

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.



THERMOVAULT1000 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. (236 mm x 66 mm dia.)

Weight: 3.2 lb

| 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 reverse side, (page 2) for Temp1000FP specifications.

TEMP1000FP SPECIFICATIONS*

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

| | |
|----------------------------------|--|
| Temperature Sensor: | 100Ω Platinum RTD |
| Temperature Range: | -40 °C to +150 °C |
| Probe Range: | -50 °C to +400 °C |
| Temperature Resolution: | 0.05 °C |
| Calibrated Accuracy: | ±0.5 °C |
| Specified Accuracy Range: | 100 °C span between calibration points |
| 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: | 32,767 readings |
| Reading Rate: | 1 reading every 2 seconds to 1 every 12 hours |
| Lethality Equations: | Sterilization Units and Pasteurization Units are available in software with the click of a button. |

| | |
|-------------------------------|---|
| Calibration: | Digital calibration through software |
| Calibration Date: | Automatically recorded within device |
| Battery Type: | 3.6V high-temperature lithium battery included, user replaceable |
| Battery Life: | 1 year typical (1 minute reading rate @ 25 °C) |
| Data Format: | Date and time stamped °C, °F, K, °R |
| Time Accuracy: | ±1 minute/month at 20 °C (RS232 cable not in use) |
| Computer Interface: | PC serial or USB (Interface cable required); 2,400 baud |
| Software: | XP SP3/Vista/Windows 7/Windows 8 |
| Operating Environment: | -40 °C to +150 °C, 0 to 100%RH, submersible to 150' |
| Dimensions (Body): | 5.7" x 1.25" dia. (145 mm x 32 mm) |
| Dimensions (Probe): | 10.8" x 0.125" dia. (275 mm x 4 mm) |
| 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).

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 | NIST Calibration Certificate | Call for Pricing |
| ER1425S | Replacement battery for Temp1000FP | \$50.00 |

ASK ABOUT OUR OTHER DATA LOGGERS

- Temperature
- Humidity
- Pressure
- pH
- Level
- Shock
- LCD Display
- Pulse/Event/State
- Current
- Voltage
- Wireless
- Intrinsically Safe
- Spectral Vibration
- Motion

For Quantity Discounts call 603-456-2011 or email sales@madgetech.com