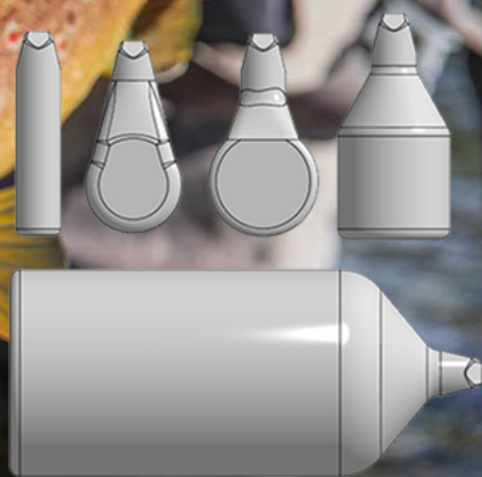# ATS
ADVANCED TELEMETRY SYSTEMS

SS400T ACOUSTIC TEMPERATURE-SENSING FISH TAG SERIES

The SS400T temperature-sensing tags were designed to get more out of the JSATS protocol, delivering not just fish IDs in detection data, but also information about the fish temperature. The tag series encompasses a range of tag sizes to accommodate different fish sizes and study duration requirements.

The SS400T models adhere to the same signal protocol as other JSATS tags, with temperature encoded within the tag ID. Lifetime estimates and size of temperature tags are identical to the standard models.

Tags alternate sending transmissions containing their full code ID and transmissions that have a partial code + temperature information. Using this scheme, any JSATS receiver can pick up the transmitter pulses, and post-processing data with ATS's software tools will yield temperature and ID information from the tags.

This variable ID does create the possibility of producing 32 different codes per tag, so extra communication with the code-reserving authority in your region may be necessary.

PHYSICAL PROPERTIES

Model	Weight (g)	Dimensions
SS410T	0.21	15.0 x 3.3 Ø
SS420T	1.0	14.5 x 7.0 x 5.5
SS430T	1.6	15.0 x 8.0 x 7.5
SS440T	2.2	20.0 x 8.5 Ø
SS450T	9.8	30.0 x 15.0 Ø

Table 1: Physical dimensions of SS400T tags

Biocompatible coating: Parylene-C or equivalent
Operating temperature: 0 – 31°C

ELECTRICAL PROPERTIES

Pulse Rate Interval (sec)	SS410T	SS420T	SS430T	SS440T	SS450T
	(L I F E T I M E I N D A Y S)				(Y E A R S)
3	48	108	141	225	
5	71	159	210	335	5+
10	111	247	332	529	
20	158	356	466	743	

Table 2: Expected lifetimes (in days) of each tag model with varying PRI

Frequency : 416.7 kHz ± 0.5%
Code set   : 65,536 possible unique IDs

Power output: +156 dB re: 1uPa @ 1 meter

(763) 444-9267

www.atstrack.com