TCTEMP1000
RUGGED THERMOCOUPLE-BASED DATA LOGGER

MADGETECH
WE BUILD DATA LOGGERS

Features
- Rugged
- Submersible
- Real time Operation
- Low Cost
- Programmable Start Time
- Reusable
- User-friendly
- Memory Wrap

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

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. The TCTemp1000 makes data retrieval quick and easy even in harsh environment. Simply plug it into an empty COM or USB port and our user-friendly software does the rest.

MADGETECH DATA LOGGER SOFTWARE

Key
- **A** Graph View
- **B** Tabular Data View
- **C** Statistics
- **D** Digital Calibration
- **E** Copy to Excel®
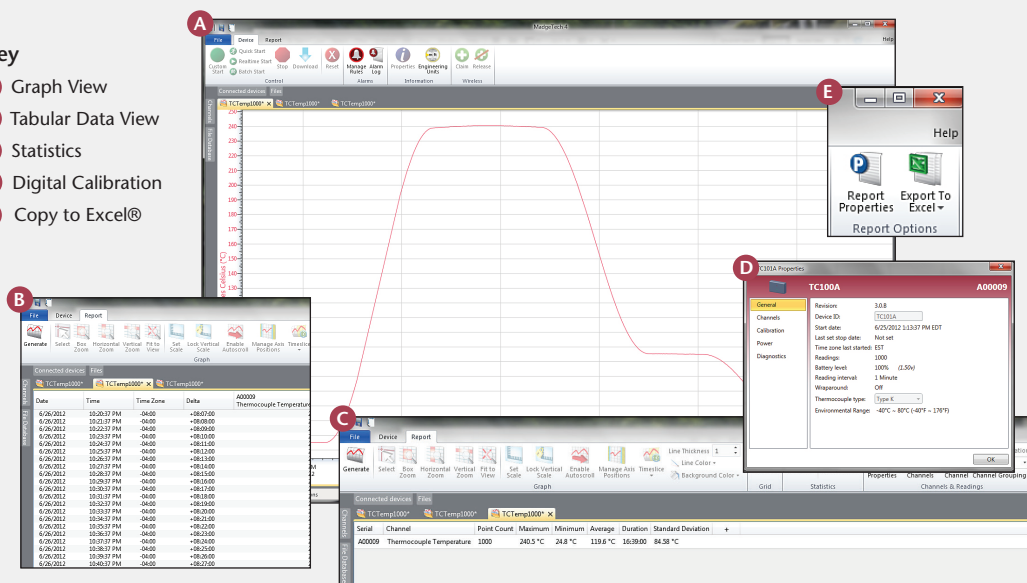
Software Features:
- Multiple graph overlay
- Statistics
- Digital calibration
- Zoom in/ zoom out
- Lethality equations (F0, PU)
- Mean Kinetic Temperature
- Full time zone support
- Data annotation
- Min./Max./Average lines
- Data table view
- Automatic report generation
- Summary view
- Multilingual

TCTEMP1000 SPECIFICATIONS*

Internal Channel

Temperature Range:	-40 °C to +80 °C (-40 °F to +176 °F)
Temperature Resolution:	0.1 °C (0.18 °F)
Calibrated Accuracy:	±0.5 °C (0 °C 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

**Thermocouple	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 adverse affect the cold junction compensation

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

Start Modes:	Software programmable immediate start or delay start 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; 32,766 total readings; software configurable memory wrap
Reading Rate:	1 reading every 2 seconds up to 1 reading every 12 hours
Calibration:	Digital calibration through software
Calibration Date:	Automatically recorded within device
Battery Type:	3.6V lithium battery included, **user replaceable**
Battery Life:	1 year typical (1 minute reading rate at +25 °C (77 °F))
Data Format:	Date and time stamped °C, °F, K, °R
Time Accuracy:	±1 minute/month (at +20 °C (+68 °F), RS232 port not in use)
Computer Interface:	PC serial or USB (interface cable required); 2,400 baud
Software:	XP SP3/Vista/Windows 7/Windows 8
Operating Environment:	-40 °C to +80 °C, 0 %RH to 100 %RH; Submersible to 150 feet
Dimensions:	7.4 in x 1.2 in dia. (188 mm x 31 mm dia.)
Materials:	303 Stainless Steel
Weight:	13 oz (0.8125 lbs)

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 80 °C (176 °F).

ORDERING INFORMATION

MODEL	DESCRIPTION
TCTEMP1000	Rugged, Thermocouple-Based Recorder
IFC110	Software, manual and RS232 interface cable
IFC200	Software, manual and USB interface cable
Calibration Certificate	Calibration Certificate available for data logger
TLH-5902	Replacement battery for TCTemp1000

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