Cryo-Temp

Part Number	Cryo-Temp
Temperature Sensor	Thermistor
Temperature Range	−86 to +35°C
Temperature Resolution	0.1°C
Calibrated Accuracy	±1.0°C
Memory	32,767
Sample Rate	5 seconds up to 30 minutes
LED Indicator	Red, Green & Yellow
Manual Start	Yes
Required Interface Package	IFC300
Baud Rate	38,400
Typical Battery Life	2 years @ +25°C, 1 year at -80°C
Operating Environment	-86 to +35°C, 0 to 100%RH
Submergible	Splash Resistant (IP65)
Material	ABS plastic
Dimensions	3.3" x 2.1" x 0.4" (83mm x 54mm x 11mm)
Approvals	CE

Cryo-Temp
Ultra Low Temperature Data Logger

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℃ (176°F).

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

Product Notes

Manual Start

To start the data logger with the **Manual Start** option, use the magnetic wand provided (*in the IFC300*) to touch the start/mark switch. (*manual start is defaulted to a 10 minute reading rate*) The reading rate can be modified in the MadgeTech 4 Software. Connect the data logger, touch the wand to the start/mark switch, the green LED (*OK*) will blink 5 times followed by the yellow LED (*WARN*) and the red LED (*ALARM*), indicating the device is recording. The logger must be manually stopped through the MadgeTech 4 software.

Marking Feature

A date and time stamp may be placed in the recorded data, by touching the magnetic wand to the start/mark switch. The marking feature may be configured to clear the alarm and warn indicators, while the logger is still active.

To start the device, hold the magnetic wand over the start/mark switch. (Also indicated below)

Submergibility

The Cryo-Temp is splash resistant, rated IP65.

LEDs

Green: Blinks to indicate safe conditions during acquisition.
Yellow: Blinks to indicate warning limits have been exceeded.
Red: Blinks to indicate alarm criteria (*limits/delay*) have been exceeded

Close-up of the start/mark switch

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 to set the high and low temperature alarms and warning alarms.
- Press **Change** to edit the values.
- Check **Enable Alarm Settings** to enable the feature and check each high and low, warn and alarm box to activate it. 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 or warn, press the **Clear Alarm** or **Clear Warn** button.
- To set an alarm delay, enter the duration of time into the **Alarm Delay** box in which the readings can be outside of the alarm parameters.

Set Password

To password protect the device so that others cannot start, stop or reset the device;
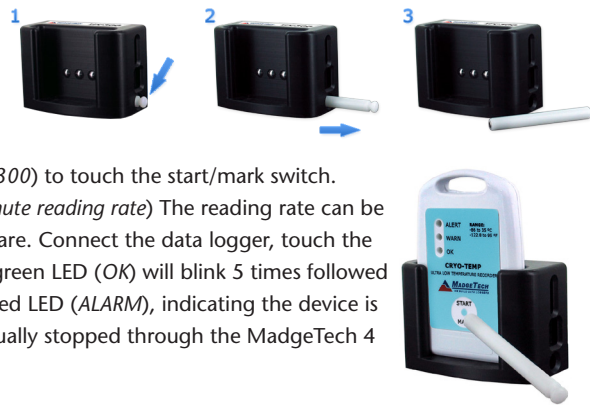
- Click Identify Device and Read Status, then select the Device Detail Tab.
- Choose Set Password.
- Enter and confirm the password and click OK

Installation Guide

Installing the Interface cable

- IFC300

  Refer to the "Quick Start Guide" included in the package.

Installing the software

Insert the MadgeTech4 Software Flash Drive 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 Installation Wizard. The Software 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 docking station.
- Place the Cryo-Temp data logger into the IFC300 dock.
- In the MadgeTech 4 software the Cryo-Temp will automatically appear under **Connected Devices**.

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 Reading Rate suitable for your application.
- Enter in any other desired parameters and click **Start**.
- When the device is succesfully started, the status will display **Running**.
- Remove the data logger from the IFC300 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.

Downloading data from a data logger

- Place the data logger into the IFC300 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 in the Graph.

Device Maintenance

Battery Replacement

The Cryo-Temp must be returned to the factory for battery replacement.

Recalibration

The Cryo-Temp standard calibration is two points at -80°C and 25°C.

Pricing:

Recalibration traceable to NIST	$70.00
Recalibration	$40.00

Additional Services:

Battery Replacement	$15.00

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.