

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.

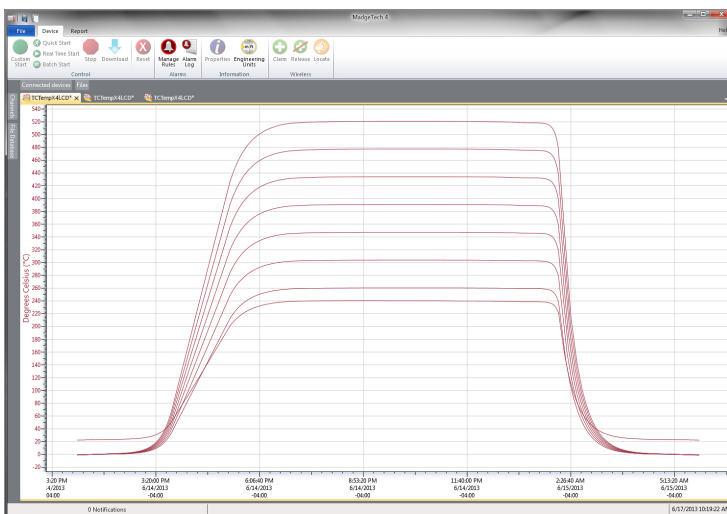
Features

- 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

| Serial | Channel | Point Count | Maximum | Minimum |
|--------|----------------|-------------|----------|---------|
| A0000 | Thermocouple 1 | 3300 | 263.3 °C | 224 °C |
| A0000 | Thermocouple 2 | 3300 | 263.3 °C | -0.7 °C |
| A0000 | Thermocouple 3 | 3300 | 303.8 °C | -0.8 °C |

Statistics

Report Properties | Export to Excel | Report Options

Export to Excel

| Time | Time Zone | Delta |
|--------------|-----------|--------------|
| J 1:13:37 PM | -0400 | -00:00.00 |
| J 1:14:37 PM | -0400 | -00:01:00.00 |
| J 1:15:37 PM | -0400 | -00:02:00.00 |
| J 1:16:37 PM | -0400 | -00:03:00.00 |
| J 1:17:37 PM | -0400 | -00:04:00.00 |
| J 1:18:37 PM | -0400 | -00:05:00.00 |
| J 1:19:37 PM | -0400 | -00:06:00.00 |
| J 1:20:37 PM | -0400 | -00:07:00.00 |
| J 1:21:37 PM | -0400 | -00:08:00.00 |
| J 1:22:37 PM | -0400 | -00:09:00.00 |
| J 1:23:37 PM | -0400 | -00:10:00.00 |
| J 1:24:37 PM | -0400 | -00:11:00.00 |
| J 1:25:37 PM | -0400 | -00:12:00.00 |
| J 1:26:37 PM | -0400 | -00:13:00.00 |
| J 1:27:37 PM | -0400 | -00:14:00.00 |
| J 1:28:37 PM | -0400 | -00:15:00.00 |

Tabular Data View

Perform actions when any of the following conditions

Any device | Connected | At a time | Connected

When conditions are met, do the following:

Create reports

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.

| 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, user replaceable |
| 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 |



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