

## Specifications

Part Number	CTL2000	
Internal Channel Temperature Sensor	Semiconductor	
Internal Channel Temperature Resolution	0.05 °C	
Internal Channel Temperature Accuracy	±0.5 °C	
Remote Channel Temperature Sensor	Thermocouple Type K	
Remote Channel Temperature Range	-260 to +260 °C	
Remote Channel Temperature Resolution	0.1 °C	
Remote Channel Temperature Accuracy	±0.5 °C	
Cold Jct. Compensation	Automatic	
Channels	8 internal & 8 remote	
Memory	500,000/channel	
Sample Rate	4 HZ up to 24 hours	
LED Indicator	Red and Green	
Required Interface Package	IFC200	
Baud Rate	115,200	
Typical Battery Life	2 years typical	
Operating Environment	-20 to +60 °C, *See table below	
Material	Enclosure:Black Anodized Aluminum	Hook: Stainless Steel
Dimensions	7.7" x 5.9" x 1.9" (196mm x 150mm x 48mm)	

\*

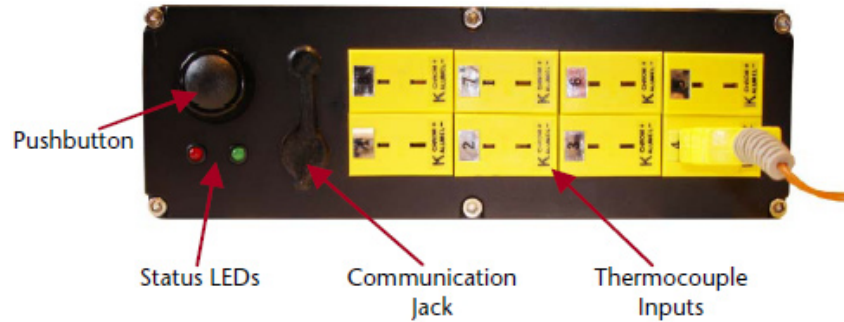
Temperature	Maximum Time
75 °C	23 min
100 °C	17 min
125 °C	14 min



**CTL2000**  
Carcass Temperature Logger

Specifications subject to change. See MadgeTech's terms and conditions at [www.madgetech.com](http://www.madgetech.com).

## Wiring the Data Logger



## Removing the Hook



The CTL2000's stainless steel hook is removable.

### To remove the hook:

- Loosen the jam nut at the base of the hook. This can be done using a 7/16" wrench or adjustable pliers.
- Unscrew the hook

## Product Notes

### Manual Start

To enable the Manual Start method, start the device (see Device Operation), and select the Manual Start method. To activate the Manual Start, hold the recessed push button down for 10 seconds. The green LED will begin to blink rapidly for 10 seconds, which signifies the push-button start has been activated. The green LED will continue to blink every 5 seconds.

### LEDs

Once started, the LED will flash at the selected reading rate to indicate that the device is running.

The following settings may be programmed into the device by selecting **Identify Device** and **Read Status** from the Device menu, and then clicking on the **Device Detail** tab.

### Set Password

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

- Choose **Set Password**.
- Enter and confirm the password and click **OK**.

### Thermocouple Type

To change the thermocouple type in the MadgeTech software;

- Select **Thermocouple Type**.
- Click on the **Change** button in the Thermocouple Type window.
- Select the correct thermocouple type from the drop down list.
- Click on the **Save** button and then Click **OK**.

*Please note that the same thermocouple type must be used on all of the channels.*

### Enabled Channels

By default, all channels are enabled. To disable channels;

- Select **Enabled Channels**, then **Change**. Uncheck boxes are disabled, checked boxes are enabled.
- Click **Save** to save the changes. Disabling channels increases the memory capacity of the enabled channels.

### Channel Naming

Up to a 10-character channel name can be programmed into the data logger for each channel. To program or change a channel name;

- Select **Channel Names**, then **Change**.
- Type in the channel name(s) and click **Save**, to save the changes.

## Installation Guide

### Installing the Interface cable

- IFC200
- Refer to the "Quick Start Guide" included in the package.

### Installing the software

Insert the Software CD in the CD-ROM Drive. If the autorun does not appear, locate the drive on the computer and double click on **Autorun.exe**. 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 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 the **Device Menu** then **Start Device**.
- **A box will appear stating "This command will clear all readings and reset the device. Are you sure you want to continue?"**.
  - Click Yes to continue.
- **Select a Start Method from the following:**
  - Start Now, to start the device immediately
  - Delay Start, in which the device will start at a future date and time
  - Manual Start, to start the device in the field, using the push-button
- **Select a Stop Method from the following:**
  - Manual, in which the device is reconnected to the PC, stopped, then downloaded
  - Timed, in which the device will stop recording at a future date and time
  - Readings, in which the device will stop recording after a certain number of readings
- **Start Parameters**
  - Up to a 6-character identification code may be programmed into the Device ID Field
  - Up to a 16-character identification code may be programmed into the Extended ID field
- **Select the desired reading rate from the drop down box**, which is suitable for the application. The reading rate is how often the device will take a measurement and record it to memory. The log time box will change, to signify how long the device will record for, before the memory becomes full.

### 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.
- Click the File Menu then Save, to save the data set for later analysis and record keeping

**Device Maintenance**

**Battery Replacement**

**Materials:**

- 6/64" Hex Key
- 6 AA cell batteries

**Procedure:**

- Using a 9/64" hex key, remove the 8 bolts from the front of the logger.
- Remove the cover from the logger to expose the circuit board and batteries.
- Remove and clean the gasket and mating surfaces.
- Remove the old batteries and replace with (6) new AA cells. (LEDs on faceplate should blink immediately after installation)
- Replace the gasket and the cover.
- Screw in each of the bolts and tighten until finger-tight.
- Partially tighten each bolt with the 9/64" hex key, then go back and tighten each bolt until the cover sits flush against the logger body

**Battery Warning**

*DISCARD USED BATTERY PROMPTLY. KEEP OUT OF REACH OF CHILDREN. DO NOT DISPOSE OF IN FIRE, RECHARGE, PUT IN BACKWARDS, DISASSEMBLE, OR MIX WITH OTHER BATTERY TYPES. MAY EXPLODE, FLAME, OR LEAK AND CAUSE PERSONAL INJURY.*

**Recalibration**

**Pricing:**

- Recalibration traceable to NIST ... \$60.00
- Recalibration ..... \$40.00

**Additional Services:**

- As Found Data ..... \$15.00 per parameter/channel
- Verification Point ..... \$15.00 per point
- Channel (1st) ..... \$30.00 at 25°C  
\$45.00 at custom point
- Additional Channels ..... \$3.00 at 25°C  
\$4.50 at custom point

*Prices and specifications subject to change. See MadgeTech's terms and conditions at [www.madgetech.com](http://www.madgetech.com)*

*To send the devices back, visit [www.madgetech.com](http://www.madgetech.com), select Services then RMA Process.*