*
Memory	1 Gigabyte
Length (mm), Diameter (mm), Weight (g), Pressure Rating, Maximum Deployment Length	**

<sup>\*</sup> Conductivity Operational Limits can be customized for freshwater applications. Please contact Wildlife Computers to learn more.

To Learn More Call: +1 (425) 881-3048 or Email: tags@wildlifecomputers.com

<sup>\*\*</sup> Specification is dependent upon the configuration model. You can see different SPLASH10-F configurations on WildlifeComputers.com