

## DataTrace Thermal Packs

### Protect your DataTrace Data Loggers from thermal damage and increase the flexibility of your investment.

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

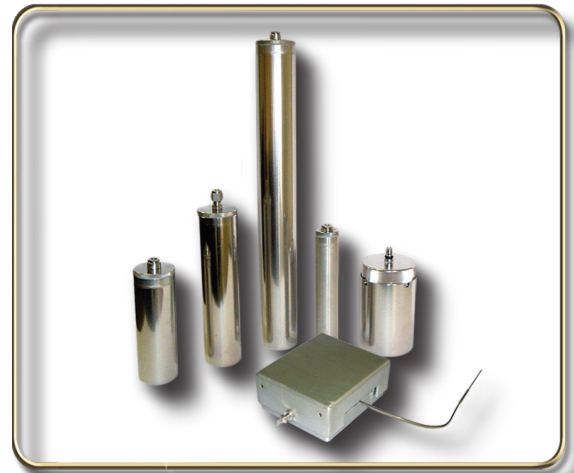
- Textile and carpet processing
- Powder painting monitoring

#### Model 3000 - Moderate Temperature

Designed for either dry or liquid environments, the Model 3000 is an economical choice to protect a single logger in moderate temperature environments.

#### Model 3080 - Multi-Logger

With the lowest cost per measurement channel, the Model 3080 is designed to protect three Micropack



III data loggers in moderate temperature environments.

#### Model 3070/3071 - Single Logger

Single-logger versions of the 3080 with the same temperature performance characteristics. Model 3070 holds a single-probe logger; Model 3071 holds a dual-probe logger.

#### Models 3140, 3200 & 3400 - High Temperature

For the ultimate in protection, choose from three different 2 inch diameter vacuum Dewar thermal barriers. The largest, Model 3400, will protect your loggers for several hours at temperatures above 350°C.

#### Model 3141 - High Temperature

A slimmer version of the 3140, 1.4" wide instead of 2", and 5.6" tall.

#### Model 3175 - Slim Line

If space is at a premium, such as in depyrogenation ovens, the 1.2 inch diameter Model 3175 vacuum Dewar is an excellent choice for the ultimate protection of your Micropack III data loggers.

#### Model 2150 - MPRF

For dry use only, Model 2150 holds one MPRF logger.

# Product Specifications

Model 3000	
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
400°C / 752°F	38 minutes

Model 3070/3071	
Size:	Rectangular Box, 64mm x 86mm x 44mm
Loggers:	3070 - One Single-Probe MPIII 3071 - One Dual-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
400°C / 752°F	24 minutes

Model 3080	
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
400°C / 752°F	24 minutes

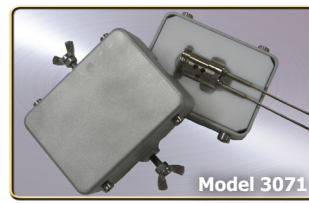
Model 3140	
Size:	Cylinder, 50mm D 140mm L
Loggers:	One MPIII
Insulation:	Vacuum Dewar, PTFE
Use:	Dry or Liquid
Typical Dry Performance*:	
Temperature	Maximum Time
250°C / 482°F	109 minutes
350°C / 662°F	77 minutes
400°C / 752°F	68 minutes

Model 3141	
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
400°C / 752°F	42 minutes

Model 3200	
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
400°C / 752°F	120 minutes

Model 3400	
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
400°C / 752°F	205 minutes

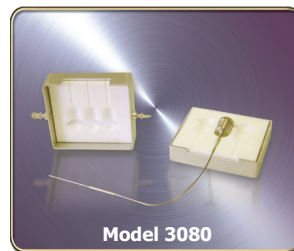
Model 3175	
Size:	Cylinder, 30mm D 175mm L
Loggers:	One MPIII
Insulation:	Vacuum Dewar, PTFE
Use:	Dry or Liquid
Typical Dry Performance*:	
Temperature	Maximum Time
250°C / 482°F	93 minutes
350°C / 662°F	61 minutes
400°C / 752°F	53 minutes



Model 2150	
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
400°C / 752°F	17 minutes

**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.



All specifications subject to change without notice. DataTrace is a registered trademark and Micropack III is a trademark of Mesa Laboratories, Inc. All other trademarks and registered trademarks are the sole property of their respective owners.  
© Copyright 2011 Mesa Laboratories, Inc.

CE Ex 21 CFR Part 11 Compliant