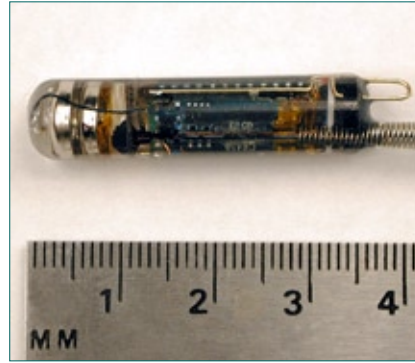


# Lotek Archival Tag Series

## Light-based geolocating archival tags



LAT2500



LAT2510

**Gain valuable insights into the life cycle of your species.**

**Lotek Archival Tags are compact, reliable instruments for the collection and storage of precision-time-stamped **depth, temperature and light-based geolocation data.****

### Key Features

- At 8mm x 35mm, the LAT25x0 is the smallest geolocation tag available for fish applications.
- Communications with the tags are highly reliable and fast (<2sec to connect) - now made through physical contacts.
- Enhanced biocompatibility from an inert coating.
- Sea water switch feature - can identify when the tag is immersed in water.
- Tag design and components selection to ensure a typical two year life.
- Data ranges are configured by specifying the min. and max. limits for each sensor. Data resolution is determined by the number of bits (up to 12) for each sensor.  
This optimizes the memory usage per sensor; selecting a lower resolution and/or narrow data range will increase the number of samples collected.
- Four memory management (log type) options:
  1. Day Log: summarizes on board geolocation and other processes, allowing one to collect data for every day at liberty; a number of "loggables" are available to be recorded in the Day Log, e.g., daily: sea surface temperature, min. and max. pressures, min. and max. temperatures, times of sunrise and sunset, etc.;
  2. Telescoping Log: allows the total times series storage capacity of the tag to be evenly distributed over the entire mission.
  3. Conditional Log: samples recorded (or not) based upon the condition of one or two sampled "loggables";
  4. Basic Log: straight sampling.



# Lotek Archival Tags: Geolocation

## Specifications

	LAT2500	LAT2510
Dimensions	8mm X 35mm	8mm X 35mm
Weight in air	3.6g	4.25g
Weight in Fresh Water	2.25g	2.5g
Memory	128K, 512K	128K, 512K
Memory Management	Custom Programming	Custom Programming
Survival Depth	2000 meters	2000 meters
Max Operation Temperature	60° C	60° C
Min Operation Temperature	-20° C	-20° C
Number of samples	Variable based upon data storage options selected	Variable based upon data storage options selected
Sample rate setting	≥1s in 1 sec. increments	≥1s in 1 sec. increments
Data Download	Gold electrical contacts, 57.6 kbauds	Gold electrical contacts, 57.6 kbauds
Sea water switch	Yes	Yes
Standard Depth Range	50m, 500m, 1000 m, 2000m	50m, 500m, 1000 m, 2000m
Data Resolution	Up to 12 bits	Up to 12 bits maximum
Processing scale and offset	Yes	Yes
Sensors	Internal Temperature, Pressure, Light	Internal & External Temperature, Pressure, Light
Light sensor stalk	No	Yes
Pressure Accuracy	+/-1%	+/-1%
Pressure Resolution	0.05%	0.05%
Temperature Measurement	-5° to 35° C	-5° to 35° C
Temperature Accuracy	Better than 0.2° C	Better than 0.2° C
Temperature Resolution	0.05° C or better	0.05° C or better
User Setup	Miscellaneous ways to log data (see Key Features)	Miscellaneous ways to log data (see Key Features)
Number of log structures allowed	4	4
Typical Life	>2 years	>2 years
Data Analysis Software	Yes	Yes

*NOTE: These specifications are subject to change.*

