



## SURVIVORSHIP PAT (sPAT) POP-UP TAG

The sPAT is used for short-term survivorship studies. Building on the success of our MiniPAT and Mk10-PAT products, the sPAT's suite of sensors monitors the status of the tagged animal. If a mortality/detachment is detected, the tag autonomously releases from its tether and transmits its status through the Argos satellite system.

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 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

- The sPAT tag sends 10 minute time-series depth data **for the five days prior to release**

#### 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



*124 x 38mm (LxØ) and 60g (in air)*

# sPAT Pop-Up Tag Product Sheet – continued

## Key Features

**Economical monitoring of animal survivorship**—most survivorship studies require a large sample size to be statistically significant. Built for a single purpose, the sPAT offers a larger number of data points for your budget.

**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.

**Easy to deploy**—the sPAT arrives at your lab configured and ready to auto start when submerged in seawater. This minimizes staff training and costly setup time while reducing the risk of incorrectly programming the tag.

**User-programmable release**—even though the tags come pre-configured, sometimes research parameters change. You can set the sPAT to release to 30, 45, or 60 days after the deployment starts.

**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.

**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**—the sPAT is supported by the 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.

## Technical Specifications

<b>Dimensions</b>	124 mm (length) x 38 mm (diameter)
<b>Weight in air</b>	60 grams
<b>Depth rating</b>	2000 m
<b>Operating frequency</b>	401.678 MHz
<b>Operating life</b>	Up to 60 days
<b>Attachment type</b>	Towed
<b>Sensors</b>	Light, Depth, Temperature, Wet/Dry
<b>Depth</b>	Range: 1700 m
<b>Resolution</b>	0.5 m
<b>Temperature</b>	Range: -20 to 50° C / Resolution: 0.05° C
<b>Communication</b>	Via USB port using Wildlife Computers USB Communications Cable

For more information, visit [WildlifeComputers.com](http://WildlifeComputers.com) or call +1 (425) 881 3048 to speak with a technical sales consultant.