

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 0.05°C | Battery Type: 3.9V high-temperature lithium battery included, user replaceable |
| Calibrated Accuracy: ±0.5°C | Battery Life: 1 year typical (1 minute reading rate @ 25°C) |
| Specified Accuracy Range: 100°C span between calibration points | Data Format: Date and time stamped °C, °F, K, °R |
| Start Modes: Software programmable immediate start or delay start, up to six months in advance | Time Accuracy: ±1 minute/month at 20°C (RS232 cable not in use) |
| Real Time Recording: May be used with PC to monitor and record data in real time | Computer Interface: PC serial or USB (Interface cable required); 2,400 baud |
| Memory: 32,767 readings | Software: Windows 95/98/ME/NT/2000/XP/Vista based software |
| Reading Rate: 1 reading every 2 seconds to 1 every 12 hours | Operating Environment: -40 to +150°C, 0 to 100%RH, submersible to 150' |
| Lethality Equations: Sterilization Units and Pasteurization Units are available in software with the click of a button. | Dimensions (Body): 5.7" x 1.25" dia. (145mm x 32mm) |
| | 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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