

Description	Temp1000S	Temp1000FP
Temperature Sensor	Integral 1 inch probe 100 Ω Platinum RTD	Integral 10.8 inch flexible probe** 100 Ω Platinum RTD
Temperature Range	-40 °C to +150 °C (-40 °F to +302 °F)	
Temperature Resolution	0.05 °C (0.09 °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	
Required Interface Package	IFC110 or IFC200	
Baud Rate	2,400	
Typical Battery Life	1 year (15 minute reading rate at 25 °C)	1 year typical (1 minute reading rate @ 25 °C)
Battery Type	3.6V lithium battery included *Must be sent to MadgeTech for battery replacement	3.6V high-temperature lithium battery included *Must be sent to MadgeTech for battery replacement
Operating Environment	-40 °C to +150 °C (-40 °F to +302 °F), 0 %RH to 100 %RH, 60 PSIG	
Material	303 Stainless Steel	Body: 303 Stainless Steel Probe: 304 Stainless Steel
Dimensions	Body: 4.8 in x 1.0 in dia. (122 mm x 26 mm x dia.) Probe: 1.0 in x 3/16 in dia. (26 mm x 5 mm dia.)	Body: 5.7 in x 1.25 in dia. (145 mm x 32 mm x dia.) Probe: 10.8 in x 1/8 in dia. (275 mm x 4 mm dia.)
Weight	8 oz (225 g)	11.3 oz (320 g)
Approvals	CE	

** The minimum bending radius of the probe is 2 inches, bending only once. Avoid bending the probe anywhere along the first 2.5 inches from the tip.

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 150 °C (302 °F).

Specifications subject to change. See MadgeTech's terms and conditions at www.madgetech.com

> MadgeTech, Inc. 6 Warner Road • Warner, NH 03278 Phone 603.456.2011 • Fax 603.456.2012 www.madgetech.com • info@madgetech.com

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Product Information Card





Temp1000S

Rugged High Temperature Data Logger with 1" Rigid Probe

Temp1000FP

Rugged Temperature Data Logger with 10.8" Flexible Probe



To view the full MadgeTech product line, visit our website at www.madgetech.com.

Product Notes

Submergibility

To connect the interface cable to the Temp1000S or Temp1000FP, unscrew the key-ring end cap to expose the COM jack. Ensure the cap is on securely before placing the device in a wet environment. After use, the device may be placed in cold water to decrease the temperature for handling purposes.

Operating Environment

The Temp1000S and Temp1000FP can withstand up to 150 $^{\circ}$ C (302 $^{\circ}$ F) and be used in a dry environment, or completely submersed.

Submergibility

The Temp1000S and Temp1000FP are fully submergible and rated IP68. They can be placed in environments with up to 230 feet (70 m) of water.

Flexible Probe

The minimum bending radius of the Temp1000FP probe is 2", bending only once. *Note: Avoid bending the probe anywhere along the first 2.5" from the tip.*

O-Rings

O-ring maintenance is a key factor when properly caring for the Temp1000S and Temp1000FP. 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

- IFC200

Insert the device into a USB port. The drivers will install automatically.

- IFC110

Plug the serial cable into the port and verify it is secure.

Installing the software

Insert the Software USB Stick in 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

The Temp1000S and Temp1000FP must be sent to MadgeTech for battery replacement.

Recalibration

The Temp1000S or Temp1000FP standard calibration is two points at 50 °C and 150 °C

Pricing:

Recalibration traceable to NIST	\$70.00
Recalibration	\$40.00

Additional Services:

Custom calibration and verification point options available, please call for pricing.

Call for custom calibration options to accommodate specific application needs. Prices and specifications subject to change. See MadgeTech's terms and conditions at <u>www.madgetech.com</u> To send devices to MadgeTech for calibration, service or repair, please use the MadgeTech RMA Process by visiting <u>www.madgetech.com</u>, then under the services tab, select RMA Process.