

MicroTemp100

Miniature Submersible Temperature Data Logger



The MicroTemp100 is a miniature data logger built to withstand temperatures up to 100 °C (212 °F). Only 2.6 inch (66 mm) tall and 0.7 inch (18 mm) in diameter, this data logger can easily fit into the smallest spaces and is submersible up to 230 ft (70 m).

Don't let its tiny size fool you, the MicroTemp100 measures and records temperatures ranging from -40 °C to +100 °C (-40 °F to +212 °F). The MicroTemp100 has a storage capacity of 32,767 readings and is equipped with an LED alarm to warn when user-specified high/low temperature limits are breached.

The MicroTemp100 is compatible with the latest MadgeTech 4 Software making starting, stopping, and downloading simple and easy. Graphical, tabular, and summary data is provided for analysis and can be viewed as customizable engineering units.

Features

- Only 2.6 inch x 0.7 inch in Size
- Reusable
- Submersible to 230 ft (70 m)
- Programmable Start Time
- Real-time Operation
- User-friendly
- Low Cost

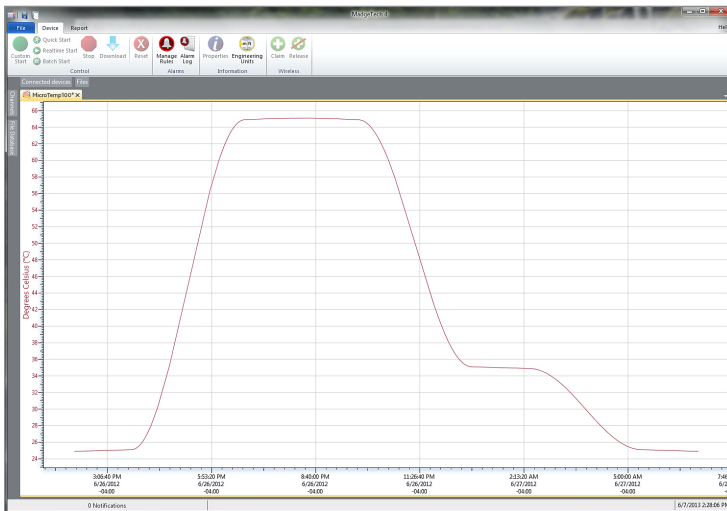
Benefits

- Simple Setup and Installation
- Minimal Long-Term Maintenance
- Long-Term Field Deployment

Applications

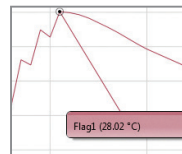
- Implement HACCP Programs
- Medical/Pharmaceutical
- Food Preparation and Processing
- Biomedical Research
- Dishwasher Testing
- Hostile Environment Monitoring
- Environmental Studies
- Well Monitoring
- Pasteurization

MadgeTech 4 Software Features

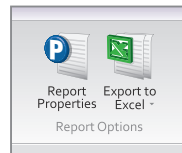


Graph View

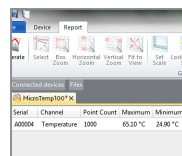
- Multiple graph overlay
- Statistics
- Digital calibration
- Zoom in/ zoom out
- Lethality equations (F0, PU)
- Mean Kinetic Temperature
- Full time zone support
- Data annotation
- Min./Max./Average lines
- Summary view



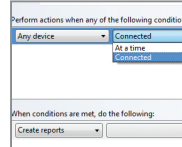
Cooling Flags



Export to Excel


 A screenshot of the software interface showing a table of data. The table has columns for "Serial", "Channel", "Point Count", "Maximum", and "Minimum". The data row shows "A0004", "Temperature", "3000", "65.10 °C", and "24.90 °C".

Tabular Data View



Automation

SPECIFICATIONS

TEMPERATURE	
Temperature Sensor	Internal Semiconductor
Temperature Range	-40 °C to +100 °C (-40 °F to +212 °F)
Temperature Resolution	0.1 °C
Calibrated Accuracy	±0.5 °C (0 °C to 50 °C) ±1.0 °C (50.1 °C to 100 °C) ±2.0 °C (-40.0 °C to -0.1 °C)

GENERAL	
Start Modes	Software programmable immediate start Delay start up to 6 months in advance
Real Time Recording	May be used with PC to monitor and record data in real time
Memory	32,767 readings
Wrap Around	Yes
Reading Rate	1 reading every 2 seconds up to 1 reading every 12 hours
LEDs	1 status LED
Calibration	Digital calibration through software
Calibration Date	Automatically recorded within device
Battery Type	3.6 V lithium battery included; user replaceable
Battery Life	1 year typical at +25 °C, 1 minute reading intervals
Data Format	Date and time stamped °C, K, °F or °R
Time Accuracy	±1 minute/month at +20 °C
Computer Interface	USB interface cable required; 38,400 baud
Operating System Compatibility	Windows XP SP3 or later
Software Compatibility	Standard Software version 4.2.21.0.0 or later
Operating Environment	-40 °C to +100 °C (-40 °F to +212 °F), 0 %RH to 100 %RH
IP Rating	IP68
Dimensions	2.6 in x 0.7 in dia. (66 mm x 18 mm dia.)
Weight	1.8 oz (50 g)
Material	316 Stainless Steel (food grade)
Approvals	CE

BATTERY WARNING: FIRE, EXPLOSION, AND SEVERE BURN HAZARD. DO NOT SHORT CIRCUIT, CHARGE, FORCE OVER DISCHARGE, CRUSH, PENETRATE, OR INCINERATE. BATTERY MAY LEAK OR EXPLODE IF HEATED ABOVE 150 °C (302 °F).

Ordering Information

MicroTemp100	PN 902239-00	Miniature Submersible Temperature Data Logger
IFC202	PN 900309-00	USB interface cable
ER14250MR-145	PN 900097-00	Replacement battery for the MicroTemp100