WILDLIFE COMPUTERS

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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:

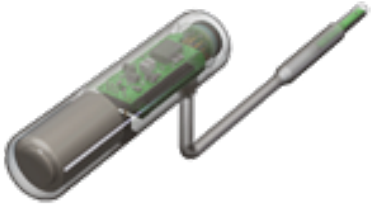
- Small size—Wildlife Computers smallest data archiving tags (less than three inches long) but able to withstand 1000 meters of pressure. Additional configurations withstand depths up to 2000 meters.
- Long life—efficient power management allows tags to function for multi-year deployments.
- Cost effective—TDR 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-Mk9-329

Model: TDR-Mk9-290



Model: TDR-Mk9-286

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

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)	5×10^{-12} W cm^{-2} to 5×10^{-2} 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**

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