

CRYOTEMP ULTRA LOW TEMPERATURE DATA LOGGER



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 (IP65)
- CE Compliant
- Approved for Delta® Mainline Flights

Benefits

- Simple Setup and Installation
- Minimal Long-Term Maintenance
- Long-Term Field Deployment

Applications

- Dry Ice Shipments
- Plasma and Red Cell Freezers
- Blood Banks/Frozen Tissue Storage
- Monitoring Frozen Vaccines
- Cold Chain Monitoring
- Medical and Pharmaceutical Shipping
- Ultra Low Temperature Storage



MadgeTech's 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 IP65 splash resistant. It utilizes a USB docking station (sold separately), to communicate with a personal computer or laptop.

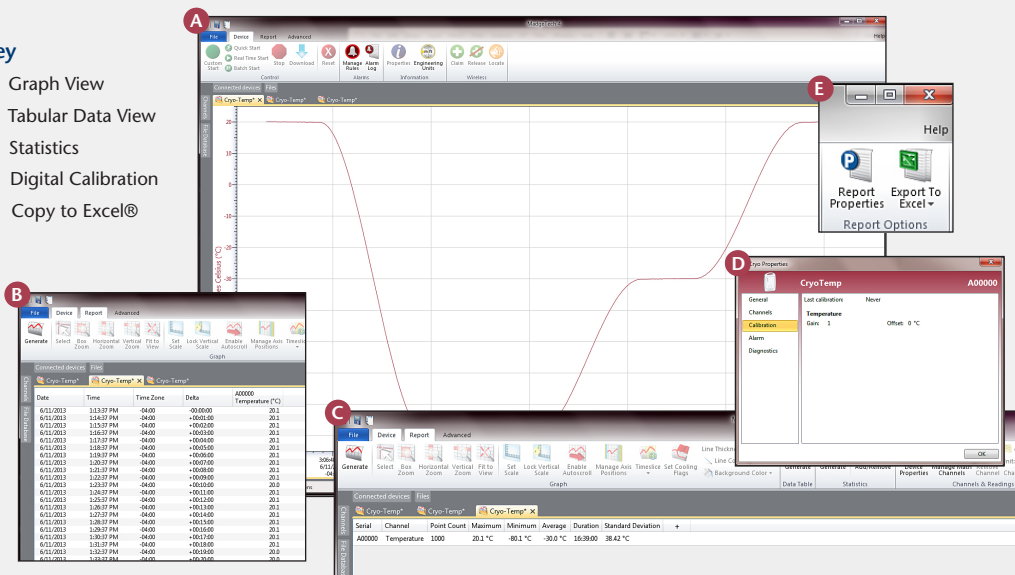
The Cryo-Temp provides date and time stamped temperature readings and uses the MadgeTech Data Logging Software. The user can view the data in graphical or tabular form. High and low alarm limits and high and low warning limits can be programmed through the software. The user can set the alarm limits in the range required for the goods to be maintained. The warning 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 for any application involving ultra low temperature recording.

MADGETECH DATA LOGGER SOFTWARE

Key

- A** Graph View
- B** Tabular Data View
- C** Statistics
- D** Digital Calibration
- E** Copy to Excel®



Temperature Sensor:	NTC Thermistor
Temperature Range:	-86 °C to +35 °C recommended, may be used up to +55 °C
Temperature Resolution:	0.1 °C
Calibrated Accuracy:	±1.0 °C
Reading Rate:	5 seconds to 30 minutes, selectable in software
Memory:	32,767 readings; software configurable memory wrap
Start Modes:	Software programmable immediate start, delay start up to 30 days in advance or manual start with magnetic switch.
Temperature Alarm:	Software programmable high and low alarm limits, high and low warn limits each set point 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 through software
Calibration Date:	Automatically recorded within device
*Battery Type:	3.6V lithium battery (LTC-7PN), *Must be sent to MadgeTech for battery replacement.
Battery Life:	2 years typical @ 25 °C, 1 min. reading intervals 1 year typical @ -80 °C, 1 min. reading intervals
Data Format:	Date and time stamped °C, °F, K, °R
Time Accuracy:	±2 minutes/month max. at 20 °C to 30 °C ±5 minutes/month max at -80 °C
Computer Interface:	USB docking station to PC (IFC300) 38,400 baud
Software:	XP SP3/Vista/Windows 7/Windows 8 (MadgeTech 4 Only)
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:	IP65 (splash resistant, not submersible)
Enclosure:	ABS plastic, white, polycarbonate labeling
Weight:	1.4 oz (40 g)
Compliance:	CE, Approved for carriage on Delta® mainline flights

BATTERY WARNING: FIRE, EXPLOSION, AND SEVERE BURN HAZARD. DO NOT SHORT CIRCUIT, CHARGE, FORCE OVER DISCHARGE, CRUSH, PENETRATE, OR INCINERATE. BATTERY MAY LEAK OR EXPLODE IF HEATED ABOVE 100 °C (212 °F).

ORDERING INFORMATION

MODEL	DESCRIPTION
CRYO-TEMP	Ultra Low Temperature Recorder
IFC300	Software, manual, docking station and USB connection cable
SVP -Secure	Protocols for validating the 21 CFR Part 11 ready, secure logging system
SVP-Secure License	License for MadgeTech SVP-Secure Software (unlimited users, license per computer)
*NIST	NIST Calibration Certificate

ASK ABOUT OUR OTHER DATA LOGGERS

- Temperature
- Humidity
- Pressure
- pH
- Level
- Shock
- LCD Display
- Pulse/Event/State
- Current
- Voltage
- Wireless
- Intrinsically Safe
- Spectral Vibration
- Motion