

Part Number	QuadTemp2000	OctTemp2000
Internal Channel Temperature Sensor	Semiconductor	
Internal Channel Temperature Resolution	0.05 °C (0.09 °F)	
Internal Channel Accuracy	±0.5°C (±0.9 °F)	
Remote Channel Temperature Sensor Range, Resolution & Accuracy	*See Table for Details	
Cold Jct. Compensation	Automatic	
Channels	4 internal & 4 remote	8 internal & 8 remote
Memory	500,000/channel	500,000/channel
Reading Rate	4 Hz up to 24 hours	
Required Interface Package	IFC200 (Recommended) or IFC110	
Baud Rate	115,200	
Typical Battery Life	18 month battery life with display off. 3 months typical with continuous display use.	
Operating Environment	-20 °C to +60 °C (-4 °F to +140 °F), 0 %RH to 95 %RH (non–condensing)	
Material	Anodized aluminum	
Dimensions	7.24 in x 2.7 in x 1.14 in (183 mm x 68 mm x 29 mm)	7.24 in x 2.7 in x 1.39 in (183 mm x 68 mm x 36 mm)
Approvals	CE	

\* Remote Channel Range, Resolution & Accuracy

Thermocouple	Range (°C)	Resolution	Accuracy
J	-210 to +760	0.1 °C	±0.5 °C
K	-270 to +1370	0.1 °C	±0.5 °C
T	-270 to +400	0.1 °C	±0.5 °C
E	-270 to +980	0.1 °C	±0.5 °C
R	-50 to +1760	0.5 °C	<u>+</u> 2.0 °C
S	-50 to +1760	0.5 °C	<u>+</u> 2.0 °C
В	+50 to +1820	0.5 °C	<u>+</u> 2.0 °C
N	-270 to +1300	0.1 °C	±0.5 °C

#### **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 100  $^{\circ}$ C (212  $^{\circ}$ F).

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

Advanced Technical Services Ltd: Ph +64 3 3774793 Fax +64 3 3774794 77 Brisbane Street Christchurch New Zealand

# **Product Information Card**



# QuadTemp2000 and OctTemp2000



\*Thermocouple Plugs/Probes Sold Separately



\*Thermocouple Plugs/Probes Sold Separately

# QuadTemp2000

4-Channel Thermocouple Based Temperature Recorder with Display

# OctTemp2000

8-Channel Thermocouple Based Temperature Reconfigure with Display



#### **Product Information Card**

#### **Product Notes**

Please refer to the QuadTemp2000 Product Manual or OctTemp2000 Product Manual for full details on how to enable and disable thermocouple channels, name thermocouple channels and configure the LCD and more.

#### **Programming Thermocouple Type**

To change the thermocouple type in the MadgeTech software:

- In the Connected Devices panel, click the device desired.
- On the **Device** Tab, in the **Information** Group, click **Properties**. Or, right-click the device and select **Properties** in the context menu.
- On the **General** Tab, change the **Thermocouple type** in the drop down menu.
- Apply these changes, there will be a prompt to reset the device, select **yes**. Please note that the same thermocouple type must be used on all of the channels.

#### **LED Function**

**Green LED** - Blinks to indicate that the device is armed and/or running. Blinks when confirming or scrolling through keypad options.

**Red LED** - Blinks to indicate low battery or low memory.

**Blue LED on Thermocouple channels** - Blinks at the reading rate (but no more than once every other second).

#### **Set Password**

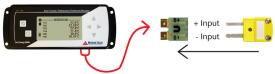
To password protect the device so that others cannot start, stop or reset the device;

- In the Connected Devices panel, click the device desired.
- On the **Device** Tab, in the **Information** Group, click **Properties**. Or, right-click the device and select **Properties** in the context menu.
- On the General Tab, click Set Password.
- Enter and confirm the password in the box that appears, then select **OK**. Note: For additional instructions refer to QuadTemp2000/OctTemp2000 manual or the "Data Logger & Software Operating Manual".

### Wiring the Data Logger

#### Wiring Diagrams

The SMP connections allow the user to insert subminiature thermocouple plugs into the connectors on the device. The diagram below shows how to connect the individual thermocouples for each of the devices.



Warning: Note the polarity instructions. Do not attach wires to the wrong terminals.

#### **Thermocouple Channel Numbers**

TC5	TC6	TC7	TC8
TC1	TC2	TC3	TC4

#### **Installation Guide**

#### Installing the Interface cable

- IFC200

Insert the Software USB Stick 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 Wizard.

## **Device Operation**

#### Connecting and Starting the data logger

- Once the software is installed and running, plug the interface cable into the data logger.
- Connect the USB end of the interface cable into an open USB port on the computer.
- The device will appear in the Connected Devices list, highlight the desired data logger.
- 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.)
- The status of the device will change to "Running", "Waiting to Start" or "Waiting to Manual Start", depending upon your start method.
- 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 logger to the interface cable.
- Highlight the data logger in the Connected Devices list. Click "Stop" on the menu bar.
- Once the data logger is stopped, with the logger highlighted, click "**Download**". You will be prompted to name your report.
- Downloading will offload and save all the recorded data to the PC.

#### **Device Maintenance**

#### **Battery Replacement**

Materials: 3/32" HEX Driver (Allen Key) and a Replacement Battery (U9VL-J)

- Remove the back cover from the device by unscrewing the two screws.
- Remove the battery from its compartment and unsnap it from the connector.
- Snap the new battery into the terminals and verify it is secure.
- Replace the cover taking care not to pinch the wires. Screw the enclosure back together. *Note: Be sure not to over tighten the screws or strip the threads.*

#### Recalibration

The QuadTemp2000 or OctTemp2000 standard calibration is one point at 25 °C and 50 °C for the internal temperature sensor and 0 mVs for the thermocouple channels.