Product User Guide

EggTemp-RH

Description	EggTemp-RH
Temperature Sensor	Internal semiconductor
Temperature Range	0 °C to +60 °C (+32 °F to +140 °F)
Temperature Resolution	0.1 °C
Temperature Accuracy	±0.5 °C
Humidity Sensor	Internal semiconductor
Humidity Range	0 %RH to 95 %RH
Humidity Resolution	0.5 %RH
Humidity Accuracy	±3.0 %RH
Memory	16,383/channel
Sample Rate	2 seconds up to 12 hours
RH Units	%RH, dew pt., water vapor concentration (mg/ml)
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 95 %RH (non-condensing)
Submergible	No
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.

EggTemp-RH

Egg Temperature and Humidity Data Logger

DOC12000035-00 REV 10 2015.03.13

Product Notes

The EggTemp-RH consists of a temperature and humidity data logger inside an egg shaped enclosure to simulate the humidity and temperature affects of a real egg.

LEDs

Once started, the green LED will flash every two seconds to indicate that the device is running. The red LED will flash in two 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-RH. 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 Stick provided in the kit, then plug the USB cable into the computer and the serial cable into the serial port.

Installing the software

Dowload the MadgeTech 4 Software from the website. Follow the instructions provided in the Wizard to complete download.

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-RH standard calibration is one point at 25 °C and two points at 25 %RH and 75 %RH.