If the process you want to monitor reaches temperatures above 140°C, the upper operating limit of DataTrace Micropack III data loggers, you need to thermally protect the electronics and battery from damage. For these applications you can choose from several different DataTrace Thermal Packs, depending on your particular application. These thermal barriers are designed to insulate the logger body from the high temperatures, while allowing the temperature probe to extend out into the environment. All of the barriers work well in a dry environment and most will work in liquid environments, such as hot oil baths.

In addition to high-temperature applications, the thermal barriers will protect the data logger battery in ultra-low temperature environments.

Several DataTrace Thermal Packs are available, depending on your particular needs.

**Business benefits**
- Extend the use of your DataTrace data loggers to high-temperature processes, getting more from your capital investment.
- Eliminate the need for unstable and cumbersome thermocouple-based measurement systems, saving you time and money.
- Monitor additional manufacturing processes, optimizing your productivity.

**Food Applications**
- Baking oven monitoring
- Frying oil temperature

**Pharmaceutical Applications**
- Depyrogenation ovens
- Ultra-low temperature freezers

**Industrial Applications**
- Textile and carpet processing
- Powder painting monitoring

**Model 3000 – Moderate Temperature**
Part#124633-502
Designed for either dry or liquid environments, this thermal barrier is an economical choice to protect a single logger in moderate temperature environments.

**Model 3080 – Multi-Logger**
Part#124876-500
With the lowest cost per measurement channel, this unit is designed to protect three Micropack III data loggers in moderate temperature environments.

**Single Logger**
Part#122010-500 & 122011-500
Single-logger versions of part# 124876-500 with the same temperature performance characteristics.

Part#122010-500 holds a single-probe logger; 122011-500 holds a dual-probe logger.

**High Temperature**
Part#124670-714, 124670-720 & 124670-740
For the ultimate in protection, choose from three different 2 inch diameter vacuum Dewar thermal barriers. The largest will protect your loggers for several hours at temperatures above 350°C.

Part#122012-140
A slimmer version of part #124670-714, 1.4” wide instead of 2”, and 5.6” tall.

**Slim Line**
Part#124873-175
If space is at a premium, such as in depyrogenation ovens, the 1.2 inch diameter Slim Line vacuum Dewar is an excellent choice for the ultimate protection of your Micropack III data loggers.

**MPRF**
Part#122013-500
For dry use only, this thermal pack holds one MPRF logger.

**MPIII Teflon Armor (Small Body)**
Part#123040
Due to its size and shape, this barrier is ideal for quick measurements in deep fryers or similar applications.
# DataTrace Thermal Packs

## Product Specifications

### 124633-502
- **Size:** Cylinder, 75mm D 120mm L
- **Loggers:** One MPIII
- **Insulation:** PTFE
- **Use:** Dry or Liquid

**Typical Dry Performance**: |
| Temperature | Maximum Time |
| 250°C / 482°F | 59 minutes |
| 350°C / 662°F | 42 minutes |

### 122010-500, 122011-500
- **Size:** Rectangular Box, 64mm x 86mm x 44mm
- **Loggers:** One MPIII, One Single-Probe MPIII
- **Insulation:** PTFE, Carbon
- **Use:** Dry Only

**Typical Dry Performance**: |
| Temperature | Maximum Time |
| 250°C / 482°F | 36 minutes |
| 350°C / 662°F | 27 minutes |

### 124876-500
- **Size:** Rectangular Box 95mm x 82mm x 46mm
- **Loggers:** Three MPIII
- **Insulation:** PTFE, Carbon
- **Use:** Dry Only

**Typical Dry Performance**: |
| Temperature | Maximum Time |
| 250°C / 482°F | 36 minutes |
| 350°C / 662°F | 27 minutes |

### 124670-714
- **Size:** Cylinder, 50mm D 140mm L
- **Loggers:** One MPIII
- **Insulation:** Vacuum Dewar, PTFE
- **Use:** Dry or Liquid

**Typical Dry Performance**: |
| Temperature | Maximum Time |
| 250°C / 482°F | 109 minutes |
| 350°C / 662°F | 77 minutes |

### 122012-140
- **Size:** Cylinder, 35mm D 140mm L
- **Loggers:** One MPIII
- **Insulation:** Vacuum Dewar, PTFE
- **Use:** Dry or Liquid

**Typical Dry Performance**: |
| Temperature | Maximum Time |
| 250°C / 482°F | 87 minutes |
| 350°C / 662°F | 54 minutes |

### 124870-720
- **Size:** Cylinder, 50mm D 200mm L
- **Loggers:** One MPIII
- **Insulation:** Vacuum Dewar, PTFE
- **Use:** Dry or Liquid

**Typical Dry Performance**: |
| Temperature | Maximum Time |
| 250°C / 482°F | 195 minutes |
| 350°C / 662°F | 135 minutes |

### 124670-740
- **Size:** Cylinder, 50mm D 400mm L
- **Loggers:** One MPIII
- **Insulation:** Vacuum Dewar, PTFE
- **Use:** Dry or Liquid

**Typical Dry Performance**: |
| Temperature | Maximum Time |
| 250°C / 482°F | 380 minutes |
| 350°C / 662°F | 240 minutes |

### 124873-175
- **Size:** Cylinder, 30mm D 175mm L
- **Loggers:** One MPIII
- **Insulation:** Vacuum Dewar, PTFE
- **Use:** Dry or Liquid

**Typical Dry Performance**: |
| Temperature | Maximum Time |
| 250°C / 482°F | 93 minutes |
| 350°C / 662°F | 61 minutes |

### DT-170034
- **Size:** Cylinder, 38.1mm D 50.29mm L
- **Loggers:** One MPIII Flex or Bendable
- **Insulation:** PTFE
- **Use:** Dry or Liquid

**Typical Dry Performance**: |
| Temperature | Maximum Time |
| 250°C / 482°F | 10 minutes |
| 350°C / 662°F | 7 minutes |

### 122013-500
- **Size:** Cylinder, 50mm D 152mm L
- **Loggers:** One MPRF
- **Insulation:** PTFE
- **Use:** Dry Only

**Typical Dry Performance**: |
| Temperature | Maximum Time |
| 250°C / 482°F | 27 minutes |
| 350°C / 662°F | 20 minutes |

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**NOTE:** The upper temperature limit of all Thermal packs is 400 °C

*MPIII Logger(s) installed. Program: Initial 25°C for 1 minute, ramp to temp. in 1 min., dwell at set point, ramp back to 25°C in 1 min and dwell at 25°C for 1 min. Typical times, your results may vary.

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