ThermoWorks

CRYO-TEMP
ULTRA LOW TEMPERATURE RECORDER

ThermoWorks
LogMaster

Features

- Ultra low operating temperature (-86°C)
- May be placed in direct contact with dry ice
- No external probes or wiring
- High accuracy
- Programmable alarm and warn ranges with alarm delay
- LED status indicators for instant alarm notification
- Magnetic start
- Optional password protection
- Splash resistant (IP64)
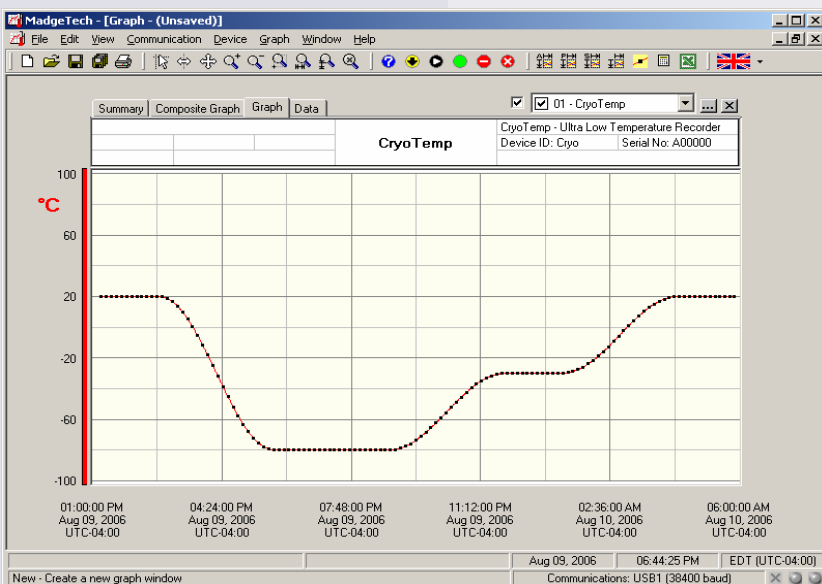- CE Compliant

Applications

- Dry ice shipments
- Plasma and red cell freezers
- Blood banks/frozen tissue storage
- Monitoring frozen vaccines
- Ultra low temperature storage/laboratory freezers
- Medical and pharmaceutical shipping
- Deep frozen foods
- Cold chain monitoring
- Low temperature research

new ultra low temperature data recorder, records temperatures as low as –86°C. The Cryo-Temp can be used in a broad line of applications such as monitoring blood plasma, vaccines, pharmaceuticals, frozen foods and shipping containers. This stand-alone device does not require any additional probes. The enclosure is designed with a handle for easy attachment and is IP64 splash resistant. It utilizes a USB docking station (sold separately), to communicate with a personal computer or laptop.

The Cryo-Temp provides date and time stamped temperature readings and uses the Data Logging Software. The user can view the data in graphical or tabular form. High and low alarm limits and high and low warning limits can be programmed through the software. The user can set the alarm limits in the range required for the goods to be maintained. The warn limits can be set to alert the user when the temperature is nearing a high or low alarm limit, so that proper action can be taken to ensure the integrity of the goods.

The Cryo-Temp is equipped with three LED's. The green LED will blink every 15 seconds while the recorder is logging data. The yellow LED will blink every 3 seconds when the temperature has breached the warning limits. The red LED will blink every 3 seconds when the temperature alarm limits have been exceeded. The Cryo-Temp is the ideal temperature monitoring solution

Data Recorder Software
displays temperature data in an easy to use graph.

This Windows®-based software package allows the user to effortlessly collect, display and analyze data. A variety of powerful tools allow the user to examine, export, and print professional looking charts and graphs with just a click of the mouse.

CRYO-TEMP SPECIFICATIONS*

TEMPERATURE

SENSOR:	NTC Thermistor
MEASUREMENT RANGE:	-86°C to +35°C recommended, may be used up to +55°C
RESOLUTION:	0.1°C
Calibrated Accuracy:	±1.0°C
Specified Accuracy Range:	-80°C to 0°C
Readings:	32,767
Recording Interval:	5 seconds to 30 minutes, selectable in software
Start Modes:	Immediate start, delay start or manual start with magnetic switch
Programmable Start Delay:	Up to 30 days from PC launch or manual start
Temperature Alarm:	Software programmable high and low alarm limits, high and low warn limits
	Each setpoint may be individually enabled or disabled
Alarm Delay:	Software programmable time delay for warn/alarm limits. Logger will not indicate out of range status until the temperature has been out of range for a set period of time.
Status Indicators:	Green: Blinks to indicate safe conditions during logging
	Yellow: Blinks to indicate warn limits have been exceeded
	Red: Blinks to indicate alarm criteria (limits/delay) have been exceeded
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.
Calibration:	Digital calibration is available to the user through software
Calibration Date:	Automatically recorded within device
Power:	3.6V lithium battery (LTC-7PN), factory replaceable only
Battery Life:	2 years typical @ 25°C, 1 min. reading intervals 1 year typical @ –80°C, 1 min. reading intervals
Time Accuracy:	±2 minutes/month max. at 20 to 30°C ±5 minutes/month max at –80°C
Data Format:	Date and time stamped °C, °F, K, °R
Computer Interface:	USB docking station to PC (IFC300) 38,400 baud
Software:	Windows 95/98/ME/NT/2000/XP based software
Operating Environment:	-86°C to +35°C (may be used up to +55°C); 0 to 100% RH
Dimensions:	3.3" x 2.1" x 0.4" (83 mm x 54 mm x 11 mm)
Ingress Protection/IP Rating:	IP64 (splash resistant, not submersible)
Enclosure:	ABS plastic, white, polycarbonate labeling
Weight:	1.4 oz (40 g)
Compliance:	CE

BATTERY WARNING: FIRE, EXPLOSION, AND SEVERE BURN HAZARD.
DO NOT RECHARGE, DISASSEMBLE, HEAT ABOVE 212ºF,
INCINERATE OR EXPOSE CONTENTS TO WATER.

SOFTWARE FEATURES

Multiple Graphs:	Simultaneously analyze data from several units or deployments; easily switch to a single data series
Real-Time Recording:	Collect and display data in real-time while continuing to log
Data Table:	Instantly access tabular view for detailed dates, times, values, and annotations
Scaling Options:	Autoscale function fits data to the screen, or allows user to manually enter their own values
Formatting Options:	Change colors, line styles, plotting options, show or hide channels quickly
Statistics:	Calculate averages, min, max, standard deviation, and mean kinetic temperature with the touch of a button
Export Data:	Export data in a variety of common formats, or switch to Excel® with a single click
Calibration:	Automatically calculate and store calibration parameters
Logger Configuration:	Easy set up and launch of data loggers with immediate or delayed start, preferred sample rate, and device ID
Printing:	Automatically print graphical or tabular data

ORDERING INFORMATION

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

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