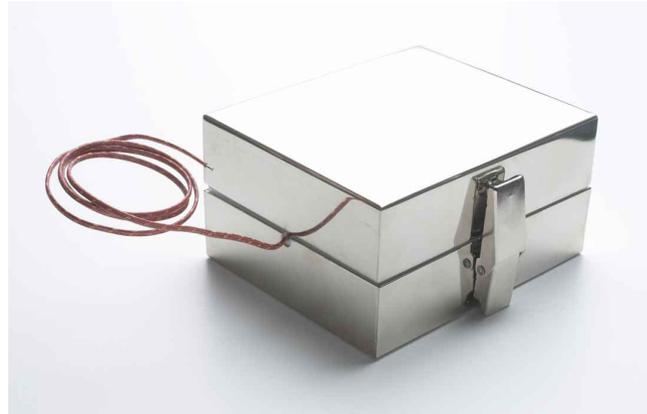


FEATURES

- ❖ N.I.S.T. traceable
- ❖ Real-time operation
- ❖ Low cost
- ❖ Programmable start time
- ❖ Reusable
- ❖ Miniature size
- ❖ User-friendly
- ❖ Automatic cold junction compensation
- ❖ Automatic thermocouple linearization

APPLICATIONS

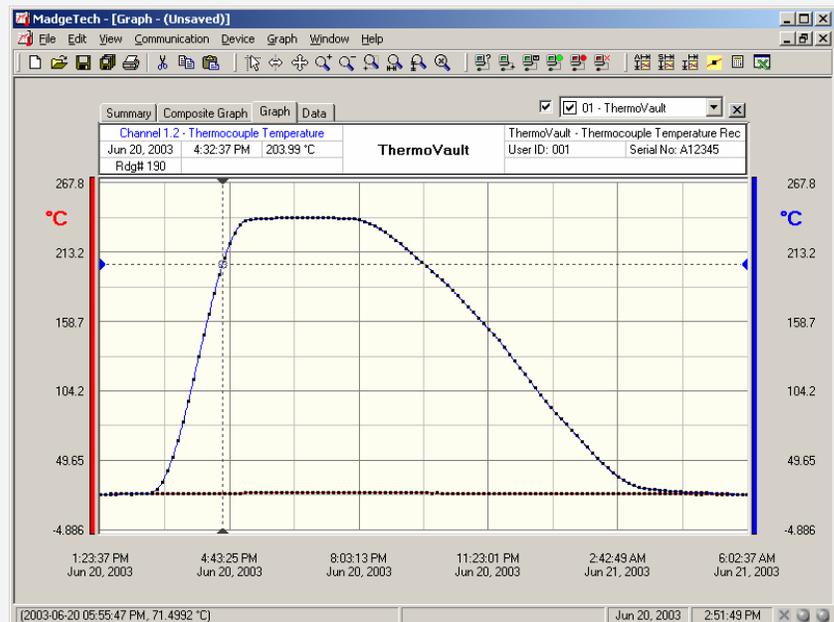
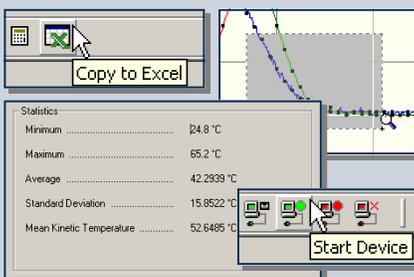
- ❖ Extreme temperature monitoring
- ❖ Oven profiling
- ❖ Environmental studies
- ❖ Replace costly strip chart recorders
- ❖ Implement HACCP programs



The THERMOVAULT is a thermally insulated, battery powered, stand alone, thermocouple based temperature recorder used for thermal profiling of ovens. The device records temperature data inside an oven to be later downloaded from to the user's PC. This is an all-in-one compact, portable, easy to use device that will measure and record up to 16,383 measurements per channel. The THERMOVAULT can withstand an oven temperature of up to 572 °F for up to 15 minutes when properly sealed. The devices real time clock ensures that all data is time and date stamped. The storage medium is non-volatile solid state memory, providing maximum data security even if the battery becomes discharged. The device can be started and stopped directly from your computer and its small size allows it to fit almost anywhere. The THERMOVAULT makes data retrieval quick and easy. Simply plug it into an empty com port and our user-friendly software does the rest.

SOFTWARE

MadgeTech's Data Recorder Software is an easy to use Windows-based software package that 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.



THERMOVAULT SPECIFICATIONS

Internal Channel
Temperature Range: -40 °C to +80 °C
Temperature Resolution: 0.1 °C
Calibrated Accuracy: ±0.5 °C(0 to +50°C)

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)	52
150 °C (302 °F)	30
200 °C (392 °F)	22
250 °C (482 °F)	17
260 °C (500 °F)	16
300 °C (572 °F)	15
350 °C (662 °F)	12
400 °C (752 °F)	10

Start Time: Software programmable start time and date. Up to six months in advance
Real Time Recording: May be used with PC to monitor and record data in real time
Memory: 16,383 readings per channel
Reading Interval: 1 reading every 2 seconds to 1 every 12 hours
Calibration: Digital calibration through software
Calibration Date: Automatically recorded within device
Power: 3.6V lithium battery included
User Replaceable Battery: 1 year typical (1 minute reading rate at 25 °C)
Data Format: Date and time stamped °C, °F, °K, °R
Time Accuracy: ±1 minute/month (at 20 °C, RS232 port not in use)
Computer Interface: PC serial or RS232C COM (Interface cable required); 2,400 baud
Software: Windows 95/98/ME/NT/2000/XP based software
Operating Environment: -40 °C to +80 °C, 0 to 95 %RH non-condensing
Dimensions: 6.0" x 4.0" x 3.0" (152mm x 102mm x 76mm)
Weight: 32 oz (910 g)

THERMOVAULT SOFTWARE FEATURES

Multiple Graphs: Simultaneously analyze data from several units or deployments; easily switch to a single data series
Real-Time Recording: Collect and display data in real-time while continuing to log
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 in an instant
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: Fully digital calibration function automatically stores parameters in device
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 set configuration
Printing: Automatically print graphical or tabular data

**As part of our commitment to continuous product improvement, MadgeTech reserves the right to change product specifications without notice.

ORDERING INFORMATION

Model	Description
THERMOVAULT	Oven Temperature Recorder
IFC101	Software, manual and 9-pin computer interface cable
N.I.S.T. Cert	N.I.S.T. Calibration Certificate

ASK ABOUT OUR OTHER DATA RECORDERS

Temperature	pH
Humidity	Level
Pressure	Shock/Vibration
Bridge/Strain	Submersible
Current	Intrinsically Safe
Pulse/Event	RF Transmitters
Voltage	Multi-parameter