



tags@wildlifecomputers.com
WildlifeComputers.com
+1 (425) 881-3048

8310 154th Ave NE, Suite 150
Redmond, WA, 98052 USA

TDR-MK9 PRODUCT SHEET

Wildlife Computers Mk9 Time-Depth Recorders (TDR-Mk9) are small archival tags best designed for studies involving marine animals where the tag and/or animal can be recovered. The TDR-Mk9 measures depth, temperature, and light-level and also differentiates wet or dry conditions at a user-configured sampling interval.

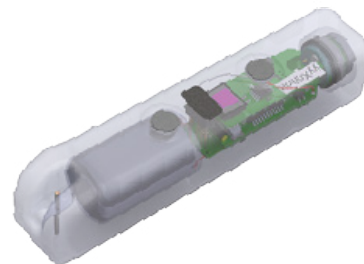
Light-level and a second temperature sensor can be added to a sensor stalk making it suitable for both external attachment and internal implantation. TDR-Mk9s have been used on seals, penguins, otters, large pelagic fish, and many other applications.

Key Benefits of TDR-Mk9 Tags:

- Small size—Wildlife Computers smallest data archiving tags (less than three inches long) but able to withstand 1000 meters of pressure. Additional configurations withstand depths up to 2000 meters.
- Long life—efficient power management allows tags to function for multi-year deployments.
- Cost effective—TDR tags are a cost-effective option for studies where the tag can be recovered.
- User-programmable sampling protocols—users can specify which sensors to sample and at what interval.
- Tag activation—the tag can be turned on and off with a magnet. The LED flash sequence indicates whether the tag is in standby mode or deployed.
- Data decoding, analysis, and communication—Wildlife Computers provides easy-to-use software that allows the user to set up the tag for deployment, download the data after recovery, and aid in the analysis of the data.
- Geolocation using light-level—Wildlife Computers GPE3 estimates daily longitude and latitude from recorded light-level curves.

Available Data Products

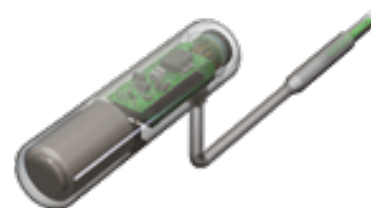
| | TDR-Mk9 | TDR-Mk9 (External Stalk) |
|---|---------|-----------------------------|
| Depth Archive | X | X |
| Tag Temperature Archive | X | X |
| External Stalk Temperature Archive | | X |
| Light Archive—external tag or external stalk only | X | X |



Model: TDR-Mk9-404



Model: TDR-Mk9-403



Model: TDR-Mk9-286

TDR-MK9 TAG – CONTINUED

TECHNICAL SPECIFICATIONS

| | |
|---|---|
| Attachment Type | Surgically implanted or externally mounted*** |
| Sensors | Depth, Temperature, Light-level, Wet/Dry*** |
| Depth Sensor Range | 0-200 m, 0-1700 m, 0-2000 m*** |
| Depth Sensor Resolution | 0.1 m, 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 $5 \times 10^{-2} \text{ W cm}^{-2}$ |
| Operating Temperature Rating (°C) | -20 °C to 50 °C |
| Conductivity Operational Limits | 0.1 S m ⁻¹ to 5 S m ⁻¹ |
| Memory | 64 MB |
| Recommended Storage Temperature Range (°C) | -20 °C to 5 °C |
| Length, Width, Height, Weight, Wet/Dry Sensor | *** |
| Maximum Deployment Length | Over eight years based on sampling depth, tag temperature, external temperature, and light every 30 seconds. Maximum deployment length is limited by memory and thus depends upon the user-programmed sampling rates. |

*** Specification is dependent upon the configuration model. You can see different TDR-Mk9 configurations on WildlifeComputers.com

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