



Data Logging Solutions

FOOD PROCESSING

For USDA Regulation Compliance and HACCP Programs



**Wireless Continuous
Process Monitoring**



**Food
Storage**



**Cooking
& Cooling**



**Canning & Beverage
Applications**



**Oven Temperature
Monitoring**



**Food
Shipping**



**Egg Shipping,
Storage & Incubation**



Data Logging Solutions for Temperature Critical Food Processing Applications

MadgeTech has been a key resource for the food and beverage industry for over 20 years, offering a wide range of temperature monitoring solutions.

We have a deep commitment to facilitating regulatory compliance and promoting best practice in food safety. MadgeTech data loggers and monitoring systems have become synonymous with HACCP compliance and process verification throughout the food industry, both domestically and internationally.

Most importantly, the MadgeTech name is widely known for both quality and reliability.

As a provider of leading-edge technology, MadgeTech offers a diverse line of wireless data logging systems for environmental and facility monitoring. This allows FSQA personnel to see both product and process temperatures in real-time. From refrigerators to freezers and blast chillers, from the production floor to packaging and storage, MadgeTech provides an easily scalable temperature and humidity data monitoring solution for even the most challenging environments.

Our goal is to continue to provide the tools needed to help food safety professionals perform their jobs more effectively and efficiently.

When you think food safety, think MadgeTech.





Wireless Continuous Process Monitoring

Wireless Meat Temperature Monitoring

MadgeTech's RFOT wireless, continuous monitoring data logging system provides a streamlined solution for measuring and recording internal product temperatures throughout the cooking, smoking, cooling and storage of meat and food products. Users can configure email and text message notifications in the event a logger receives data outside of the desired range.

The RFOT monitors and records internal temperature of meat products during cooking, cooling and storage. It can be used inside smokers and other cooking processes up to 212 °F (100 °C) as well as coolers and freezers down to -4 °F (-20 °C). The RFOT is completely splash-proof and can withstand wash down cycles. Once deployed, loggers can be stopped and started remotely and real-time data can be viewed from a central PC or from a smartphone using MadgeTech Cloud Services.

MadgeTech wireless data loggers help users ensure that critical control limits are not exceeded by sending email or text notifications when temperature thresholds are met.



Food Storage

Wireless Ambient Data Loggers

The MadgeTech 2000A series of wireless data loggers include models specifically designed to monitor ambient temperature and humidity in warehouses, coolers, freezers and other sensitive environments. Data from each 2000A logger can be viewed locally via LCD screen or remotely using MadgeTech 4 Data Logger Software or MadgeTech Cloud Services.

Programmable alarms can be set to alert users of undesirable temperature or humidity excursions. These alarms are audible and visible on the logger itself and users can also configure text message or email notifications.

Wireless Thermocouple-Based Data Loggers

The RFTCTemp2000A is a wireless thermocouple temperature data logger. This device can measure ambient temperature and be fitted with a thermocouple probe for targeted remote measurement. It accepts all thermocouple types, allowing the device to measure and record temperatures between -454 °F and +3308 °F (-270 °C to +1820 °C). The convenient LCD provides instant viewing of the current readings, as well as access to minimum, maximum and average statistics.



RFRHTemp2000A

Wireless Temperature and Humidity Data Logger with LCD display on wall mount.



RFTCTemp2000A

Wireless Thermocouple based Temperature Data Logger with LCD display on table mount.

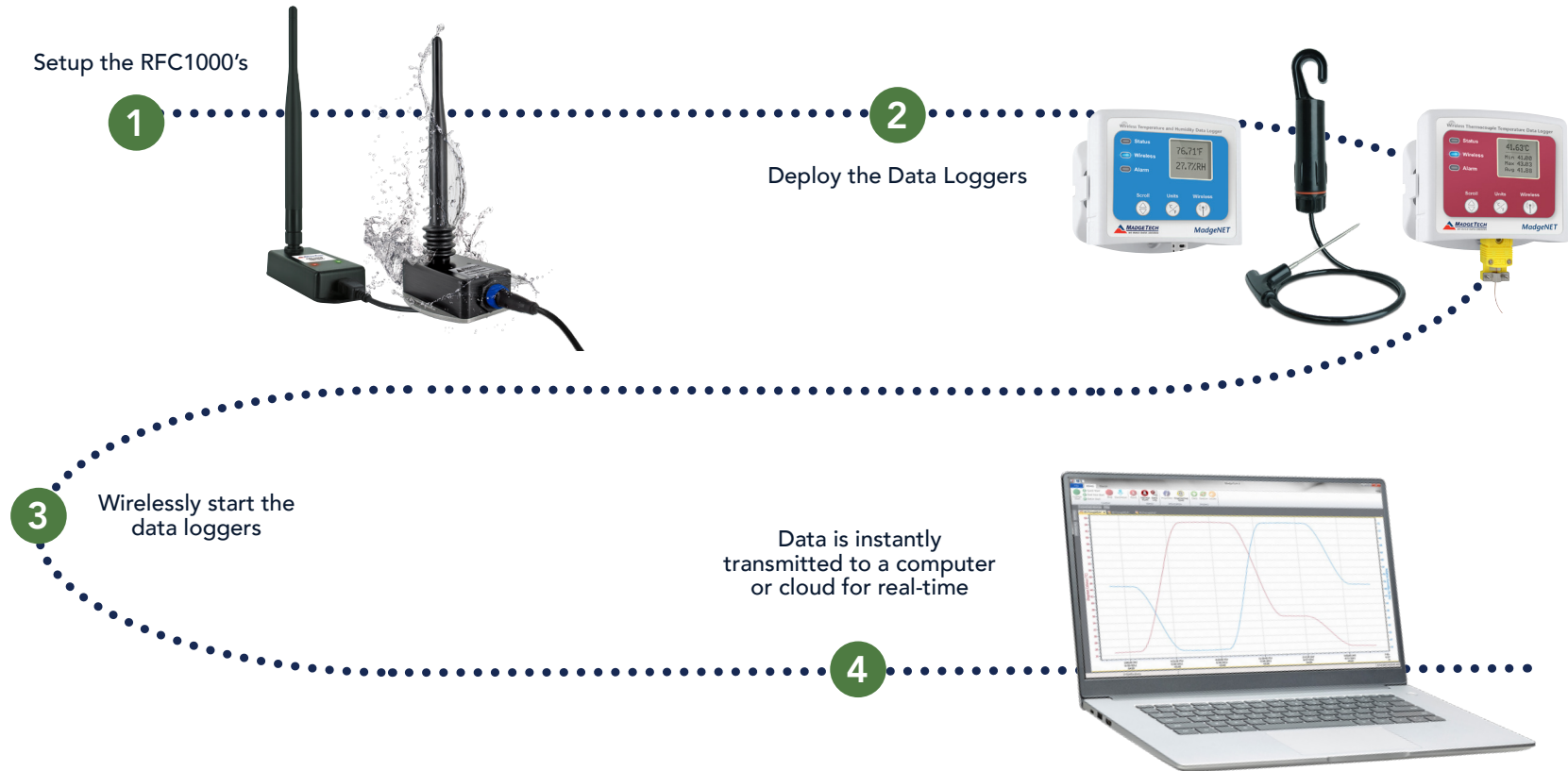
Features

- LCD Screen
- Audible & LED Alarm Indicators
- Battery Life Indicator

Applications

- Coolers
- Freezers
- Warehouses
- Thermal Mapping

Wireless Logging in 4 Easy Steps!



RFC1000

Wireless Transceiver

The RFC1000 is a wireless transceiver for the RFOT and RF2000A series of data loggers. The RFC1000 features a 7.0 inch (178 mm) pivoting external antenna, which increases the transmission distance and provides greater signal strength and also allows more flexibility with mounting orientation.

RFC1000-IP69K

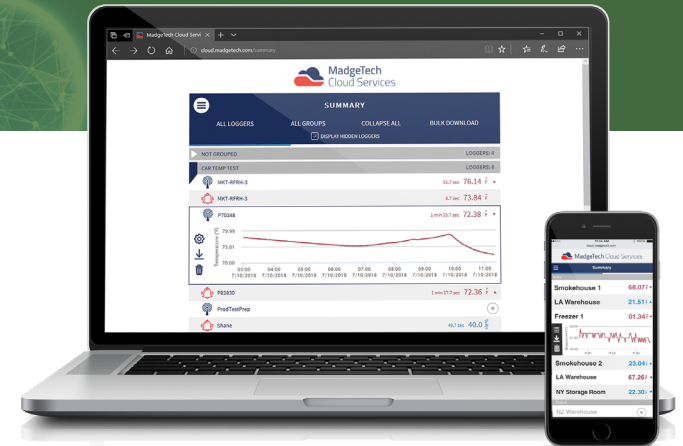
Splash-Proof Wireless Transceiver

The RFC1000 is a wireless transceiver for the RFOT and RF2000A series of data loggers. The RFC1000 features a 7.0 inch (178 mm) pivoting external antenna, which increases the transmission distance and provides greater signal strength and also allows more flexibility with mounting orientation.

MadgeTech Cloud Services

Access Data Instantly and Securely from Anywhere in the World

The **MadgeTech Cloud** is compatible with all MadgeTech wireless data loggers, providing users with instant access to real-time data from any location. With the MadgeTech Cloud, data loggers can securely transmit data to be viewed on any Internet enabled device such as a computer, tablet or smartphone.



Scalable Solution

The MadgeTech Cloud is designed to support organizations of any size. From a single data logger to a network consisting of hundreds of loggers, the MadgeTech Cloud provides facilities with on-demand data supervision, attainable results, and flexibility like never before. The MadgeTech Cloud gives users the power to have control of all their critical data right in the palm of their hand.

Cloud Capabilities

All wireless MadgeTech data loggers can transmit data to the MadgeTech Cloud to be saved, viewed and controlled. The data is available for viewing from any Internet enabled device anywhere in the world. Equipped with many features, the MadgeTech Cloud is flexible enough to adapt to any data logging needs.

New Logger Groups

Assembling data loggers is easier than ever thanks to the MadgeTech Cloud's Logger Groups. Users have the ability to organize data loggers into groups and subgroups, making all data easily accessible from one central location.

Email & Text Message Alerts

The MadgeTech Cloud allows users to configure alarms to alert for no readings, channel thresholds or battery level. When an alarm is triggered, text message or email notifications are instantly sent, giving users the ability to view the data and assess the situation immediately.



Quick & Easy Setup



View Data From Anywhere



Access Data Instantly



Email & Text Notifications



Relay Data Directly to
MadgeTech Cloud



Long Distance
Wireless Transmission



LED Indicators

Transmit Data to the MadgeTech Cloud with the RFC1000 Cloud Relay

Taking cloud data logging to a whole new level! The **RFC1000 Cloud Relay** is a data logging hub that connects to the Internet via Ethernet and transmits data directly to the MadgeTech Cloud. This allows users to remotely monitor and manage groups of data loggers throughout a large facility or multiple locations without the need of a central PC.

The RFC1000 Cloud Relay has the ability to transmit data for up to 64 data loggers with no limit on the number of cloud relays that can be connected to a cloud account. This provides users with the ability to obtain information from a single data logger to many data loggers in multiple locations.

Cooking & Cooling

Verify Wet or Dry Food Processing Applications

MadgeTech HiTemp140 data loggers are designed for a wide range of food and meat processing applications to assist in compliance with HACCP guidelines and USDA regulations.

HiTemp140 loggers are made from food-grade stainless steel and come in a variety of both rigid and flexible probes. These rugged loggers can indefinitely withstand temperatures of up to 284 °F (140 °C) and are completely submersible, making them perfect to validate cooking, smoking or pasteurization processes.

For applications above 284 °F (140 °C), a thermal shield is available for HiTemp140 series data loggers. Made of food-grade PTFE, the Thermal Shield extends the operating temperature range of the data logger for extreme temperature monitoring.

MadgeTech data loggers help users monitor and record the internal temperature of meat during a process



Applications

- Cooking & Smoking
- Pasteurization Process
- Roasting Ovens
- Lobster Boiling
- Equipment Validation/Profiling



Canning Applications

Canning

The HPT System provides an all-encompassing solution for monitoring the internal temperatures of canned and packaged foods during processing. This system not only facilitates heat penetration testing but also ensures detailed temperature distribution monitoring, which is crucial for detecting cold spots and maintaining uniform heat distribution. Experience ultimate flexibility with the option to use the HiTemp140-CF with either the ThermoLock or CF202. For applications with canning or bottles with liquid, the ThermoLock thermowell creates a hermetic seal to avoid spillage. Alternatively, the CF202 can be used for dry goods including foods packaged in recart packaging or pouches.



Suitable Packing Type

- Cans
- Jars
- Soft Pouches
- Rigid Plastic Containers
- Retort Packages

Oven Temperature Monitoring

Rotary & Conveyor Oven Monitoring

The ThermoVault Max is an extreme, high temperature thermal barrier designed for use with MadgeTech's HiTemp140-PT data logger models. Built to endure extreme temperature monitoring environments, this durable enclosure can withstand temperatures up to 752 °F (400 °C) and provides a best-in-class solution for the harshest of applications.

Features

- No Wires or Thermocouples
- Temperatures up to 752 °F
- Food-grade Stainless Steel
- Sleek Compact Design

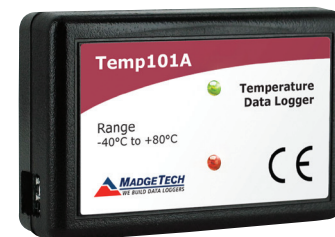
MadgeTech data loggers help verify your equipment is working properly and assist in your preventative maintenance program



Food Shipping

Refrigerated Products

The Temp101A is second to none in the compact, portable and low cost data logger class. This device can measure and record ambient temperature from -40°C to 80°C (-40°F to $+176^{\circ}\text{F}$) and is approximately the size of a matchbox which allows for easy placement even in tight spaces. Combined with the ability to store over 2,000,000 readings makes the Temp101A the ideal solution for long term temperature deployment and monitoring cycles.



Bluetooth Monitoring

The LynxPro logger excels in the monitoring of ambient temperatures critical for food storage and shipments. Featuring a robust measurement range from -20°C to 60°C , it guarantees accurate temperature data capture across various conditions. Ideal for overseeing temperature-sensitive goods in storage facilities or during transit, the LynxPro helps ensure your products remain within safe temperature thresholds. Its Bluetooth capability enhances connectivity, allowing for wireless data retrieval and real-time monitoring directly from your device. The large LCD screen provides immediate and clear readings, enabling swift response to any temperature fluctuations vital in maintaining food quality and safety.



Freezer Foods & Shipping Containers

The CryoTemp is a standalone ultra-low temperature logger that can measure as low as -122°F (-86°C). The enclosure is splash-proof and equipped with LED lights to inform users when programmed temperature limits have been approached or exceeded.



Egg Shipping, Storage & Incubation

Validating Egg Processes

The EggTemp and EggTemp-RH Thermal Shields are enclosures for the MicroRHTemp data logger that are designed to thermally respond to an environment the same way a real egg does. The EggTemp is submersible and measures temperature, while the EggTemp-RH measures temperature and humidity, simulating the experience of the actual product.

These devices are commonly used in monitoring the shipping and storage of eggs as well as monitoring pasteurization cycles. The MicroRHTemp can record temperatures up to 140 °F (60 °C) and has a maximum memory capacity of 32,767 readings.



MadgeTech 4 Software

The simple, easy-to-use, Windows-based software enables the user to effortlessly collect, display and analyze data. A variety of powerful tools can be used to examine, export, and print professional quality reports with just a click of the mouse. This software can be downloaded for free from the MadgeTech website.

MadgeTech 4 Software Customizable Features and Options

MadgeTech 4 Software can communicate with multiple loggers through multiple interface cables. Capable of simultaneous start, stop and download of over 100 devices, this software serves as your virtual command center for large scale facilities and small. Display your data in graphs, with tabbed views and multi-monitor support. Utilize the infinite graphing flexibility by combining channels and datasets as desired. All graphing makes use of accelerated graphics hardware for real-time updating and high performance visuals.

MadgeTech 4 Software is designed with a built-in database for automatic storage of downloaded data. The look and feel is organized much like standard email programs to aid in user friendliness and ease of use. MadgeTech 4 Software also offers extensive alarming options across multiple devices, wireless and non-wireless. Alarm output options include email, on-screen, text message and run-a-program alerts.

MadgeTech 4 Software has a powerful and comprehensive statistics system that allows the user to customize and view statistics as desired. Another feature is customizable engineering units. This enables users to support and program devices with many different unit types as well as the ability to display them as an alternate unit if desired.

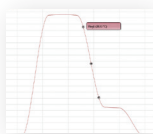


Software Features

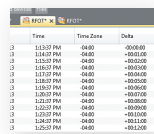
- Multiple Graph Overlay
- Statistics
- Digital Calibration
- Zoom In / Zoom Out
- Cooling Flags
- Lethality Equations (F0, PU)
- Mean Kinetic Temperature
- Full Time Zone Support
- Data Annotation
- User Friendly File Management
- Min. / Max. / Average Lines
- Timeslice
- Data Table Review
- Automatic Report Generation
- Summary View
- Workflows / Automation



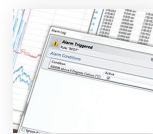
Cooling Flags



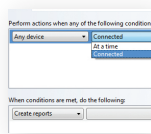
Graph View



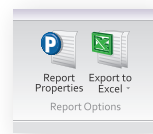
Tabular Data View



Alarm Notifications



Automation



Export to Excel

MadgeTech Data Logging Software makes record keeping a simple task. Easily tailor graphs and create custom reports for the product being processed to help comply with federal guidelines and regulations

