

# THERMOVAULT1000-P

## THERMAL BARRIER SYSTEM

### WITH TEMP1000P



#### Features

- 304 Stainless Steel Enclosure
- Small 2.6" Diameter
- Submersible
- Withstands temperatures up to 350 °C for 2.5 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-P system includes a stainless steel thermal barrier and a Temp1000P 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 Temp1000P, thread the probe through the end cap and latch it back onto the barrier body.

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



## THERMOVAULT1000 SPECIFICATIONS\*

<b>Operating Environment:</b> -200 °C to +350 °C (230 °C with O-Ring), 0 to 100% RH	<b>Enclosure Material:</b> 304 Stainless Steel
<b>IP Rating:</b> IP68	<b>Dimensions:</b> 9.3" x 2.6" dia. (236 mm x 66 mm dia.)
<b>Insulation Type:</b> Dewar flask and PTFE	<b>Weight:</b> 3.2 lb
<b>Access Port Thread:</b> 1/4" NPT Female	

Ambient Temperature	Time In Air To Max Internal Temp (Temp1000P)	Time In Liquid To Max Internal Temp (Temp1000P)
100 °C	600 min	130 min
150 °C	315 min	120 min
200 °C	240 min	75 min
250 °C	180 min	60 min
For extended ranges, please contact MadgeTech.		
300 °C	165 min	n/a
350 °C	150 min	n/a

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

# TEMP1000P SPECIFICATIONS\*

\*SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE. SPECIFIC WARRANTY REMEDY LIMITATIONS

<b>Temperature Sensor:</b> 100Ω Platinum RTD	<b>Calibration:</b> Digital calibration through software
<b>Temperature Range:</b> -40 °C to +80 °C	<b>Calibration Date:</b> Automatically recorded within device
<b>Probe Range:</b> -50 °C to +400 °C	<b>Battery Type:</b> 3.6V high-temperature lithium battery included, <b>user replaceable</b>
<b>Temperature Resolution:</b> 0.05 °C	<b>Battery Life:</b> 1 year typical (1 minute reading rate @ 25 °C)
<b>Calibrated Accuracy:</b> ±0.5 °C	<b>Data Format:</b> Date and time stamped °C, °F, K, °R
<b>Specified Accuracy Range:</b> 100 °C span between calibration points	<b>Time Accuracy:</b> ±1 minute/month at 20°C (RS232 cable not in use)
<b>Start Modes:</b> Software programmable immediate start or delay start, up to six months in advance	<b>Computer Interface:</b> PC serial or USB (Interface cable required); 2,400 baud
<b>Real Time Recording:</b> May be used with PC to monitor and record data in real time	<b>Software:</b> XP SP3/Vista/Windows 7/Windows 8
<b>Memory:</b> 32,767 readings	<b>Operating Environment:</b> -40 °C to +80 °C, 0 to 100%RH, submersible to 150'
<b>Reading Rate:</b> 1 reading every 2 seconds to 1 every 12 hours	<b>Dimensions (Body):</b> 4.5" x 1.0" dia. (115 mm x 26 mm dia.)
<b>Lethality Equations:</b> Sterilization Units and Pasteurization Units are available in software with the click of a button.	<b>Dimensions (Probe):</b> 6.75" x 3/16" dia. (172 mm x 5 mm dia.)
	<b>Enclosure:</b> 303 stainless steel
	<b>Probe:</b> 304 stainless steel
	<b>Weight:</b> 7.3 oz (205 g)
	<b>Approvals:</b> CE

**BATTERY WARNING:** RISK OF FIRE OR EXPLOSION. DO NOT RECHARGE, FORCE OPEN, HEAT OR DISPOSE OF IN FIRE.

## ORDERING INFORMATION

MODEL	DESCRIPTION
THERMOVAULT1000-P	Thermal Barrier System, includes enclosure and Temp1000P
IFC110	Software, manual and RS232 interface cable
IFC200	Software, manual and USB interface cable
NIST	NIST Calibration Certificate
TLH-5902	Replacement battery for Temp1000P

**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

