

TCTEMP1000

RUGGED THERMOCOUPLE-BASED RECORDER

Features

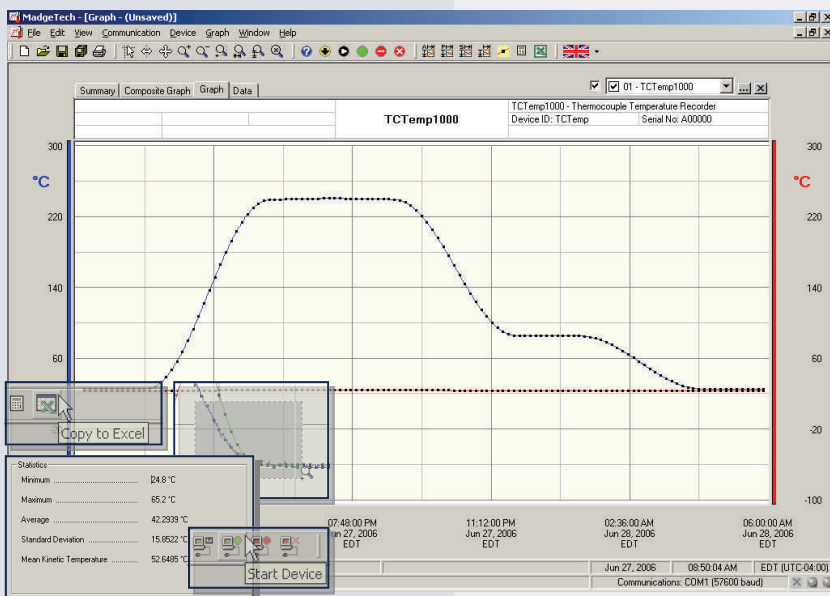
- Rugged
- Submersible
- N.I.S.T. traceable
- Real-time operation
- Low cost
- Programmable start time
- Reusable
- User-friendly
- CE Approved
- Memory wrap

Applications

- Extreme temperature monitoring
- Warehouse monitoring
- HVAC
- Medical and Pharmaceutical
- Well monitoring
- Hostile environment monitoring
- Environmental studies
- Implement HACCP programs



The TCTemp1000 is a rugged, submersible, battery powered, thermocouple based temperature recorder. This is a stand-alone, compact, portable, easy to use device to measure and record up to 16,383 measurements per channel. The storage medium is non-volatile solid state memory, providing maximum data security even if the battery becomes discharged. Its real time clock ensures all data is time and date stamped. Start and stop the device directly from your computer and its small size allows it to fit most anywhere. The TCTemp1000 makes data retrieval quick and easy even in harsh environments. Simply plug it into an empty COM or USB port and our user-friendly software does the rest.



MadgeTech Data Recorder Software

Displays temperature data in an easy to use graph.

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

Click [MadgeTech Software](#) for more information or to download the software.

TCTEMP1000 SPECIFICATIONS*

Internal Channel
Temperature Range: -40 to +80°C
Temperature Resolution: 0.1°C
Calibrated Accuracy: ±0.5°C (0 to +50°C)

Remote Channel
Thermocouple Types: J, K, T, E, R, S, B, N
Thermocouple connection: Female subminiature (SMP)

Cold Junction Compensation: Automatic, based on internal channel

**ThermocoupleType:	Range (°C)	Resolution	Accuracy
J	-210 to +760	0.1°C	±0.5°C
K	-270 to +1370	0.1°C	±0.5°C
T	-270 to +400	0.1°C	±0.5°C
E	-270 to +980	0.1°C	±0.5°C
R	-50 to +1760	0.5°C	±2.0°C
S	-50 to +1760	0.5°C	±2.0°C
B	+50 to +1820	0.5°C	±2.0°C
N	-270 to +1300	0.1°C	±0.5°C

**Thermocouple accuracy is specified with a 24 AWG, 3 meter thermocouple

Note: Rapidly changing temperatures or temperature gradients across the device may adversely affect the cold junction compensation.

Start Time: Software programmable start time and date, up to six months in advance
Real Time Recording: May be used with PC to monitor and record data in real time

Memory: 16,383 readings per channel; software configurable memory wrap

Reading Interval: 1 reading every 2 seconds to 1 every 12 hours

Calibration: Digital calibration through software

Calibration Date: Automatically recorded within device

Power: 3.6V lithium battery included

User Replaceable Battery: 1 year typical (1 minute reading rate at 25°C)

Data Format: Date and time stamped °C, °F, K, °R

Time Accuracy: ±1 minute/month (at 20°C, RS232 port not in use)

Computer Interface: PC serial or USB (interface cable required); 2,400 baud

Software: Windows 95/98/ME/NT/2000/XP based software

Operating Environment: -40 to +80°C, 0 to 100%RH; Submersible to 150 feet

Dimensions: 7.4" x 1.2" dia. (188mm x 31mm dia.)

Weight: 13 oz (380 g)

Approvals: CE

BATTERY WARNING: RISK OF FIRE OR EXPLOSION. DO NOT RECHARGE, FORCE OPEN, HEAT OR DISPOSE OF IN FIRE.

SOFTWARE FEATURES

Multiple Graphs: Simultaneously analyze data from several units or deployments; easily switch to a single data series

Graphical Cursor: One click displays readings by time, value, parameter or sample number

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

Communications: Automatically sets up communications port, or lets user select configuration

*SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE. SPECIFIC WARRANTY AND REMEDY LIMITATIONS APPLY. CALL 1-603-456-2011 OR GO TO WWW.MADGETECH.COM FOR DETAILS.

ORDERING INFORMATION

<u>Model</u>	<u>Description</u>	
TCTEMP1000	Rugged, Thermocouple-Based Recorder	
IFC110	Software, manual and RS232 interface cable	
IFC200	Software, manual and USB interface cable	
NIST	N.I.S.T. Calibration Certificate	
TL-2150	Replacement battery for TCTemp1000	

ASK ABOUT OUR OTHER DATA RECORDERS

Temperature	Pulse/Event/State
Humidity	Low Level Current
Pressure	Low Level Voltage
pH	RF Transmitters
Level	Intrinsically Safe
Shock	Spectral Vibration

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

