

tags@wildlifeComputers.com WildlifeComputers.com +1 (425) 881-3048

8310 154th Ave NE, Suite 150 Redmond, WA, 98052 USA

## **SPAT TAG PRODUCT SHEET**

sPAT tags are pop-up satellite transmitting tags designed for short-term survivorship studies. If a mortality or detachment is detected, the tag autonomously releases from its tether and transmits its status.

At the end of the deployment period, and if the tag is associated with a living animal, the tag releases from its tether and begins transmitting. The data imports directly to your Wildlife Computers portal account where you can run an analysis and determine survivorship.

### **Data Products**

Daily Min and Max Temperature	Х
Change in Light Level for Each UTC Day	Х
Time-series Depth for the End of Deploy- ment	Х
Pop-up Location Via Argos	Х

The sPAT is economical and easy to deploy. Built for a single purpose, the sPAT offers a large number of data points for your budget. It arrives fully configured and ready to auto-start when submerged in seawater. This minimizes training and costly setup time while reducing the risk of incorrectly programming the tag.

#### **Data Products**

#### **Daily Data**

- The daily minimum and maximum temperature and depth readings from the fast-sampled archive data set.
- The change in light level for each UTC day to detect ingestion by a predator.

#### **Time Series**

 Time-series depth for the end of deployment to help determine the fate of the animal.

#### **Pop-up Location**

 When the sPAT floats to the surface, Argos calculates the position of the tag so you know where the animal died, or where it was at the end of the deployment. sPAT-431 118 x 41mm (LxØ) and 68 g (in air)

# SPATTAGPRODUCTSHEET-CONTINUED

## **OTHER KEY FEATURES AVAILABLE IN SPAT**

**Full Archive Available for Recovered Tags**—a complete record of depth, temperature, and light level are stored onboard the tag so if you recover it, you can access it.

**Conditional Release and Mortality Detection**—the sPAT monitors for constant depth, a state which implies the tag is floating at the surface or sitting on the sea floor. If constant-depth conditions are met, release is activated. Thus, the sPAT transmits even in the event of attachment failure, animal mortality, or unexpected animal behavior. This feature minimizes the chance that something will damage the tag between the premature release event and the programmed pop-up date.

**User-Programmable Release**—tags come pre-configured with a standard default to release after 30 days or release if the default conditional release parameter is met. Users can choose to adjust the release day and conditional release parameter to better suit their application.

- Users can customize the sPAT to release either 30, 45, or 60 days after deployment
- Users can customize the conditional release parameters

**Tag Price Includes Argos Platform Number and Pre-assembled Tether/Anchor System**—Wildlife Computers takes care of all the logistics so tags are ready to go upon arrival. The tethering system is a crucial component of your tagging study. In addition to reducing your labor commitment, a fully supplied tether system ensures consistency and reliability. We offer multiple tether and anchor combinations.

**The Portal Advantage**—sPAT 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**

Dimensions	118 mm (length) x 41 mm (diameter)
Weight in Air	68 grams
Pressure Rating	2000 m
Operating Frequency	401.678 MHz
Operating Life	Up to 60 days
Attachment Type	Towed
Sensors	Light, Depth, Temperature, Wet/Dry
Depth	Range: 1700 m
Resolution	0.5 m
Temperature	Range: -20° C to 50° C / Resolution: 0.05° C
Communication	Via USB port using Wildlife Computers Communications Cable

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

Tag features and specifications subject to change without notice.