

Description Temp1000IS  Temperature Sensor Resitance Temperature Detector (RTD)  Temperature Range -20 to +80°C	
Temperature Range -20 to +80°C	
Temperature Resolution 0.01°C	
Calibrated Accuracy ±0.5°C (0 to ±50°C)	
Memory 32,767	
Start Modes Software programmable immediate or delay start, up to 2 years in advance	
Real Time Recording  May be used with PC to monitor and record data in Rea (PC interface not IS rated)	l time
Reading Rate 1 reading every 2 seconds to 1 every 12 hours	
Lethality Equations Sterilization Units and Pasteurization Units are available software with a click of a button	within
Calibration Digital calibration through software	
Calibration Date	ftware
Battery Type 3.6V lithium battery included, user replaceable	
Battery Life 2 years typical at 15 minute reading rate	
Data Format Date and time stamped °C, °F, K, °R	
Time Accuracy ±1 minute/month at 20°C	
Required Interface Package IFC400	
Software XP SP3/Vista/Windows 7/Windows 8	
Operating Environment -20 to +80°C, 0 to 95%RH (case properly sealed)	
Dimensions 2.0" x 1.0" dia. (50.8mm x 25.4mm dia.)	
Weight 3oz (85g)	
Materials 316 Stainless Steel	
Approvals IS, 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).

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

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# **Product Information Card**



Temp1000IS

## Temp1000IS

Intrinsically Safe Temperature Data Logger with Stainless Steel Enclosure



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## **Product Notes**

## **Intrinsically Safety Approval**

The Temp1000IS has been certified by FM Approvals as Intrinsically Safe (IS) for use in Class I, Division 1, groups A, B, C, D, and Non-incendive (NI) for use in Class I, Division 2, groups A, B, C, D indoor and outdoor, Hazardous (Classified) Locations. The rating is listed as follows in the Factory Mutual approval guide:

- Temp1000IS. Temperature Data Logger. IS / I / 1 / ABCD T4A Ta=80°C; NI / I / 2 / ABCD / T4A Ta=80°C

These are the only safety ratings relevant to the use of this product. Use of this product in hazardous environments not specifically covered by this rating is prohibited, unless the user takes the appropriate steps to ensure the safety of the product and assumes full responsibility for its safe use.

#### **Installation Guide**

## **Installing the Software**

Insert the MadgeTech 4 Software Flash Drive into an open USB port on the PC. If the autorun does not appear, locate the drive on the computer and double click on **Autorun. exe**. Follow the instructions provided in the Installation Wizard to install the MadgeTech Software. Software can also be downloaded from the MadgeTech website at the following link: <a href="https://www.madgetech.com/software-download">www.madgetech.com/software-download</a>

## **Installing the Interface Cable**

- IFC400:

Follow the instructions provided in the Installation Wizard to install the USB Interface Drivers. Drivers can also be downloaded from the MadgeTech website at the following link: www.madgetech.com/software-download

#### **Connecting the Data Logger**

- Once the software is installed and running, plug the interface cable into the PC.
- Place the Temp1000IS data logger into the IFC400 docking station.
- The Temp1000IS will automatically appear under Connected Devices within the software.

# **Device Operation**

#### Starting the Data Logger

- Select the device from the connected devices list.
- On the Device Ribbon tab, Control Group, select **Custom Start**.
- Choose the desired start parameters and a Reading Rate suitable for your application.
- Enter in any other desired parameters and click **Start**.
- When the device is successfully started, the status will display Running.
- Remove the data logger from the IFC400 docking station and place it in the environment to be measured.

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.

## Stopping and Downloading Data from the Data Logger

- Launch the MadgeTech 4 software and connect the interface cable to the PC.
- Place the data logger in the IFC400 docking station.

- Select the device from the connected devices list.
- On the Device Ribbon tab, Control Group, select **Stop**.
- On the Device Ribbon tab, Control Group, select **Download**. This will offload all recorded data onto the PC and display it in the graph.

**Product Quick Reference Card** 

#### **Device Maintenance**

#### **Battery Replacement**

Materials: Replacement Battery (TL-2150)

- Carefully unscrew the data logger encasement to separate the top from the bottom of the device.
- The battery is the purple cylinder inside the data logger.
- Gently slip out the old battery.
- Insert the new battery.
- Reassemble the data logger encasement by screwing the sections back together, ensuring that the fit is tightly sealed.

#### O-Rings

O-Ring maintenance is a key factor when properly caring for the Temp1000IS. 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.

Note: For more information refer to the Temp1000IS Intrinsic Safety user notice.

#### Recalibration

The Temp1000IS standard calibration is one point at 25°C.

#### Pricing:

Recalibration traceable to NIST \$70.00 Recalibration \$40.00

#### **Additional Services:**

Verification Point \$15.00 per point

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

To send the devices back, visit www.madgetech.com, select Services then RMA Process.