



# RFTC4000A Thermocouple Recorder & Wireless Transmitter

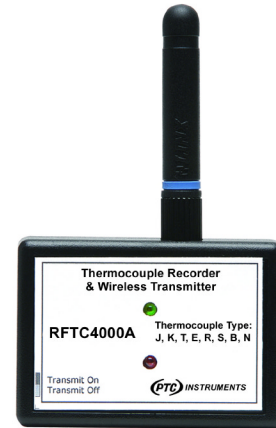
## FEATURES

- ❖ Multiple transmitter configurations
- ❖ Memory wrap around
- ❖ Software configurable
- ❖ Real-time operation
- ❖ Programmable start time
- ❖ Miniature size
- ❖ User-friendly
- ❖ N.I.S.T. traceable

## APPLICATIONS

- ❖ Extreme temperature monitoring
- ❖ Oven profiling
- ❖ Warehouse monitoring
- ❖ HVAC
- ❖ Medical/Pharmaceutical
- ❖ Museum monitoring
- ❖ Environmental studies
- ❖ Implement HACCP programs

The RFTC4000A is a battery powered thermocouple temperature recorder and wireless transmitter. This is an all-in-one compact, portable, easy to use device that will measure and record up to 4,095 measurements per channel. The RFTC4000A combines the features from the standard product line and adds the convenience of a wireless transmitter. When enabled, the

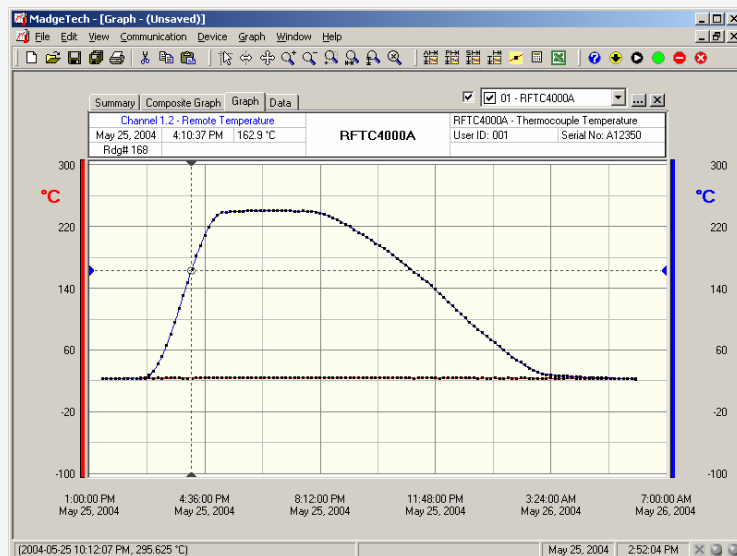
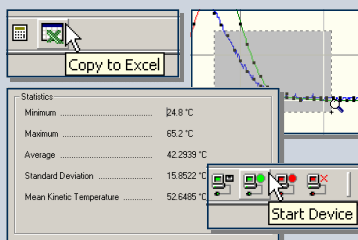


wireless transmitter will transmit readings back to the host computer where the data can be analyzed in real time. These readings are also logged to the device's memory for added data security. The convenient slide switch allows the transmitter to be turned on or off without affecting the operation of the device.

The device can be started, stopped and configured directly from your computer. Its small size allows it to fit almost anywhere. In addition to the wireless communications, the RFTC4000A makes data retrieval quick and easy. Simply plug the device into an empty com port and our user-friendly software will handle the rest.

## SOFTWARE

PTC®'s Data Recorder Software is an easy to use Windows-based software package that allows the user to effortlessly collect, display and analyze data. A variety of powerful tools allow you to examine, export, and print professional looking data with just a click of the mouse.



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## RFTC4000A SPECIFICATIONS

**Internal Channel**  
**Temperature Range:** -30 °C to +70 °C  
**Temperature Resolution:** 0.1 °C  
**Calibrated Accuracy:** ±0.5 °C(0 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

**Memory:** 4,095 readings per channel  
**Reading Interval:** 1 reading every 30 seconds to 1 every 12 hours  
**Calibration:** Digital calibration through software  
**Data Format:** Date and time stamped °C, °F, °K, °R; V, mV, µV  
**Time Accuracy:** ±1 minute/month (at 20 °C to 30 °C)  
**Computer Interface (serial interface):** PC serial or RS232C COM (Interface cable required); 57,600 baud  
**RF Baud Rate:** 4,800 baud  
**RF Carrier Frequency:** 418 MHz  
**Range:** Line-of-sight: up to 120 ft  
**Approvals:** US (FCC), CA (IC)  
**Power:** 3.6V lithium battery included (LTC-7PN)  
**Battery Life:** 1 year typical (1 min reading rate @ 25 °C)  
**Software:** Windows 95/98/ME/NT/2000/XP based software  
**Operating Environment:** -30 °C to +70 °C, 0 to 95 %RH non-condensing  
**Dimensions:** 0.8" x 1.7" x 2.7" (20 mm x 42 mm x 68 mm)  
**Weight:** 2 oz (60 g)  
**Enclosure:** ABS plastic

## SOFTWARE FEATURES

<b>Multiple Graphs:</b> Simultaneously analyze data from several units or deployments; easily switch to a single data series	<b>Statistics:</b> Calculate averages, min, max, standard deviation, and mean kinetic temperature with the touch of a button
<b>Real-Time Recording:</b> Collect and display data in real-time while continuing to log	<b>Export Data:</b> Export data in a variety of common formats, or switch to Excel with a single click
<b>Graphical Cursor:</b> One click displays readings by time, value, parameter or sample number	<b>Calibration:</b> Fully digital calibration function automatically stores parameters in device
<b>Data Table:</b> Instantly access tabular view for detailed dates, times, values, and annotations	<b>Logger Configuration:</b> Easy set up and launch of data loggers with immediate or delayed start, preferred sample rate, and device ID
<b>Scaling Options:</b> Autoscale function fits data to the screen, or allows user to manually enter their own values	<b>Communications:</b> Automatically sets up communications port, or lets user set configuration
<b>Formatting Options:</b> Change colors, line styles, plotting options, show or hide channels in an instant	<b>Printing:</b> Automatically print graphical or tabular data

### ORDERING INFORMATION

Model	Description
RFTC4000A	Thermocouple Recorder & Wireless Transmitter
RFC101A	Wireless Receiver
SP100	Software, manual and 9-pin computer interface cable
Contact PTC®	N.I.S.T. Calibration Certificate

### ASK ABOUT OUR OTHER DATA RECORDERS

<b>Temperature</b>	<b>pH</b>
<b>Humidity</b>	<b>Level</b>
<b>Pressure</b>	<b>Shock/Vibration</b>
<b>Bridge/Strain</b>	<b>Submersible</b>
<b>Current</b>	<b>Intrinsically Safe</b>
<b>Pulse/Event</b>	<b>RF Transmitters</b>
<b>Voltage</b>	<b>Multi-parameter</b>

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