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

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.

Model 3070/3071 - 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.

Models 3140, 3200 & 3400 - 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 350ºC.

Model 3141 - High Temperature

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

Model 3175 - 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.

Model 2150 - MPRF

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

Model 2050 - Small Body

Part#123040
Due to its size and shape, this barrier is ideal for quick measurements in deep fryers or similar applications.

Product Specifications

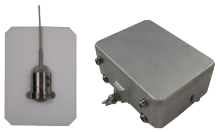
DataTrace® Thermal Packs

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

Models 3070 & 3071	
Size:	Rectangular Box, 64mm x 86mm x 44mm
Loggers:	122010-500 - One Single-Probe MPIII 122011-500 - 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

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

Model 3071



Model 3070

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

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

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

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

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

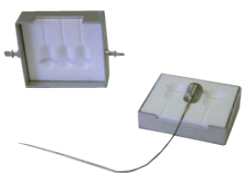
Model 2050	
Size:	Cylinder, 26.93mm D 57.15mm L
Loggers:	One MPIII Flex or Bendable
Insulation:	PTFE
Use:	Dry or Liquid
Typical Dry Performance*:	
Temperature	Maximum Time
250°C / 482°F	10 minutes
350°C / 662°F	7 minutes

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

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.

Model 3000



Model 3080

Model 3175

Models 3140, 3141, & 3400

Model 2150

Model 2050

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CE Ex 21 CFR Part 11 Compliant

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