

Data Logging Solutions

# SEAFOOD PROCESSING

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For USDA Regulation Compliance and HACCP Programs



# Data Logging Solutions for Temperature Critical Food Processing Applications



MadgeTech has been a key resource for the seafood 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 Continuous Process 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 seafood products. Users can configure email and text message notifications in the event a logger receives data outside of the desired range.

The RFOT is designed for use in monitoring and recording the temperatures of meat and seafood products throughout production.

- Monitor fish temperatures throughout the entire production process
- Verify proper cooking temperatures are reached
- Monitor product temperatures in smokehouses and coolers
- Validate internal temperatures during refrigeration and storage
- Wirelessly transfer real-time data to PC
- Compatible with MadgeTech Cloud Services for remote monitoring



### Available Probe Lengths

- 1.75 in (70 mm) RFOT-FR (Fast Response)
- 4.0 in (102 mm) RFOT-4
- 4.0 in (102 mm) RFOT-4-TD (Transitional Diameter)
- 7.0 in (177 mm) RFOT-7
- 12.0 in (304 mm) RFOT-12



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.



# Seafood Storage

## Applications

- Coolers
- Freezers
- Warehouses
- Thermal Mapping

## Features

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



**RFTemp2000A**  
Wireless Ambient Temperature Data Logger with LCD on wall mount.

## Wireless Ambient Data Loggers

The **MadgeTech 2000A series** of wireless data loggers provide the ultimate solution in environmental monitoring for seafood production facilities, storage warehouses, retail locations and more.

- Monitor storage environments to prevent spoilage
- Map the temperature of production facilities and warehouses
- View data on device screen or remotely via PC or MadgeTech Cloud Services
- User-programmable audible or visible alarms
- Configure text message or email notifications



**RFRTemp2000A**  
Wireless Temperature and Humidity Data Logger with LCD display on wall mount.

## Wireless Thermocouple-Based Data Logger

The **RFTCTemp2000A** is a wireless thermocouple temperature data logger compatible with most thermocouple probes, ideal for remote product temperature monitoring.

- Monitor internal temperatures of products in smokers, coolers and steamers
- View data locally on LCD or remotely via PC or MadgeTech Cloud Services
- Program alerts to tell you when unsafe temperatures occur



**RFTCTemp2000A**  
Wireless Thermocouple based Temperature Data Logger with LCD display on table mount.



# Wireless Logging in 4 Easy Steps

STEP 1

Setup the RFC1000's

## 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.



STEP 2

Deploy the data loggers



STEP 3

Wirelessly start the data loggers

STEP 4

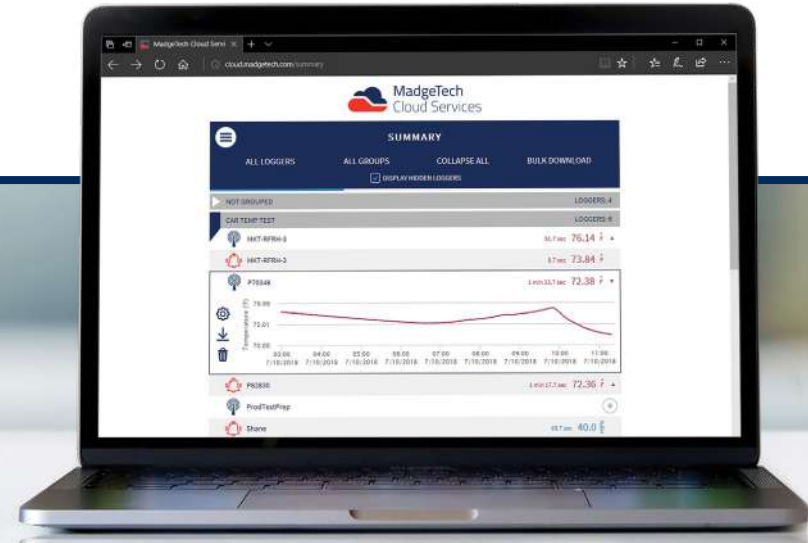
Data is instantly transmitted to a computer or cloud for real-time monitoring





# 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 and  
Easy Setup



View Data  
From Anywhere



Access Data  
Instantly

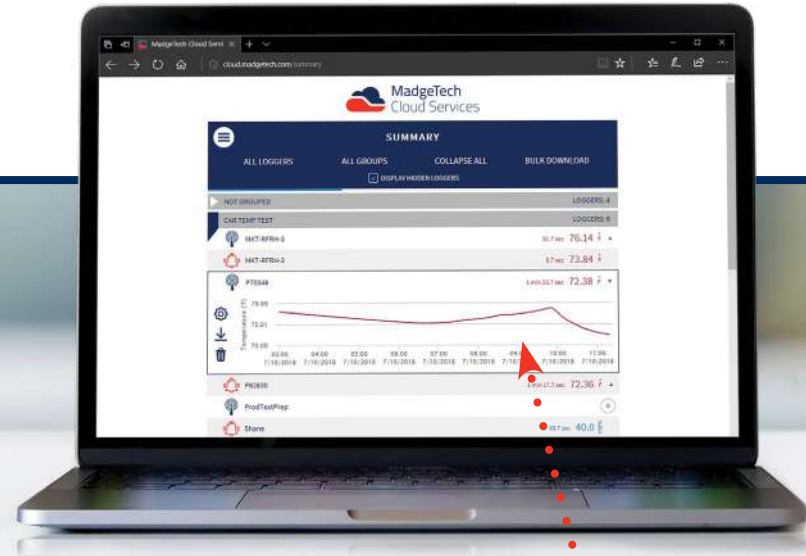


Email and Text  
Notifications



# MadgeTech Cloud Services

## 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.



Relay Data  
Directly to the  
MadgeTech Cloud



Long Distance  
Wireless  
Transmission



LED Indicators





# High Temperature Process Validation



## Verify Wet or Dry Food Processing Applications

MadgeTech **HiTemp140** data loggers are designed for a wide range of seafood 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.

- Monitor temperatures during cooking and smoking
- Validate pasteurization processes
- Verify equipment sterilization
- Map and profile ovens
- Generate compliance reports through MadgeTech 4 Data Logger Software

## Applications

- Cooking and Smoking
- Pasteurization Processes
- Lobster Boiling
- Equipment Validation/Profiling



Thermal Shield

HiTemp140X2

HiTemp140-1

HiTemp140-2

HiTemp140-5.25

HiTemp140-7

HiTemp140-PT-1





# Canning Applications



## Canning

The **CF200 Canning Fitting** securely attaches MadgeTech HiTemp140 data loggers to jar lids, cans or other containers, with the data logger probe inserted into the container to monitor internal temperatures. The CF200 can withstand temperatures up to 140 °C (284 °F) making it ideal for use in a variety of canning applications in a wide range of industries and environments. This accessory is compatible with the HiTemp140-FP, HiTemp140-PT-5, HiTemp140-2-TD and HiTemp140-5.25-TD data loggers.

- Securely attach HiTemp140 data loggers to jars, cans and other containers
- Monitor internal temperatures during canning processes
- Prevent the risk of foodborne illness
- Validate canning process compliance and safety



## Suitable Packaging Types

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



# Shipping



## Refrigerated Products

The **TransiTemp-EC** is a low cost temperature data logger ideal for shipping applications.

- Record product exposure during storage or shipping
- Fits easily in refrigerators, freezers or shipping trucks
- Dual LEDs provide device status and alarm conditions
- Single or multi-use versions available

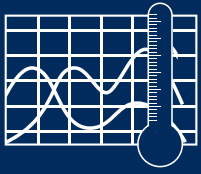


## Freezer Foods & Shipping Containers

The **CryoTemp** is a standalone ultra-low temperature logger that can measure as low as -122 °F (-86 °C).

- Monitor freezer temperatures during storage and shipping
- The perfect complement to a dry ice system
- Easy-to-read LED light display
- Splash-proof design, compact and portable





# MadgeTech 4 Software



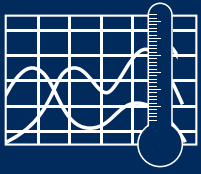
The simple, easy-to-use, Windows-based software enables the user to effortlessly collect, display and analyze data. A variety of powerful tools can be used to examine, export, and print professional quality reports with just a click of the mouse. This software can be downloaded for free from the MadgeTech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

## 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 View
- Automatic Report Generation
- Summary View
- Workflows / Automation



The 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.



# MadgeTech 4 Software

## MadgeTech 4 Software Customizable Features and Options

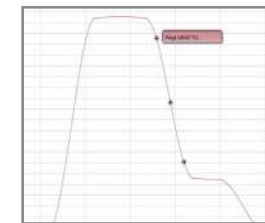
**MadgeTech 4 Software** can communicate with multiple loggers through multiple interface cables. Capable of simultaneous start, stop and download of over 100 devices, this software serves as your virtual command center for large scale facilities and small. Display your data in graphs, with tabbed views 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.



Cooling Flags



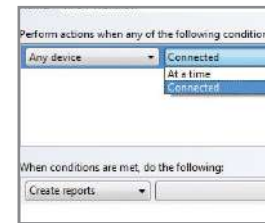
Graph View

Time	Time Zone	Delta
3	11:36:57 PM	-04:00
3	11:40:57 PM	-04:00
3	11:53:57 PM	-04:00
3	11:57:57 PM	-04:00
3	12:02:57 PM	-04:00
3	12:07:57 PM	-04:00
3	12:12:57 PM	-04:00
3	12:17:57 PM	-04:00
3	12:22:57 PM	-04:00
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3	12:37:57 PM	-04:00
3	12:42:57 PM	-04:00

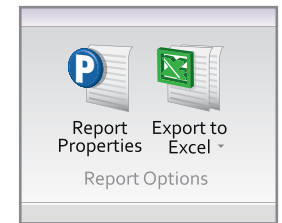
Tabular Data View



Alarm Notifications



Automation



Export to Excel



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