

Description	EggTemp
Temperature Sensor	Internal semiconductor
Temperature Range	0 °C to +60 °C (+32 °F to +140 °F)
Temperature Resolution	0.1 °C
Temperature Accuracy	±0.3 °C
Memory	32,767 Readings
Reading Rate	1 reading every 2 seconds up to 1 reading every 12 hours
LED Indicator	Red & Green
Required Interface Package	IFC202
Baud Rate	38,400
Typical Battery Life	1 year
Operating Environment	0 °C to +60 °C (+32 °F to +140 °F), 0 %RH to 100 %RH
Submergible	Yes
Material	Enclosure: HDPE Logger: Stainless Steel
Dimensions	2.25 in x 1.68 in dia. (57.15 mm x 42.67 mm)
Weight	2.02 oz (60 g)
Approvals	-

# **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 60 °C (140 °F).

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

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# **Product User Guide**

**EggTemp** 



**EggTemp**Egg Temperature Data Logger



EggTemp Product User Guide

#### **Product Notes**

#### **Getting Started**

The EggTemp is designed to thermally respond to an environment the same way a real egg does, simulating the experience of the actual product.

To start the data logger, unscrew the enclosure to access the data logger. The communication port is located on the end of the data logger. Tighten the enclosure to ensure a waterproof seal.

#### **LEDs**

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

#### **Alarm Settings**

To change the settings for the temperature alarm:

- Select **Alarm Settings** from the **Device menu** in the MadgeTech software. A window will appear allowing the customer to set the high and low temperature alarms.
- Press Change to edit the values.
- Check **Enable Alarm Settings** to enable the feature. The values can be entered in the field manually or by using the scroll bars.
- Click Save to save the changes. To clear an active alarm, press Clear Alarm.

# **O-Rings**

O-ring maintenance is a key factor when properly caring for the EggTemp. 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.

- USB-1 or USB-101

Install the USB drivers from the USB Software Stick provided in the kit, then plug the USB cable into the computer and the serial cable into the serial port.

#### Installing the software

Download the MadgeTech4 Software at www.madgetech.com/software-download.Follow the instructions provided in the Wizard.

## Connecting the data logger

- Once the software is installed and running, plug the interface cable into the data logger.
- Click the Communication Menu, then Auto Configure Port.
- After a moment, a box will appear stating that a device has been found.
- Click OK. The Device Status box will appear. Click OK.

- At this point, communications have been configured for your logger. These settings can be found under the **Communication Menu**.

Note: For additional installation instructions refer to your "Data Logger & Software Operating Manual".

# **Device Operation**

## Starting the data logger

- Click Device Menu then Start Device.
- Choose the desired start method.
- Choose the start parameters by selecting a **Reading Rate** suitable for your application.
- Enter in any other desired parameters and click Start.
- A box will appear stating the data logger has been started. Click OK.
- 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 data logger to the interface cable.
- Click the **Device Menu** then **Read Device Data**. This will offload all recorded data onto the PC.

#### **Device Maintenance**

#### **Battery Replacement**

Materials: Replacement Battery (SR1154W)

- Remove the data logger from the egg enclosure
- Unscrew the knurled endcap on the data logger
- Tip the batteries (enclosed in a plastic sleeve) out of the enclosure tube.
- Use a small, dull, non-metallic tool (e.g. pen cap) to push the batteries out of the sleeve.
- Press the new batteries into the sleeve negative (-) end first.
- Place the sleeved batteries in the enclosure tube positive (+) end first.
- Screw the knurled cap back in place.

#### Recalibration

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

Call for custom calibration options to accommodate specific application needs.