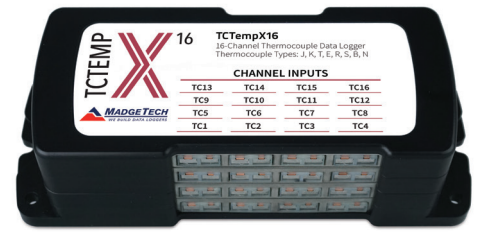


X SERIES

TCTempX Series 4, 8, 12 and 16-Channel Thermocouple Data Loggers

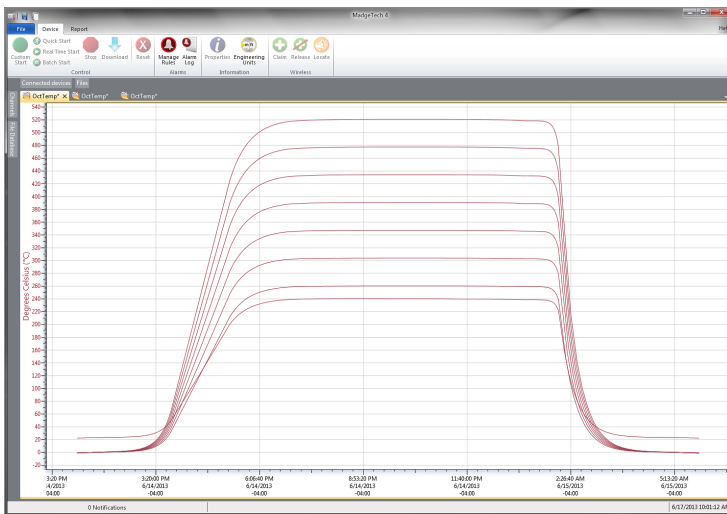


The new TCTempX Series consists of 4, 8, 12 and 16-channel thermocouple data loggers with a reading rate of up to 4 Hz. Improvements include the elimination of an interface cable (uses standard USB-A to Micro USB), increased memory for more readings and increased download speed.

In addition, the TCTempX Series features individual cold junction compensation for each channel providing increased accuracy and response time, and if a probe is removed or severed during logging, the software automatically annotates the data. For easy identification, each channel can be named with up to a ten digit title. To maximize memory capacity, users can enable or disable channels.

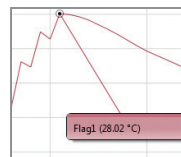
The TCTempX Series are ideal for a variety of applications, whether it is remote temperature monitoring, or multiple points in a central location. Data from all channels is simultaneously logged. After the monitoring cycle is complete, data can be downloaded for analysis.

MadgTech 4 Software Features

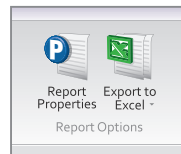


Graph View

- 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



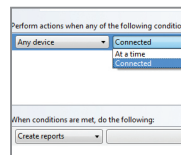
Cooling Flags



Export to Excel

| Time | Time Zone | Delta |
|------------|-----------|-----------|
| 1:13:37 PM | -0400 | -00:00:00 |
| 1:14:37 PM | -0400 | -00:00:00 |
| 1:15:37 PM | -0400 | -00:00:00 |
| 1:16:37 PM | -0400 | -00:00:00 |
| 1:17:37 PM | -0400 | -00:00:00 |
| 1:18:37 PM | -0400 | -00:00:00 |
| 1:19:37 PM | -0400 | -00:00:00 |
| 1:20:37 PM | -0400 | -00:00:00 |
| 1:21:37 PM | -0400 | -00:00:00 |
| 1:22:37 PM | -0400 | -00:00:00 |
| 1:23:37 PM | -0400 | -00:00:00 |
| 1:24:37 PM | -0400 | -00:00:00 |
| 1:25:37 PM | -0400 | -00:00:00 |

Tabular Data View



Automation

Features

- Up to 4 Hz Reading Rate
- Open Channel Detection
- Title Channels
- Accepts Thermocouple Types J, K, T, E, R, S, B, N
- External Power or User Replaceable Battery
- Pushbutton or Programmable Start
- Calibration Certificate included

Benefits

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

Applications

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

SPECIFICATIONS

Specifications are subject to change without notice. Specific warranty remedy limitations apply. Call (603) 456-2011 or go to 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) | | |
| 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 | 4-channel: 524,032 readings 8-channel: 262,016 readings 12-channel: 174,677 readings 16-channel: 131,008 readings |
| 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 |
| 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 4.2.17.0 or later Secure Software version 4.2.16.0 or later |
| Operating Environment | -20 °C to +60 °C (-4 °F to +140 °F), 0 %RH to 95 %RH non-condensing |
| Dimensions | 4-channel: 2.70 in x 7.25 in x 1.22 in (65.6 mm x 184.2 mm x 31.0 mm) 8-channel: 2.70 in x 7.25 in x 1.22 in (65.6 mm x 184.2 mm x 31.0 mm) 12-channel: 2.70 in x 7.25 in x 1.68 in (65.6 mm x 184.2 mm x 42.7 mm) 16-channel: 2.70 in x 7.25 in x 2.14 in (65.6 mm x 184.2 mm x 54.4 mm) |
| Weight | 4-channel: 13 oz (368 g) 8-channel: 13 oz (368 g) 12-channel: 20 oz (580 g) 16-channel: 28 oz (800 g) |
| Material | Black anodized aluminum |
| Approvals | CE |

Ordering Information

| | | |
|-----------|--------------|--|
| TCTempX4 | PN 902169-00 | 4-Channel Thermocouple Data Logger, USB-A to micro USB cable, universal power adapter |
| TCTempX8 | PN 902171-00 | 8-Channel Thermocouple Data Logger, USB-A to micro USB cable, universal power adapter |
| TCTempX12 | PN 902177-00 | 12-Channel Thermocouple Data Logger, USB-A to micro USB cable, universal power adapter |
| TCTempX16 | PN 902178-00 | 16-Channel Thermocouple Data Logger, USB-A to micro USB cable, universal power adapter |
| U9VL-J | PN 901804-00 | Replacement battery for TCTempX Series |

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