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## TDR10 PRODUCT SHEET

Wildlife Computers Time-Depth Recorders (TDR) are data-archiving tags designed for tracking fine-scale movements of marine animals.

A TDR10 is a cost-effective tag that works best on animals that can be captured twice such as pinnipeds, sea turtles, and penguins.

The TDR10 tags come in a variety of shapes with a variety of sensor options for gathering sample data including depth, temperature, light, wet/dry, acceleration, and stomach temperature (using the stomach temperature pill linked to a TDR). TDR10 tags can also come equipped with Fastloc® GPS. Fastloc acquires highly accurate locations in under a second.

### Key Benefits of TDR10 Tags:

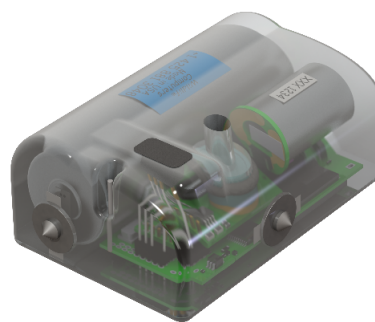
- Fine-scale, high-resolution sample data—the data from a recovered TDR10 is recorded and downloaded at the highest resolution possible.
- High-sample rates—sensor channels can be sampled as fast as 32 Hz.
- Best possible digital resolution—each sensor sample is stored at the maximum possible resolution.
- Most complete data set—a recovered TDR10 will provide a complete dataset with no risk of data gaps.

### Key Benefits of Fastloc GPS:

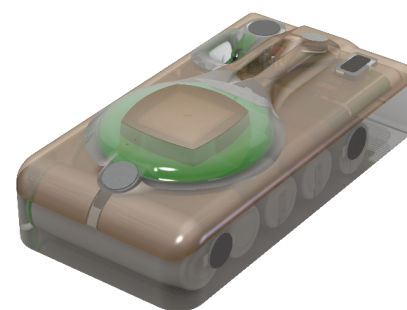
- Highly accurate—to 20 m with optimal satellite coverage.
- Fast acquisition—even after prolonged sleep, a location can be acquired in a fraction of a second. Very little surface exposure is needed.
- All acquired GPS snapshots are stored for validation post-download.
- Flexible scheduling—fixes can be scheduled at regular intervals or duty cycled depending on day or season.
- Many locations possible—hundreds achievable per day for a higher resolution track.

### Available Data Products

|                             | TDR10-F | TDR10-X | TDR10-FX | TDR10-BX | TDR10-LX |
|-----------------------------|---------|---------|----------|----------|----------|
| Depth Archive               | X       | X       | X        |          | X        |
| Temperature Archive         | X       | X       | X        | X        | X        |
| Light Archive               | X       | X       | X        |          | X        |
| Wet/Dry Archive             | X       | X       | X        | X        | X        |
| Acceleration 3-Axis Archive |         | X       | X        | X        | X        |
| Stomach Temperature Archive |         |         |          |          | X        |
| Fastloc Archive             | X       |         | X        |          |          |



Model: TDR10-X-340 /TDR10-BX-340



Model: TDR10-F-238

*This is a small representation of our available tags. Tag features and specifications subject to change without notice.*

# TDR10 – CONTINUED

## RECOVERY OPTIONS FOR TDR TAGS

**Payload Recovery Device**—a great way to recover data with minimal effort and disturbance. From over 200 m away, the Payload Recovery Device will detach from the animal with a radio command.

**Float Packages**—if you cannot recapture your animal another option is to attach the TDR10 to a float package that will release from the animal and then recovered. For example, a suction cup attachment on a cetacean. A SPOT tag, like our Asset Recovery tag, can be used to assist in finding the float package.

**Asset Recovery Tag**—A SPOT tag can be attached to the animal in order to locate it, recapture it, and recover the TDR10. This tag can also be incorporated into a float package that holds the TDR10.

## TECHNICAL SPECIFICATIONS

|  |   |
|--|---|
| Attachment Type  | Externally mounted***   |
| Sensors  | Depth, Temperature, Light-level, Wet/Dry, 3D Accelerometer, Stomach Temperature, Fastloc GPS*** |
| Depth Sensor Range   | 0-1700 m, 0-2000 m***   |
| Depth Sensor Resolution  | 0.5 m, 1 m***   |
| Depth Sensor Accuracy  | ±1% of reading  |
| Temperature Sensor Range   | -40 °C to 60 °C   |
| Temperature Sensor Resolution  | 0.05 °C   |
| Temperature Sensor Accuracy  | ± 0.1 °C  |
| Light Sensor (When Installed)  | $5 \times 10^{-12} \text{ W cm}^{-2}$ to $5 \times 10^{-2} \text{ W cm}^{-2}$                   |
| 3D Accelerometer Range   | ± 2g  |
| 3D Accelerometer Resolution  | 0.05 m <sup>-2</sup>  |
| Stomach Temperature Resolution   | ± 0.1 °C  |
| Stomach Temperature Accuracy   | ± 0.3 °C  |
| Maximum Sampling Rate  | 32 Hz   |
| Pressure Rating (m)  | Up to 2000 m  |
| Operating Temperature Rating (°C)  | -20 °C to 50 °C   |
| Recommended Storage Temperature Range (°C)                               | -20 °C to 5 °C  |
| Conductivity Operational Limits  | 0.1 S m <sup>-1</sup> to 5 S m <sup>-1</sup>  |
| Memory   | 1 GB  |
| Length, Width, Height, Weight, Wet/Dry Sensor, Maximum Deployment Length | ***   |

\*\*\* Specification is dependent upon the configuration model. You can see different TDR10 configurations on [WildlifeComputers.com](http://WildlifeComputers.com)

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