

CryoTemp

Ultra Low Temperature
Data Logger



PRODUCT USER GUIDE

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Product Overview

The CryoTemp data logger is designed for use in ultra-low operating temperatures for processes such as monitoring blood plasma, vaccines, pharmaceuticals, frozen foods and shipping containers. The CryoTemp can record temperatures as low as -86 °C (-122 °F). This standalone device does not require any additional probes. The enclosure is designed with a built-in handle for easy attachment and is IP64 splash resistant.

Installation Guide

Installing the Software

The Software can be downloaded from the MadgeTech website at madgetech.com. Follow the instructions provided in the Installation Wizard.

Installing the Docking Station

IFC300 (sold separately) — Connect the device into a USB port with the interface cable and install the drivers.

Ordering Information

- 900038-00 — CryoTemp
- 900315-00 — IFC300

Device Operation

Connecting and Starting the Data Logger

1. Once the software and USB drivers are installed, plug the USB cable into the docking station.
2. Connect the other end of the USB cable into an open USB port on the computer.
3. Place the data logger into the docking station.
4. The data logger will automatically appear under **Connected Devices** within the software.
5. 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.*)
6. The status of the device will change to **Running**, **Waiting to Start** or **Waiting to Manual Start**, depending upon your start method.
7. 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, unless user selectable memory wrap is enabled. At this point the device cannot be restarted until it has been re-armed by the computer.*

Downloading Data from a Data Logger

1. Connect the data logger to the computer with the interface cable.
2. Highlight the data logger in the **Connected Devices** list. Click **Stop** on the menu bar.
3. Once the data logger is stopped, with the logger highlighted, click **Download**.
4. Downloading will offload and save all the recorded data to the PC.

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Device Operation (cont'd)

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.



Set Password

To password protect the device so that others cannot start, stop or reset the device:




1. In the **Connected Devices** panel, click the device desired.
2. On the **Device** Tab, in the **Information** Group, click **Properties**. Or, right-click the device and select **Properties** in the context menu.
3. On the **General** Tab, click **Set Password**.
4. Enter and confirm the password in the box that appears, then select **OK**.

Alarm Settings

To change the settings for the alarm:

1. In the **Connected Devices** panel, select the intended device to change the alarm settings.
2. On the **Device** tab, in the **Information** group, click **Properties**. Users can also right-click on the device and select **Properties** in the context menu.
3. A window will appear allowing to set the high and low alarms and warning alarms.
4. Press **Change** to edit the values.
5. 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.
6. Click **Save** to save the changes. To clear an active alarm or warn, press the **Clear Alarm** or **Clear Warn** button.
7. 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.

LED Indicators

	Green LED blinks to indicate safe conditions during logging
	Yellow LED blinks to indicate warn limits have been exceeded
	Red LED blinks to indicate alarm criteria (limits/delay) have been exceeded

Device Maintenance

Battery Replacement and Calibration

When battery life is expended or device calibration is required, the CryoTemp data logger must be returned to MadgeTech to participate in the product exchange program. Please call a MadgeTech sales representative for details.