

# X SERIES

## TCTempX4LCD TCTempX8LCD

4 and 8-Channel Thermocouple Data Loggers with LCD Screen



\*Thermocouple Probes Sold Separately

The TCTempX4LCD and TCTempX8LCD are four and eight channel thermocouple data loggers with an LCD screen. The device features on-screen minimum, maximum and average statistics, as well as a user configurable screen that allows for any combination of channels to be displayed. The device accepts J, K, T, E, R, S, B and N type thermocouples.

The TCTempX4LCD and TCTempX8LCD are ideal for a variety of applications, whether it is remote temperature monitoring, or multiple points in a central location. Data from all channels is simultaneously logged and displayed on-screen for real-time monitoring. It can then be downloaded to a PC for further analysis.

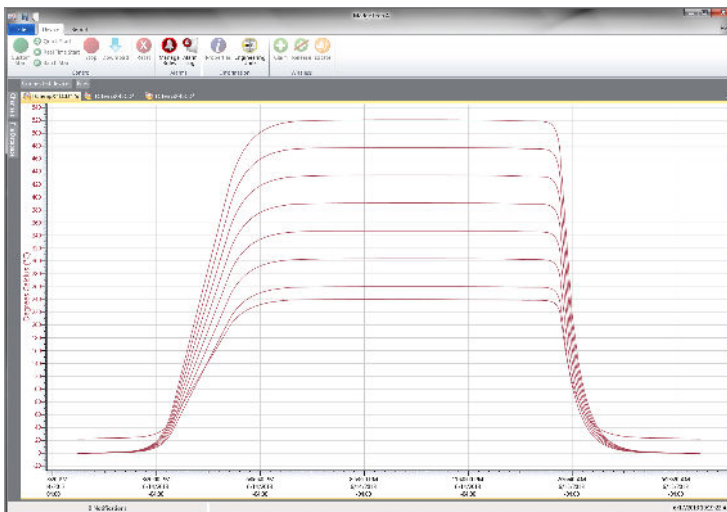
### Features

- Large Backlit LCD Display
- User-Friendly Front Panel
- Monitor Multiple Points
- Accepts thermocouple types
- J, K, T, E, R, S, B, N
- High speed downloading
- On-screen statistics
- External power or user replaceable battery
- Low battery indicator

### Benefits

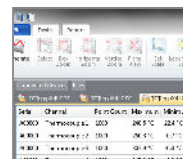
- Simple Setup and Installation
- Minimal Long-Term Maintenance
- Long-Term Field Deployment

### MadgeTech 4 Software Features

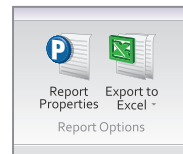


Graph View

- 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



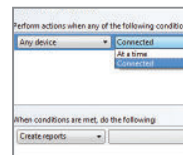
Statistics



Export to Excel

Time	Time-Stamp	Data
1	1:17:27 PM	418 X -302.30 C
2	1:18:01 PM	418 X -330.30 C
3	1:18:35 PM	418 X -330.30 C
4	1:19:09 PM	418 X -330.30 C
5	1:19:43 PM	418 X -330.30 C
6	1:20:17 PM	418 X -330.30 C
7	1:20:51 PM	418 X -330.30 C
8	1:21:25 PM	418 X -330.30 C
9	1:21:59 PM	418 X -330.30 C
10	1:22:33 PM	418 X -330.30 C
11	1:23:07 PM	418 X -330.30 C
12	1:23:41 PM	418 X -330.30 C
13	1:24:15 PM	418 X -330.30 C
14	1:24:49 PM	418 X -330.30 C
15	1:25:23 PM	418 X -330.30 C
16	1:25:57 PM	418 X -330.30 C
17	1:26:31 PM	418 X -330.30 C
18	1:27:05 PM	418 X -330.30 C
19	1:27:39 PM	418 X -330.30 C
20	1:28:13 PM	418 X -330.30 C

Tabular Data View



Automation

### Applications

- Warehouse Monitoring
- Refrigerator Monitoring
- Medical and Pharmaceutical
- Oven Monitoring
- Smoke Houses
- Food Processing
- HVAC
- Engine Studies

# TCTempX4LCD and TCTempX8LCD

## SPECIFICATIONS

Specifications are subject to change without notice. Specific warranty remedy limitations apply. Call (603) 456-2011 or go to [madgetech.com](http://madgetech.com) for details.

INTERNAL CHANNELS	
Temperature Range	-20 °C to +60 °C (-4 °F to +140 °F)
Temperature Resolution	0.01 °C (0.018 °F)
Calibrated Accuracy	±0.5 °C (0 °C to 50 °C), ±0.9 °F (32 °F to 131 °F)

REMOTE CHANNELS			
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		
Maximum Thermocouple Resistance	1000 Ω, <100 Ω recommended		
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 specified with 24 AWG diameter thermocouple wires.

**BATTERY WARNING:** BATTERY MAY LEAK, FLAME OR EXPLODE IF DISASSEMBLED, SHORTED, CHARGED, CONNECTED TOGETHER, MIXED WITH USED OR OTHER BATTERIES, EXPOSED TO FIRE OR HIGH TEMPERATURE. DISCARD USED BATTERY PROMPTLY. KEEP OUT OF REACH OF CHILDREN.

GENERAL	
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 (all channels enabled)	4-channel: 524,032 readings per channel 8-channel: 262,016 readings per channel
LEDs	1 per channel and 2 status LEDs
Reading Rate	4 Hz up to 1 reading every 24 hours
Calibration	Digital calibration through software
Calibration Date	Automatically recorded within device
Battery Type	9 V lithium battery included, <b>user replaceable</b>
Battery Life	18 months typical with display off. 3 months typical with continuous display use.
Data Format	Date and time stamped °C, °F, K, °R, mV, V
Time Accuracy	±1 minute/month
Computer Interface	USB-A to micro USB cable (included); 460,800 baud
Operating System Compatibility	Windows XP SP3 or later
Software Compatibility	Standard Software version 4.2.21 or later Secure Software version 4.2.18 or later
Operating Environment	-20 °C to +60 °C (-4 °F to +140 °F), 0 %RH to 95 %RH non-condensing
Dimensions	4-channel: 7.25 in x 2.70 in x 1.22 in (184.15mm x 65.58 mm x 30.99 mm) 8-channel: 7.25 in x 2.70 in x 1.68 in (184.15mm x 65.58 mm x 42.672 mm)
Weight	4-channel: 15.3 oz (435 g) 8-channel: 20.1 oz (569 g)
Material	Black anodized aluminum
Approvals	CE

## Ordering Information

TCTempX4LCD	PN 902170-00	4-Channel Thermocouple Data Logger with LCD screen and USB-A to micro USB cable
TCTempX8LCD	PN 902172-00	8-Channel Thermocouple Data Logger with LCD screen and USB-A to micro USB cable
U9VL-J	PN 901804-00	Replacement battery for TCTempX4LCD and TCTempX8LCD



**Authorized Distributor in Australia**  
**Pacific Sensor Technologies Pty Ltd**  
 Unit 4, 3 Neutron Place Rowville, VIC 3178 Australia  
 1300 662 720 | [sales@pacificsensortech.com.au](mailto:sales@pacificsensortech.com.au)  
[www.pacificsensortech.com.au](http://www.pacificsensortech.com.au)