

THERMOVault1000-FP

THERMAL BARRIER SYSTEM WITH TEMP1000FP

Features

- 304 Stainless Steel Enclosure
- Small 2.6" Diameter
- Submersible
- Withstands temperatures up to 350°C for 4.5 hours continuously

Applications

- Extreme temperature monitoring
- Food Processing
- Oven Monitoring
 - Convention Oven
 - Curing Ovens
 - Baking Ovens
 - Batch Ovens
 - Conveyor or Continuous Oven
 - Walk-in / Truck-in Ovens
- Dry Heat Sterilization
- Autoclave Validation
- Furnace/Kiln Profiling
- Geothermal down-hole temperature recording
- Chemical Processing



The ThermoVault1000-FP system includes a stainless steel thermal barrier and a Temp1000FP data logger. The durable enclosure can withstand temperatures up to 230°C when completely submerged and 350°C in dry heat applications (o-ring removed).

The device is easy to use, simply open the enclosure, insert the Temp1000FP, thread the probe through the end cap and latch it back onto the barrier body. The 10.8" flexible probe can be adjusted to measure hard to reach locations.



The ThermoVault1000-FP is built for use in applications that required extreme temperature monitoring, such as with furnace profiling, geothermal down-hole recording, and oven profiling.

THERMAL BARRIER SPECIFICATIONS*

Operating Environment: -200°C to +350°C
(230°C with O-Ring),
0 to 100% RH

IP Rating: IP68

Insulation Type: Dewar flask and PTFE

Access Port Thread: 1/4" NPT Female

Enclosure Material: 304 Stainless Steel

Dimensions: 9.3" x 2.6" dia.
236mm x 66mm dia.

Weight: 3.2lb

Ambient Temperature	Time In Air To Max Internal Temp Temp1000FP	Time In Liquid To Max Internal Temp Temp1000FP
100 °C	n/a	n/a
150 °C	n/a	n/a
200 °C	540 min	130 min
250 °C	390 min	120 min

For extended ranges, please contact MadgeTech.

300 °C	300 min	n/a
350 °C	270 min	n/a

See page 2 for Temp1000FP specifications.

TEMP1000FP SPECIFICATIONS*

Temperature Sensor: 100Ω Platinum RTD	Calibration: Digital calibration through software
Temperature Range: -40 to +150°C	Calibration Date: Automatically recorded within device
Probe Range: -50 to +260°C	Battery Type: 3.9V high-temperature lithium battery included, user replaceable
Temperature Resolution: 0.05°C	Battery Life: 1 year typical (1 minute reading rate @ 25°C)
Calibrated Accuracy: ±0.5°C	Data Format: Date and time stamped °C, °F, K, °R
Specified Accuracy Range: 100°C span between calibration points	Time Accuracy: ±1 minute/month at 20°C (RS232 cable not in use)
Start Modes: Software programmable immediate start or delay start, up to six months in advance	Computer Interface: PC serial or USB (Interface cable required); 2,400 baud
Real Time Recording: May be used with PC to monitor and record data in real time	Software: XP SP3/Vista/Windows 7
Memory: 32,767 readings	Operating Environment: -40 to +150°C, 0 to 100%RH, submersible to 150'
Reading Rate: 1 reading every 2 seconds to 1 every 12 hours	Dimensions (Body): 5.7" x 1.25" dia. (145mm x 32mm)
Lethality Equations: Sterilization Units and Pasteurization Units are available in software with the click of a button.	Dimensions (Probe): 10.8" x 0.125" dia. (275mm x 4mm)
	Enclosure: 303 stainless steel
	Weight: 11.3 oz (320 g)
	Approvals: CE

BATTERY WARNING: FIRE, EXPLOSION, AND SEVERE BURN HAZARD. DO NOT SHORT CIRCUIT, CHARGE, FORCE OVERDISCHARGE, DISASSEMBLE, CRUSH, PENETRATE OR INCINERATE. BATTERY MAY LEAK OR EXPLODE IF HEATED ABOVE 150 °C (302°F).

SOFTWARE FEATURES

Multiple Graphs: Simultaneously analyze data from several units or deployments; easily switch to a single data series	Statistics: Calculate averages, min, max, standard deviation, and mean kinetic temperature with the touch of a button
Real-Time Recording: Collect and display data in real-time while continuing to log	Export Data: Export data in a variety of common formats, or switch to Excel® with a single click
Graphical Cursor: One click displays readings by time, value, parameter or sample number	Calibration: Automatically calculate and store calibration parameters
Data Table: Instantly access tabular view for detailed dates, times, values, and annotations	Logger Configuration: Easy set up and launch of data loggers with immediate or delayed start, preferred sample rate, and device ID
Scaling Options: Autoscale function fits data to the screen, or allows user to manually enter their own values	Communications: Automatically sets up communications port, or lets user select configuration
Formatting Options: Change colors, line styles, plotting options, show or hide channels quickly	Printing: Automatically print graphical or tabular data

*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.)
THERMOVAULT1000-FP	Thermal Barrier System, includes enclosure and Temp1000FP	\$1599.00
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
3B5700	Replacement battery for Temp1000FP	\$99.00

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
LCD Display	



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