

# TCTempX16

## 16-CHANNEL THERMOCOUPLE DATA LOGGER



### Features

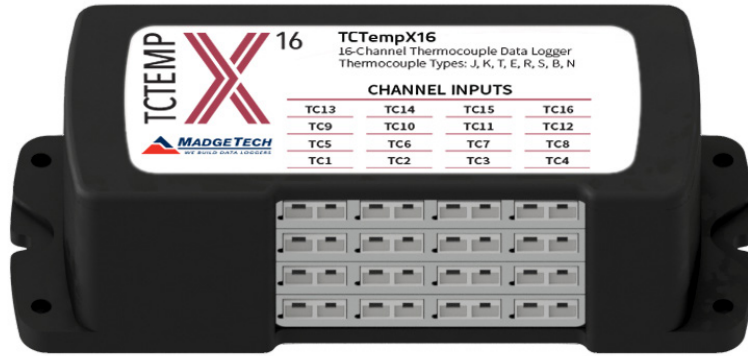
- Up to 4 Hz Reading Rate
- 131,008 Readings per Channel
- Open Channel Detection
- Title Channels
- Accepts Thermocouple Types J, K, T, E, R, S, B, N
- External Power or User Replaceable Battery
- Pushbutton or Programmable Start
- Calibration Certificate included

### Benefits

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

### Applications

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



The TCTempX16 is a 16-channel thermocouple data logger with a reading rate of up to 4 Hz. It can measure and record 131,008 readings per channel. To maximize memory capacity, users can enable or disable channels. For easy identification, each channel can be named with up to a ten digit title.

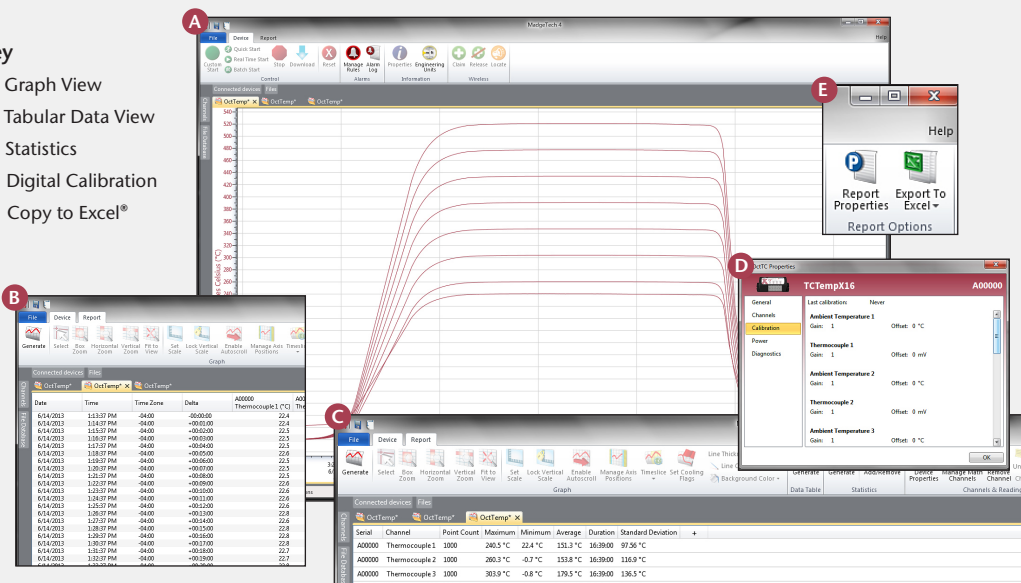
In addition, the TCTempX16 features individual cold junction compensation for each channel providing increased accuracy and response time, and if a probe is removed or severed during logging, the software automatically annotates the data.

The TCTempX16 is 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.

## 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

# TCTempX16 SPECIFICATIONS\*

\*Specifications are subject to change without notice. Specific warranty remedy limitations apply. Call (603) 456-2011 or go to madgetech.com for details.

## 16 Internal Channels

<b>Temperature Range:</b>	-20 °C to +60 °C (-4 °F to +140 °F)
<b>Temperature Resolution:</b>	0.01 °C (0.018 °F)
<b>Calibrated Accuracy:</b>	±0.05 °C (-20 °C to 60 °C)

## 16 Remote Channels

<b>Remote Channel Thermocouple Types:</b>	J, K, T, E, R, S, B, N		
<b>Thermocouple Connection:</b>	Female subminiature (SMP)		
<b>Cold Junction Compensation:</b>	Automatic, based on internal channel		
<b>Maximum Thermocouple Resistance:</b>	1000 Ω, <100 Ω recommended		
<b>Thermocouple</b>	<b>Range (°C)</b>	<b>Resolution</b>	<b>Accuracy**</b>
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
<b>Start Modes:</b>	Software programmable immediate start or delay start up to six months in advance		

\*\*Thermocouple accuracy is specified with a 24 AWG.

<b>Real Time Recording:</b>	May be used with PC to monitor and record data in real time
<b>Memory:</b> (all 16 Channels enabled)	131,008 readings per channel; 4,192,256 total readings
<b>Reading Rate:</b>	4 Hz up to 1 reading every 24 hours
<b>Calibration:</b>	Digital calibration through software
<b>Calibration Date:</b>	Automatically recorded within device
<b>Battery Type:</b>	9 Volt lithium or alkaline battery included, <b>user replaceable</b>
<b>Battery Life:</b>	18 months typical
<b>Data Format:</b>	Date and time stamped °C, °F, K, °R, mV, V
<b>Time Accuracy:</b>	±16 seconds/month
<b>Computer Interface:</b>	USB (Interface cable required); 115,200 baud
<b>Software:</b>	Windows XP SP3 or later
<b>Software Compatibility:</b>	Standard Software version 4.2.16.0 or later Secure Software version 4.2.17.0 or later
<b>Operating Environment:</b>	-20 °C to +60 °C (-4 °F to +140 °F), 0 %RH to 95 %RH non-condensing
<b>Dimensions:</b>	2.7 in x 7.25 in x 2.15 in (69 mm x 184 mm x 54 mm)
<b>Material:</b>	Black anodized aluminum
<b>Weight:</b>	28 oz (800 g)
<b>Approvals:</b>	CE

**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.

## ORDERING INFORMATION

MODEL	PART NUMBER	DESCRIPTION
TCTempX16	902174-00	16-Channel Thermocouple Data Logger
U9VL-J	901804-00	Replacement battery for TCTempX16

**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

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