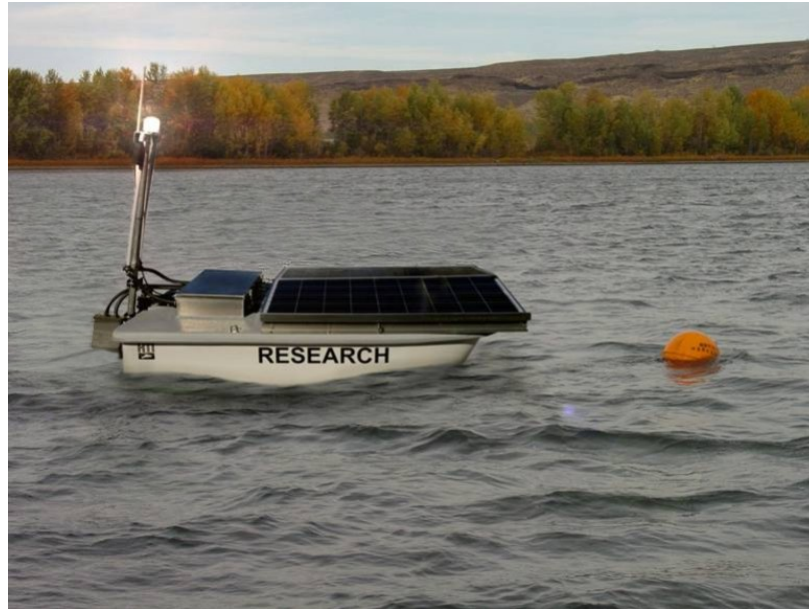


## MODEL 295B ACOUSTIC TAG DATA LOGGER



HTI's *Model 295B Acoustic Tag Data Logger (ATDL)* offers a cost-effective means of remotely recording the time-stamped presence of fish tagged with *Model 795 Acoustic Tags*. This solar powered, cableless, buoy is designed to withstand rigorous hydraulic and wind environments.

Engineered into an unsinkable, foam filled skiff, the *Model 295B ATDL* doesn't require shore-based electronics. It is interfaced with a wireless access point for data transmission. This allows real-time monitoring of the system's status, as well as immediate notification of any system faults. The fiberglass deck provides easy access for servicing and keeps the electronics cool with a river-water air conditioning system. A white-light marker strobe flashes 3 feet (91 cm) above the waterline, which can be seen up to a mile away (1.6 km). And two 125 watt solar panels keep the entire system powered.

### A Brief Overview:

- Self-contained, solar powered, cableless acoustic tag data logger
- Compact, light, portable, battery powered
- Detection ranges up to 1 km (3,280 ft)
- Real-time status notification
- Wireless data transmission via encoded WiFi
- Able to operate in tandem with *Model 290/291 Acoustic Tag Tracking Receivers*

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## MODEL 295B ACOUSTIC TAG DATA LOGGER

<b>Dimensions:</b>	Length: 229 cm (90 inches). Width: 135 cm (53 inches).
<b>Weight:</b>	114 kgs (250 lbs.)
<b>Power Supply:</b>	Two 125 watt solar cells and two 100 a-h deep cell batteries
<b>Operating Temp.:</b>	0-50°C (32-122°F)
<b>Power Consumption:</b>	Approximately 9 watts
<b>Batteries:</b>	Recommend deep cycle 12 VDC battery. Life = battery amp hours (e.g., 180 amp hour battery will last approximately 180 hours).
<b>Data Displays:</b>	Using HTI <i>AcousticTag</i> software, real-time data can be viewed for in-field adjustments. HTI <i>MarkTags</i> software is used for post viewing and analysis.
<b>Computer Req.:</b>	Contact HTI for current minimum PC specs.
<b>Frequency:</b>	307 kHz standard

## MODEL 795 ACOUSTIC TAGS – Also see separate spec sheet.

Acoustic Tag Model	Diameter mm	Length mm	Volume cm <sup>3</sup>	Weight		Minimum Life in Days	
				In Air grams	Fresh-water grams	0.33 pri	0.06 pri
<i>Model 795s Micro Acoustic Tag</i>	6.7	16.4	0.26	0.65	0.34	15	28
<i>Model 795m Micro Acoustic Tag</i>	6.8	16.5	0.28	0.75	0.40	15	28
<i>Model 795E Acoustic Tag</i>	6.8	21.0	0.45	1.5	0.8	25	35
<i>Model 795G Acoustic Tag</i>	11.0	25.0	1.4	3.1	1.9	50	80
<i>Model 795X Acoustic Tag</i>	15.7	47.5	5.2	13.0	7.1	180	240
<i>Model 795Z Acoustic Tag</i>	16.0	73.0	25	24	14	3.3 yr	4.1 yr

<b>Tag Weight:</b>	From 0.65 g to 24 g (in air), depending on model. See separate spec sheet.
<b>Detection Range:</b>	Up to 1 km (3,280 ft) in freshwater. For three-dimensional tracking ranges <300 m (984 ft) hydrophone separation recommended for freshwater. Noisy sites may reduce detection ranges.
<b>Frequency:</b>	307 kHz standard
<b>Signal Encoding:</b>	Proprietary encoded code-phase modulated signal improves signal-to-noise ratio by 11 dB. Can be used to extend detection range (e.g., typically by 100-350 m in freshwater), or increase resolution by reducing pulse width (e.g., from 5 msec to 0.4 msec), or some combination of both.
<b>Pulse Repetition Rate:</b>	Field programmable: 25 ping/sec to 1 ping every 16 sec
<b>Pulse Width:</b>	Field programmable: 0.5 msec to 5 msec
<b>Individual ID:</b>	Individual tag identification for up to 50,000 unique codes, standard
<b>Tag Life Notes:</b>	All tags operate at 307 kHz with an encoded signal. Length, diameter, and weight may vary +/- 10%. Life quoted is calculated based on operating parameters of 1 msec pulse width (PW) at 25°C. Life can be extended by decreasing PW.

## ADDITIONAL NOTES:

<b>Resolution:</b>	Sub-meter three-dimensional resolution requires <ol style="list-style-type: none"> <li>1) Proper hydrophone geometry,</li> <li>2) Known location of hydrophones, and</li> <li>3) Adequate signal-to-noise ratio.</li> </ol>
<b>Computer Req.:</b>	Contact HTI for computer specs.
<b>Specifications:</b>	All specifications subject to change without notice.
<b>Demo Disk:</b>	Contact HTI for demo CD for the <i>Model 290/291 Acoustic Tag System</i> .

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