

# QUADTHERMOVAULT

## 4 CHANNEL OVEN TEMPERATURE DATA LOGGER

### Features

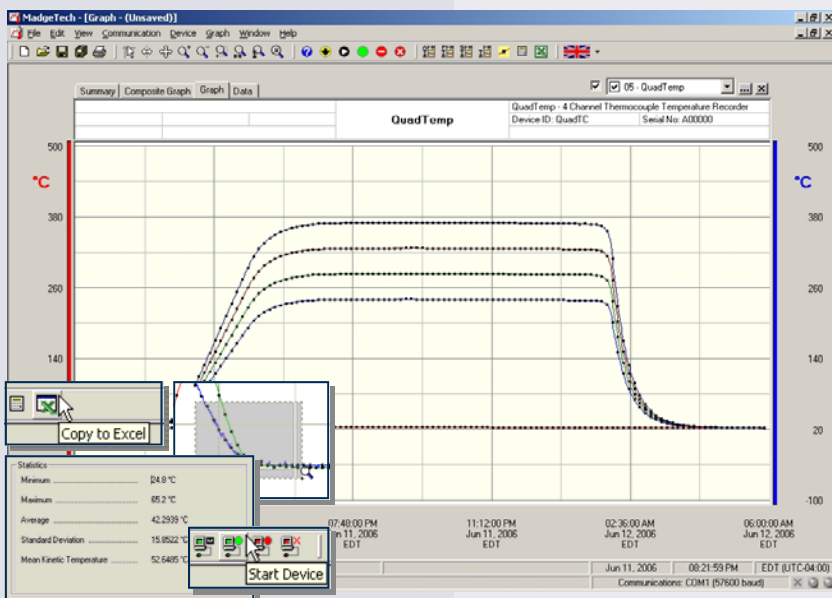
- N.I.S.T. traceable
- Programmable start time
- Reusable
- Convenient size
- User-friendly
- Automatic cold junction compensation
- Automatic thermocouple linearization
- CE Compliant

### Applications

- Extreme temperature monitoring
- Oven profiling
- Powder coating cure ovens
- Wet coating cure ovens
- Batch ovens
- Conveyor ovens
- Implement HACCP programs



Oven temperature profiling can help ensure that a quality product is consistently produced. Profiling enables users to optimize their process, prove process control and make corrections to a process when required. The QuadThermoVault is a four channel thermally insulated, battery powered, oven temperature recorder able to withstand extreme temperatures. It can withstand oven temperatures of up to 662°F for up to 25 minutes when properly sealed. Its stainless steel enclosure and thermal properties lend itself to be the ideal temperature recording device for applications such as powder coating cure ovens, wet coating cure ovens, batch ovens and conveyor ovens. The external thermocouple probes provide accurate temperature measurements, with fast response times. Our user-friendly software easily downloads the data to a computer, where the readings may be displayed in degrees Celsius, degrees Fahrenheit, Kelvin or Rankine. The software allows the user to view all data points or a range of data points and a summary of the data being viewed for calculations such as Mean Kinetic Temperature (MKT). If additional analysis of the data needs to be performed, the data can be easily exported to Excel® by simply clicking a button.



### MadgeTech Data Recorder Software

displays temperature data in an easy to use graph.

The Windows®-based software package allows the user to effortlessly collect, display and analyze data. A variety of powerful tools allow you to examine, export, and print professional looking data with just a click of the mouse.

Click [MadgeTech Software](#) for more information or to download the software.

# QUADTHERMOVAULT SPECIFICATIONS\*

## Internal Channel

**Temperature Range:** -20°C to +60°C

**Temperature Resolution:** 0.1°C

**Calibrated Accuracy:** ±0.5°C (0 to +50°C)

## 4 Remote Channels

**Thermocouple Types:** J, K, T, E, R, S, B, N

**Thermocouple connection:** Female subminiature (SMP)

**Cold Junction Compensation:** Automatic, based on internal channel

Maximum Exposure Time	
Ambient Temperature	Maximum Duration in Minutes
100 °C (212 °F)	110
150 °C (302 °F)	62
200 °C (392 °F)	45
250 °C (482 °F)	35
260 °C (500 °F)	33
300 °C (572 °F)	30
350 °C (662 °F)	25

**Start Modes:** Software programmable immediate start or delay start up to six months in advance

**Real Time Recording:** May be used with PC to monitor and record data in real time

**Memory:** 26,214 readings per channel

**Reading Rate:** 1 reading every 5 seconds to 1 every 12 hours

**Calibration:** Digital calibration through software

**Calibration Date:** Automatically recorded within device

**Battery Type:** 9V lithium or alkaline battery included, **user replaceable**

**Battery Life:** 1 year typical

**Data Format:** Date and time stamped °C, °F, °K, °R; μV, mV, V

**Time Accuracy:** ±1 minute/month (at 20°C, RS232 port not in use)

**Computer Interface:** PC serial or USB (Interface cable required); 2,400 baud

**Software:** Windows 95/98/ME/NT/2000/XP based software

**Operating Environment:** See table for temperature, 0 to 95%RH non-condensing

**Internal QuadTemp:** -20 to +80°C, 0 to 95%RH non-condensing

**QuadThermoVault System:** -20 to +400°C, 0 to 95%RH non-condensing

**Dimensions:** 6.5" x 7.9" x 3.2" (165mm x 200mm x 82mm)

**Weight:** 12.5 lb (5.7 kg)

**Approvals:** CE

BATTERY WARNING: DISCARD USED BATTERY PROMPTLY. 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.

## SOFTWARE FEATURES

**Multiple Graphs:** Simultaneously analyze data from several units or deployments; easily switch to a single data series

**Graphical Cursor:** One click displays readings by time, value, parameter or sample number

**Data Table:** Instantly access tabular view for detailed dates, times, values, and annotations

**Scaling Options:** Autoscale function fits data to the screen, or allows user to manually enter their own values

**Formatting Options:** Change colors, line styles, plotting options, show or hide channels quickly

**Statistics:** Calculate averages, min, max, standard deviation, and mean kinetic temperature with the touch of a button

**Export Data:** Export data in a variety of common formats, or switch to Excel® with a single click

**Calibration:** Automatically calculate and store calibration parameters

**Logger Configuration:** Easy set up and launch of data loggers with immediate or delayed start, preferred sample rate, and device ID

**Communications:** Automatically sets up communications port, or lets user select configuration

\*SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE. SPECIFIC WARRANTY AND REMEDY LIMITATIONS APPLY. CALL 1-603-456-2011 OR GO TO WWW.MADGETECH.COM FOR DETAILS.

## ORDERING INFORMATION

Model	Description	Price (U.S.)
QUADTHERMOVAULT	4-Channel Oven Temperature Recorder	\$1,499.00
IFC110	Software, manual and RS232 interface cable	\$99.00
IFC200	Software, manual and USB interface cable	\$119.00
NIST	N.I.S.T. Calibration Certificate	Call for Pricing
U9VL-J	Replacement battery for QuadThermoVault	\$15.00

### ASK ABOUT OUR OTHER DATA RECORDERS

Temperature	Pulse/Event/State
Humidity	Low Level Current
Pressure	Low Level Voltage
pH	RF Transmitters
Level	Intrinsically Safe
Shock	Spectral Vibration

For Quantity Discounts call 603-456-2011 or email [sales@madgetech.com](mailto:sales@madgetech.com)

