MADGETECH
WE BUILD DATA LOGGERS

Product Information Card

MicroTemp

Description	MicroTemp
Temperature Sensor	Internal semiconductor
Temperature Range	-40 °C to +80 °C (-40 °F to +176 °F)
Temperature Resolution	0.1 °C (0.18 °F)
Calibrated Accuracy	±0.5 °C (±0.9 °F)
Memory	32,767
Reading Rate	1 reading every 2 seconds up to 1 reading every 12 hours
Alarm	Yes
LED Indicator	Red & Green
Required Interface Package	IFC102 or IFC202
Baud Rate	38,400
Typical Battery Life	1 year
Operating Environment	-40 °C to +80 °C (-40 °F to +176 °F), 0 %RH to 100%RH
Material	316 food grade stainless steel
Dimensions	2.6 in x 0.7 in dia. (66 mm x 18 mm dia.)
Weight	1.8 oz (50 g)
Approvals	CE

Battery Warning

WARNING: FIRE, EXPLOSION, AND SEVERE BURN HAZARD. DO NOT SHORT CIRCUIT, CHARGE, FORCE OVER DISCHARGE, DISASSEMBLE, CRUSH, PENETRATE OR INCINERATE. BATTERY MAY LEAK OR EXPLODE IF HEATED ABOVE 80 °C (176 °F).

MicroTemp
Miniature Temperature Data Logger
in Stainless Steel Enclosure

Specifications subject to change.
See MadgeTech's terms and conditions

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Product Notes

Submergibility

The MicroTemp is fully submergible and is rated IP68. It can be placed in environments with up to 230 feet (70 m) of water.

LEDs

Once started, the LED will flash at the selected reading rate to indicate that the device is running. The LED will flash in one second intervals if there is an alarm condition.

Alarm Settings

To change the settings for the temperature alarm:

- In the **Connected devices** panel, select the intended device to change the alarm settings.
- On the **Device** tab, in the **Information** group, click **Properties**. Users can also right-click on the device and select **Properties** in the context menu.
- Click the **Alarm** tab. If the Alarm tab is missing, the device does not have any alarm settings.

Configure the alarm settings:

- The High and Low settings indicate reading thresholds at which the alarm becomes active.
- The Warn high and Warn low settings indicate reading thresholds at which the alarm warning becomes active.
- The **Delay** setting indicates how long to wait before the alarm becomes active after passing an alarm threshold.
- The **Use cumulative alarm delay** checkbox indicates whether the alarm delay should reset when reading values fall back within the alarm threshold. *Note: Available settings vary per model.*
- Click the **Apply** button.

O-Rings

O-Ring maintenance is a key factor when properly caring for the MicroTemp. The O-Rings ensure a tight seal and prevent liquid from entering the inside of the device.
Please refer to the application note "O-Rings 101: Protecting Your Data", found on the MadgeTech website, for information on how to prevent O-ring failure.

Installation Guide

Installing the Interface cable

- IFC202
  Insert the device into a USB port. The drivers will install automatically.
- IFC102
  Plug the serial cable into the port and verify it is secure.
- USB-1 or USB-101
  Install the USB drivers from the CD provided in the kit, then plug the USB cable into the computer and the serial cable into the serial port.

Installing the software

Insert the Software USB into an open USB port. If the autorun does not appear, locate the drive on the computer and double click on **Autorun.exe**. Follow the instructions provided in the Wizard.

Device Operation

Connecting and Starting the data logger

- Once the software is installed and running, plug the interface cable into the data logger.
- Connect the USB end of the interface cable into an open USB port on the computer.
- The device will appear in the Connected Devices list, highlight the desired data logger.
- For most applications, select "**Custom Start**" from the menu bar and choose the desired start method, reading rate and other parameters appropriate for the data logging application and click "**Start**". ("***Quick Start***" *applies the most recent custom start options,* "***Batch Start***" *is used for managing multiple loggers at once,* "***Real Time Start***" *stores the dataset as it records while connected to the logger.*)
- The status of the device will change to "**Running**", "**Waiting to Start**" or "**Waiting to Manual Start**", depending upon your start method.
- Disconnect the data logger from the interface cable and place it in the environment to measure.

Note: The device will stop recording data when the end of memory is reached or the device is stopped. At this point the device cannot be restarted until it has been re-armed by the computer.

Downloading data from a data logger

- Connect the logger to the interface cable.
- Highlight the data logger in the Connected Devices list. Click "**Stop**" on the menu bar.
- Once the data logger is stopped, with the logger highlighted, click "**Download**". You will be prompted to name your report.
- Downloading will offload and save all the recorded data to the PC.

Device Maintenance

Battery Replacement

Materials:

Large Flat Head Screwdriver

Replacement Battery (ER14250)

- Use the screwdriver to unscrew the bottom cap from the enclosure.
- Tip the battery out of the enclosure tube.
- Insert the new battery into the enclosure tube, positive (+) terminal first.
- Screw the bottom cap back in place.

Recalibration

The MicroTemp standard calibration is one point at 25 °C.

Pricing:

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