

A Division of AMIRIX Systems Inc.

Minilog 8-bit Data Logger

Rugged, dependable temperature and/or depth logger

Minilog is a miniature data logger that records temperature or temperature and depth information. Minilogs are waterproof, extremely rugged and ideal for a number of data collection applications. The device is used in combination with a Minilog-PC interface box for study initialization and data download. Applications include:

- Monitoring temperatures in alpine lakes;
- Small stream management programs;
- Measuring temperature changes in lakes and ocean areas to determine the impact on local marine life;
- Soil temperature measurements and monitoring;
- Aquaculture site observation;
- Waste water temperature monitoring;
- Long line thermistor chains with multiple loggers;
- Food, drug and medical supply transportation monitoring.

Minilog has no external electrical connections that could leak and users typically experience five years of battery life.



The Minilog is used in a marine environment to collect temperature data for aquatic animal behaviour monitoring purposes.

Minilog is available in the following options:

Product Name	Description
8 - bit Minilog TR	Temperature sensor only; Rugged plastic case
8 - bit Minilog TDR	Temperature & depth sensors; Rugged plastic case
Optional memory	16 K [temperature only]; 64K
PC interface & software	Connects to computer via DB9 connector

Software

VEMCO's Minilog software is designed to be used in a Windows environment and is included with the PC interface unit. Minilog software features a "delayed start" option that allows the user to initialize a study and have the unit begin recording data at some point in the future. This option is useful for the synchronized start of a study with multiple loggers or when a study is to take place some distance away.

Contact us

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Specifications may change without notice.

Data Logger

Temperature Range

The temperature resolution of the Minilog depends on the range specified. Minilog is available in three standard ranges. [Resolution is defined as the fineness of detail that can be distinguished in a measurement. Accuracy is defined as the ability of a measurement to repeatedly match the actual value of the quantity being measured.] Resolution and accuracy are:

Standard Range	Resolution	Accuracy
-4 to 20 °C	0.1 °C resolution	± 0.2 °C accuracy
-5 to 35 °C	0.2 °C resolution	± 0.3 °C accuracy
0 to 40 °C	0.2 °C resolution	± 0.3 °C accuracy

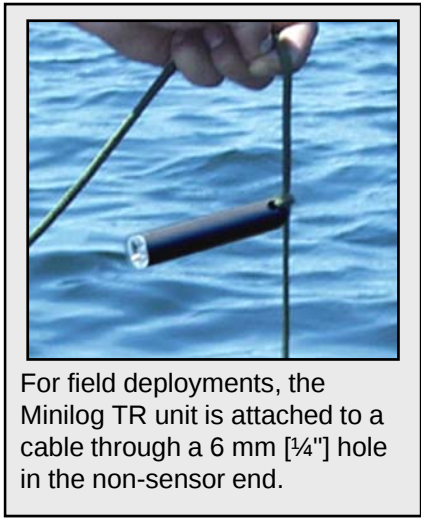
Depth Sensors

Minilogs with depth sensors are available in six factory preset depth ranges. This chart [right] describes the resolution and accuracy for each sensor range in sea water.

Depth Ranges	Resolution
34 m	0.2 m
68 m	0.4 m
136 m	0.8 m
204 m	1.2 m
340 m	2.0 m
680 m	4.0 m

Specifications:

Case	Rugged model: polycarbonate plastic
Weight	Rugged model: 41 g in air; 12 g in water
Size	Rugged model: 22 mm x 95 mm long
Thermal Time Constant	45 seconds in stirred liquid.
Maximum Depth	Rugged model: 680 m
Memory Capacity	Approximately 8000 readings
Full Memory Download	Temperature only: 3 minutes Temperature & depth: 6 minutes
Logging Duration	2 ¼ hours to 5 years
Logging Interval	User programmable from 1 second to 6 hours
Battery Life	Temperature only: 5 years or 1000 full deployments Temperature & Depth: 5 years or 700 full deployments
Data Retention	20 years
Memory Type	Non-volatile EEPROM
Power Supply	Single Lithium Cell, ½ AA size
Clock Drift	± 4 seconds per day (nominal)



How to Order a Minilog

When ordering a Minilog, specify the product name [ex. TR or TDR], desired temperature range [ex. -4 to 20 C], desired depth range [ex. 68 m, if applicable], and if any options are required. Temperature and depth ranges are listed above.

For more information on specific applications of Minilog technology or technical details, please contact VEMCO.

