Description	QuadThermoVault	OctThermoVault
Internal Channel Temperature Sensor	Semiconductor	
Internal Channel Temperature Range	-20 °C to +60 °C (-4 °F to +140 °F)	
Internal Channel Temperature Resolution	0.01 °C (0.018 °F)	
Internal Channel Calibrated Accuracy	±0.5 °C (0 °C to 50 °C)	
Remote Channel Temperature Sensor	Thermocouple Types J, K, T, E, R, S, B, N	
Remote Channel Temperature Range, Resolution & Accuracy	*See Table Below	
Cold Jct. Compensation	Automatic	
Channels	4 internal & 4 remote	8 internal & 8 remote
Memory	261,888 Readings per channel (QuadTCTempV2)	130,944 Readings per channel (OctTCTempV2)
Reading Rate	4 Hz up to 24 hours	
Required Interface Package	IFC200	
Baud Rate	115,200	
Typical Battery Life	18 months typical	
Operating Environment	**See table on other side for details, 0 %RH to 95 %RH (non-condensing)	
Material	304 stainless steel w/ PTFE insulation	
Dimensions	12.3 in x 6.65 in x 2.45 in (312 mm x 168 mm x 62 mm) *[Includes handles, brackets and front enclosure latches]* 9.1 in x 5.9 in x 2.45 in (231 mm x 149 mm x 62 mm) *[Enclosure case only. Excludes handles, brackets and latches]*	
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	±2.0 °C
S	-50 to +1760	0.5 °C	±2.0 °C
B	+50 to +1820	0.5 °C	±2.0 °C
N	-270 to +1300	0.1 °C	±0.5 °C

Battery Warning

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.

Specifications subject to change.
See MadgeTech's terms and conditions at madgetech.com

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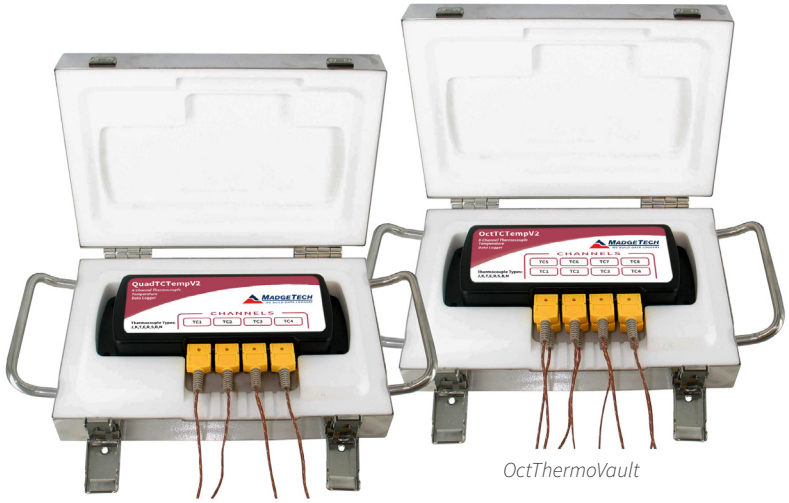
Product User Guide

QuadThermoVault and OctThermoVault



OctThermoVault

QuadThermoVault

QuadThermoVault
4-Channel Oven Temperature Data Logger

OctThermoVault
8-Channel Oven Temperature Data Logger

To view the full MadgeTech product line, visit our website at **madgetech.com**.

Product Notes

Operating Environment

The QuadThermoVault is an oven temperature recorder that consists of a QuadTCTempV2 inside a thermal enclosure. The OctThermoVault is the same, only with an 8-channel OctTCTempV2 inside. The thermal enclosure acts as a buffer and allows the device to be placed in higher operating environments for certain durations of time. The chart outlines the maximum temperature and time duration to which the device can be exposed.

**Operating Environment: Maximum Exposure Time

Ambient Temperature	Quad/Oct Channel
100 °C (212 °F)	110 min
150 °C (302 °F)	62 min
200 °C (392 °F)	45 min
250 °C (482 °F)	35 min
260 °C (500 °F)	33 min
300 °C (572 °F)	30 min
350 °C (662 °F)	25 min

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.

Installation Guide

Installing the Interface cable

- IFC200

  Insert the device into a USB port. The drivers will install automatically.

Installing the software

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

Note: Windows XP SP3 or later and MadgeTech 4 software, version 4.2.12.0 or later

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)

- Open the Quad/OctThermoVault and remove the data logger.
- Remove the battery cover from the bottom of the device by unscrewing the two screws.
- Pull the tab to remove the battery from its compartment and unsnap it from the connector.
- Snap the new battery into the terminals and place it back into the compartment.
- Replace the cover taking care not to pinch the wires. Screw the cover back into place.

Recalibration

MadgeTech recommends annual re-calibrations.

Additional Services:
Custom calibration and verification point options available, please call for pricing.

Call for custom calibration options to accommodate specific application needs.
Prices and specifications subject to change. See MadgeTech's terms and conditions at ***madgetech.com***
To send devices to MadgeTech for calibration, service or repair, please use the MadgeTech RMA Process by visiting ***madgetech.com****.*