

LyoTemp

Lyophilization Data Logger

The LyoTemp Data Logger is designed for use in ultra-low operating temperatures for processes such as Lyophilization. The LyoTemp has an operating range of -60 °C to +75 °C, and is designed with a hermetically sealed thermistor temperature sensing element in a long thin flexible cable form with stainless steel tip, making it ideal for monitoring products during the lyophilization process.

The LyoTemp data logger offers a smart, affordable solution for a wide range of applications including the preparation of biological pharmaceuticals, monitoring plasma and red cell freezers or dry ice shipments.

The compact size and simple operation make the LyoTemp user friendly and reliable. The LyoTemp has three LED indicators to alert or inform the user of the logging status and includes a manual start option using the magnetic wand included with the IFC300 interface (sold separately). Other features of the LyoTemp include delayed start configuration, real-time recording, user configurable alarms and password protection. The LyoTemp requires minimal maintenance and with average use will require annual calibration.

The LyoTemp utilizes the MadgeTech 4 Data Logger Software, available as a free download at madgetech.com. MadgeTech 4 software provides device management and an all-in-one package for storing, analyzing and sharing data.



FEATURES

- Ultra low Operating Temperature
- Hermetically Sealed Thermistor
- LED Status Indicators
- Manual Start Option
- Configurable Alarms
- Password Protection
- Real Time Recording

BENEFITS

- Compact
- Simple Setup and Installation
- Minimal Long-Term Maintenance

APPLICATIONS

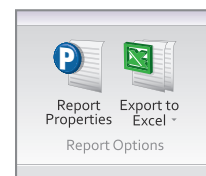
- Monitoring Lyophilization
- Dry Ice Shipments
- Plasma and Red Cell Freezers

MadgeTech 4 Software Features

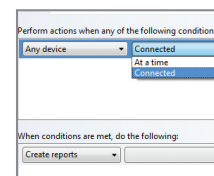


Graph View

- Multiple graph overlay
- Statistics
- Digital calibration
- Zoom in/ zoom out
- Lethality equations (F0, PU)
- Mean Kinetic Temperature
- Full time zone support
- Data annotation
- Min./Max./Average lines
- Summary view



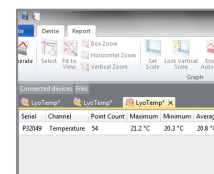
Export to Excel



Automation

Time	Time Zone	Delta
1:13:37 PM	-04:00	-00:00:00
1:14:37 PM	-04:00	-00:01:00
1:15:37 PM	-04:00	-00:02:00
1:16:37 PM	-04:00	-00:03:00
1:17:37 PM	-04:00	-00:04:00
1:18:37 PM	-04:00	-00:05:00
1:19:37 PM	-04:00	-00:06:00
1:20:37 PM	-04:00	-00:07:00
1:21:37 PM	-04:00	-00:08:00
1:22:37 PM	-04:00	-00:09:00
1:23:37 PM	-04:00	-00:10:00
1:24:37 PM	-04:00	-00:11:00
1:25:37 PM	-04:00	-00:12:00
1:26:37 PM	-04:00	-00:13:00
1:27:37 PM	-04:00	-00:14:00
1:28:37 PM	-04:00	-00:15:00

Tabular Data View



Statistics

Specifications

Specifications are subject to change without notice. Specific warranty remedy limitations apply. Call **(603) 456-2011** or go to **madgetech.com** for details.

GENERAL	
Start Modes	Software programmable immediate start Delay start up to 30 days in advance Manual start with magnetic switch
Memory	32,511 readings
Wrap Around	Yes
Reading Rate	1 reading every 5 seconds up to 1 reading every 30 minutes
Password Protection	An optional password may be programmed into the device to restrict access to configuration options. Data may be read out without the password.
LEDs	2 status and 1 alarm LED
Calibration	Digital calibration through software
Calibration Date	Automatically recorded within device
Battery Type	3.6 V lithium battery
Battery Life	1 year typical at a 10 minute reading rate
Data Format	Date and time stamped °C, K, °F or °R
Time Accuracy	±5 minutes/month at -80 °C (-112 °F)
Computer Interface	USB docking station to PC (IFC300); 38,400 baud
Operating System Compatibility	Windows XP SP3 or later
Software Compatibility	Standard Software version 4.1.10.0 or later Secure Software version 4.1.9.0 or later
Operating Environment	-60 °C to +75 °C (-76 °F to +167 °F) 0 %RH to 100 %RH 0.002 PSIA to 100 PSIA
IP Rating	IP50
Dimensions	Body: 3.25 in x 2.10 in x 0.41 in (82.5 mm x 53.3 mm x 10.3 mm) Probe Length: 48 in x 0.13 in (1219 mm x 3.2 mm)
Weight	1.90 oz (54g)
Material	Body: ABS plastic, white, polycarbonate labeling Probe: PFA Insulated Cable with Stainless Steel Tip
Approvals	CE
Product Maintenance	The LyoTemp exchange program provides the user with a new replacement device at a reduced cost when battery is depleted or device is in need of factory calibration. Call for details.

TEMPERATURE	
Temperature Sensor	NTC Thermistor
Temperature Range	-60 °C to +75 °C (-76 °F to +167 °F)
Temperature Resolution	0.1 °C (0.18 °F)
Calibrated Accuracy	± 0.5 °C (±0.9 °F)

BATTERY WARNING: FIRE, EXPLOSION AND SEVERE BURN HAZARD. DO NOT RECHARGE, DISASSEMBLE, HEAT ABOVE 100 °C (212 °F), INCINERATE, CRUSH, OR EXPOSE CONTENTS TO WATER.

Ordering Information

LyoTemp	PN 900355-00	Lyophilization Data Logger
IFC300	PN 900315-00	USB docking station

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