

# MicroTemp

## Miniature Submersible Temperature Data Logger



The MicroTemp is a miniature, submersible, self-contained temperature data logger. 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. It can even fit down the neck of most beverage bottles! Don't let the diminutive size fool you — this is an industrial grade instrument and will operate in temperatures from -40 °C to +80 °C. Its food grade stainless steel casing makes it inert to most common fluids and gases. It operates with user-replaceable batteries for up one year (typical use) and downloads data (32,767 readings) quickly to your PC.

MadgeTech's miniature technology opens up new options for documenting and ensuring proper environments for pharmaceuticals, biomedical research, food processing and transport. Our easy to use, yet versatile software not only allows you to view the data in common temperature units such as °C and °F, but also in Kelvin and Rankine. Additionally, the software will automatically calculate Pasteurization Units (PU), F0 and Mean Kinetic Temperature (MKT) saving you time.

## 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

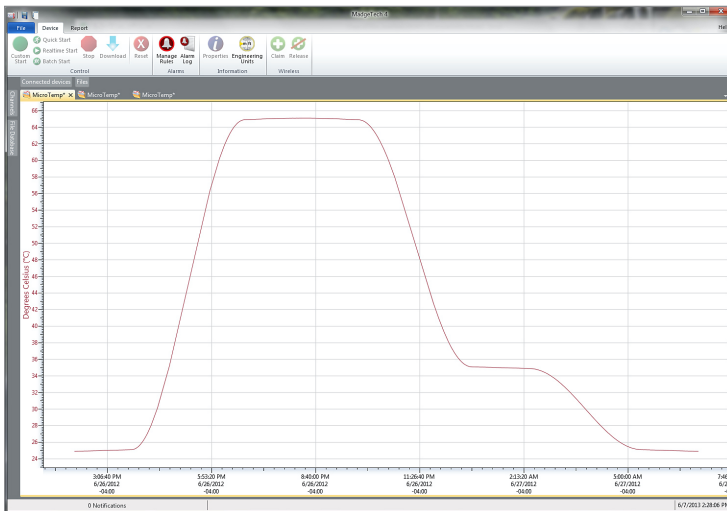
## Benefits

- 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

## MadgeTech 4 Software Features

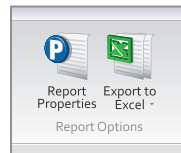


Graph View

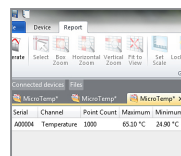
- Multiple graph overlay
- Statistics
- Digital calibration
- Zoom in/ zoom out
- Lethality equations (F0, PU)
- Mean Kinetic Temperature
- Full time zone support
- Data annotation
- Min./Max./Average lines
- Summary view



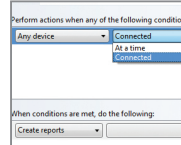
Cooling Flags



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

Specifications are subject to change without notice. Specific warranty remedy limitations apply.

| TEMPERATURE            |   |
|------------------------|---|
| Temperature Sensor     | Internal Semiconductor  |
| Temperature Range      | -40 °C to +80 °C (-40 °F to +176 °F)  |
| Temperature Resolution | 0.1 °C  |
| Calibrated Accuracy    | ± 0.5 °C (0 °C to 50 °C)<br>± 1.0 °C (50.1 °C to 80 °C)<br>± 2.0 °C (-40.0 °C to -0.1 °C) |

| GENERAL                        |   |
|--------------------------------|---|
| Start Modes                    | Software programmable immediate start<br>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 and 1 alarm 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             | PC serial or USB (interface cable required); 38,400 baud                                |
| Operating System Compatibility | Windows XP SP3 or later   |
| Software Compatibility         | Standard Software version 2.00.58a or later<br>Secure Software version 3.00.67 or later |
| Operating Environment          | -40 °C to +80 °C (-40 °F to +176 °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   |
| 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 100 °C (212 °F).

## Ordering Information

|           |              |   |
|-----------|--------------|---|
| MicroTemp | PN 900367-00 | Miniature Submersible Temperature Data Logger |
| IFC202    | PN 900309-00 | USB interface cable                           |
| ER14250   | PN 900095-00 | Replacement battery for the MicroTemp         |