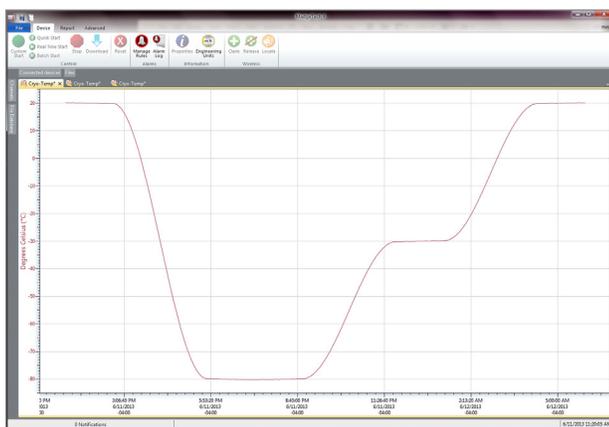# CryoTemp
Ultra Low Temperature Data Logger

MadgeTech's popular ultra-low temperature data recorder, records temperatures as low as -86 °C (122 °F). The CryoTemp can be used in a broad line of applications such as monitoring blood plasma, vaccines, pharmaceuticals, frozen foods and shipping containers. This standalone device does not require any additional probes. The enclosure is designed with a built in handle for easy attachment and is IP64 splash resistant. It utilizes a USB docking station (sold separately), to communicate with a desktop PC or laptop.

The CryoTemp provides date and time stamped temperature readings and uses the MadgeTech Data Logging Software. High and low alarm thresholds can be configured in the MadgeTech software to warn users if safe limits are exceeded. The CryoTemp is equipped with three LED lights to visually indicate when the logger is recording or if temperature thresholds are in danger of being exceeded or have been breached.

The CryoTemp is the ideal temperature monitoring solution for any application involving ultra-low temperature recording.
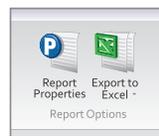
FEATURES

- Ultra-Low Operating Temperature (-86 °C/-122 °F)
- 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
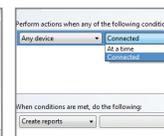- Splash Resistant (IP64)
- CE Compliant

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 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
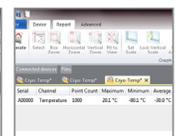- Min./Max./Average lines
- Summary view

Export to Excel Automation 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.

TEMPERATURE

Temperature Sensor	NTC Thermistor
Temperature Range	-86 °C to +35 °C (-122 °F to +95 °F) recommended, may be used up to +55 °C (131 °F)
Temperature Resolution	0.1 °C (0.18 °F)
Calibrated Accuracy	±1.0 °C (1.8 °F)

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 24 hours
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.
Temperature Alarm	User selectable high and low limits
Alarm Delay	Software programmable time delay for warn/alarm limits
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	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, K, °F or °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
Operating System Compatibility	Windows XP SP3 or later
Operating Environment	-86 °C to +35 °C (-122.80 °F to +95 °F) May be used up to +55 °C (131 °F) 0 %RH to 100 %RH
IP Rating	IP64 (splash resistant, not submersible)
Dimensions	3.3 in x 2.1 in x 0.4 in (83 mm x 54 mm x 11 mm)
Weight	1.4 oz (40 g)
Material	ABS plastic, white, polycarbonate labeling
Approvals	CE
Product Maintenance	The CryoTemp 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.

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

CryoTemp	PN 900038-00	Ultra Low Temperature Data Logger
IFC300	PN 900315-00	USB docking station

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