



Temperature Data Logging Solutions

MEAT INDUSTRY

For USDA Regulation Compliance and HACCP Programs



Wireless Continuous
Process Monitoring



Meat Cooking
and Cooling



Smokehouses



Oven Temperature
Profiling



Meat Storage

The MadgeTech Advantage

Ensure safety, quality and efficiency by measuring and recording crucial data for inconsistencies that directly impact the success of a business. Our customizable data logging solutions provide real-time monitoring for applications where the slightest change in environment could be destructive. Coupled with the accuracy and reliability of our products, we also offer free software and cloud services, making compliance and validation reporting a breeze.

Why Choose MadgeTech?

At MadgeTech we take pride in maintaining meaningful relationships with our customers, going above and beyond to turn their everyday problems into new data logging solutions. To ensure the instrument's accuracy, MadgeTech offers in-house standard and customized calibration services, including ISO/IEC 17025 accredited calibrations for certain products.

Benefits:

- ▲ Calibration
- ▲ ISO/IEC 17025 Accreditation
- ▲ IQ/OQ/PQ On-Site Services
- ▲ Free Technical Support
- ▲ Free Software
- ▲ Cloud Services
- ▲ 21 CFR Part 11 Compliance

MadgeTech data loggers are designed, manufactured and serviced in the USA and distributed worldwide.



HEADQUARTERS
Warner, New Hampshire

Wireless Continuous Process Monitoring



MadgeTech's wireless, continuous monitoring data logging systems provide a streamlined solution for measuring and recording the cooking, cooling and storage of meat and food products. Wireless data loggers are placed throughout a facility to measure processes such as cooking and cooling cycles or environmental monitoring in coolers, freezers or warehouses. If the data received is out of a safe range, the system can be configured to send an email, text message or on-screen alarm.

Wireless Meat Temperature Monitoring

The **RFOT** is designed for use in monitoring and recording the temperature of meat products during cooking, cooling and storage. It can be used in smokers and other cooking processes up to 212 °F (100 °C) as well as coolers and freezers down to -4 °F (-20 °C). It is completely splash-proof and can withstand wash down cycles.



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.



Available Probe Lengths

- 1.75 in (70mm)
- 4.0 in (102 mm)
Fast Response
- 4.0 in (102 mm)
Transitional Diameter
- 7.0 in (177 mm)
- 12.0 in (304 mm)

Wireless Facility Monitoring



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.

MadgeTech's 2000A Wireless Data Logger Series is designed to provide continuous temperature and humidity monitoring of coolers, freezers, warehouses and any other temperature sensitive environment. This series is easy to mount and includes a built in digital display for instant access to the current reading, as well as minimum, maximum and average statistics.

Data can be transmitted wirelessly back to a central PC through an RFC1000 mesh network, or relayed instantly to the MadgeTech Cloud for viewing on any internet enabled device. This series features an audible alarm to alert users in close proximity should the temperature or humidity exceed a user defined safe range. Email, text message or on-screen alerts can also be configured for around the clock notification.

Wireless Data Loggers

The **RFRHTemp2000A** is a wireless temperature and humidity data logger. It is ideal for monitoring warehouses and other temperature and humidity sensitive environments. The **RFTCTemp2000A** is a wireless thermocouple based temperature data logger. This device can measure both ambient temperature as well as thermocouple temperature and can be used for ovens, coolers, freezers and more.

Applications

- Coolers
- Freezers
- Warehouses
- Thermal Mapping

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

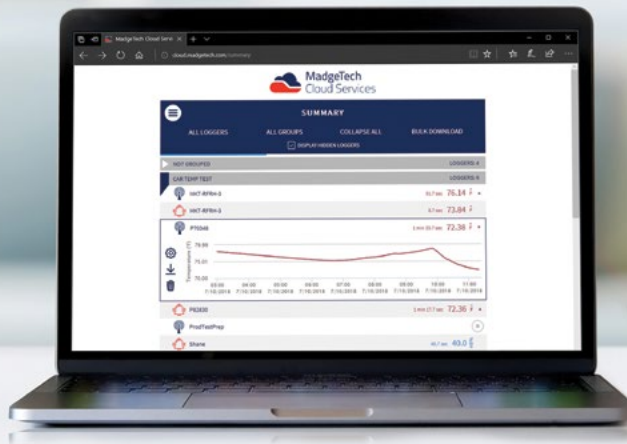
Data is instantly transmitted to a computer or cloud for real-time monitoring





MadgeTech Cloud Services

Access Data
Instantly and
Securely from
Anywhere in
the World



Quick and
Easy Setup



View Data
From Anywhere



Access Data
Instantly



Email and Text
Notifications

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.

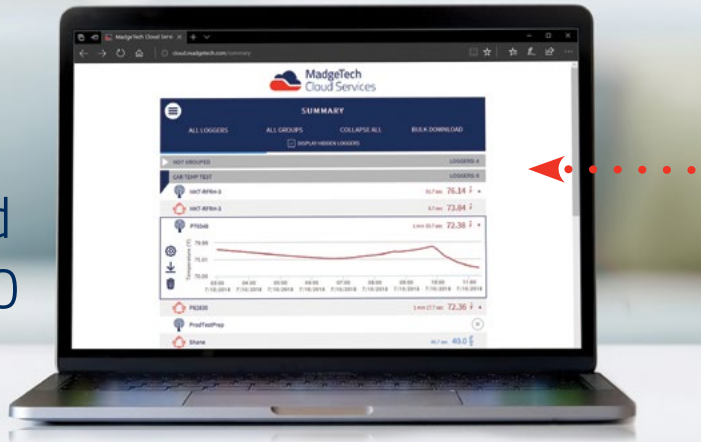
Cloud Capabilities

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.



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.

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.



Relay Data Directly to
the MadgeTech Cloud



Long Distance Wireless
Transmission



LED Indicators

High Temperature Data Loggers



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

The MadgeTech **HiTemp140** series data loggers are designed to be used in a wide range of food and meat applications to help comply with HACCP requirements and USDA regulations. These data loggers can indefinitely withstand temperatures up to 284 °F (140 °C) and are completely submersible. The RTD probe and food-grade stainless steel enclosure, is available in both rigid and flexible probe models. This series allows customers to create a custom validation kit for smokehouse monitoring, oven mapping, pasteurization and more.

- Compliance with USDA Regulations
- Completely Submersible
- Food-Grade Stainless Steel
- Withstand Temperatures up to 284 °F (140 °C)



HiTemp140X2 HiTemp140-1 HiTemp140-2 HiTemp140-5.25 HiTemp140-7 HiTemp140-PT-1

High Temperature Data Loggers



Extended Temperature Monitoring

For applications above 284 °F (140 °C), a thermal shield is available for the 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.



- Withstand Temperatures up to 482 °F (250 °C)
- Flush-Top & Vented Models Available



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



Versatile High Temperature Data Logger with M12 Probe Connector

The **HiTemp140-M12** features the same rugged stainless steel body as the other HiTemp140 data loggers in the series, but offers interchangeable probe options using an M12 type connector. The M12 connectivity makes this versatile data logger compatible with the large variety of M12 RTD probes available today. The HiTemp140-M12 is capable of measuring and recording temperatures from -200 °C to +850 °C (-328 °F to +1562 °F) (probe dependent).

High Temperature Data Loggers



Lethality Compliance System

Need to record humidity at high temperatures? Look no further than the **LCS140** Wet-Bulb/Dry-Bulb system. Ditch the complexity of calculating with a psychrometer, the LCS140 coupled with the MadgeTech 4 Software does all the work for you! Capable of withstanding temperatures from -40 °C to +140 °C (-40 °F to +284 °F), the dual probe LCS140 takes wet-bulb and dry-bulb readings simultaneously to determine the amount of humidity present.



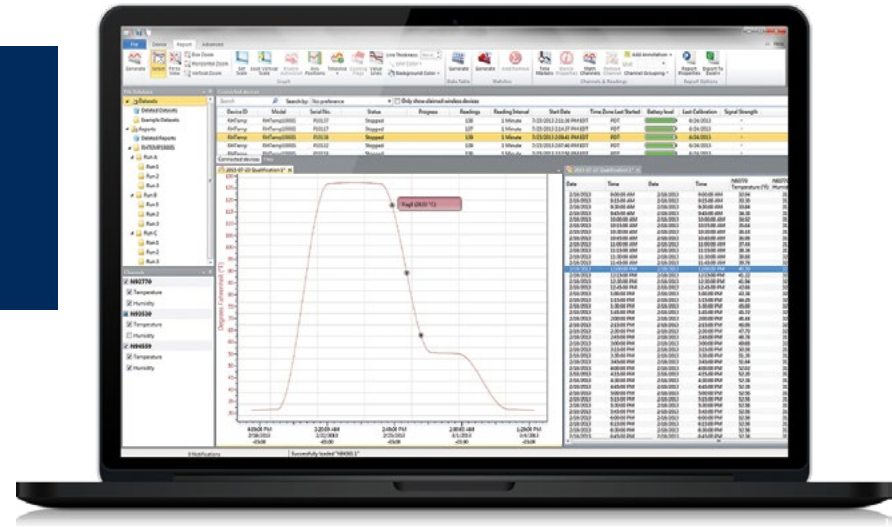
Oven Temperature Profiler

The **ThermoVaultX4** is a four channel thermally insulated oven temperature profiler. The ThermoVaultX4 features a stainless steel enclosure with PTFE insulation and can withstand oven temperatures up to 662 °F for up to 25 minutes. The device sits at 2.45 inch (62 mm), allowing it to fit inside most conveyor ovens, and comes equipped with four thermocouples to monitor multiple locations. An eight channel model is also available.

- Identify Oven Hot & Cold Spots
- Withstand Temperatures up to 662 °F (350 °C)

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.

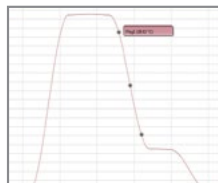
MadgeTech 4 Software has a powerful and comprehensive statistics system that allows the user to customize and view statistics as desired. Another feature is customizable engineering units. This enables users to support and program devices with many different unit types as well as the ability to display 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 View
- Automatic Report Generation
- Summary View
- Workflows / Automation



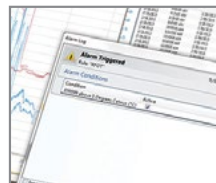
Cooling Flags



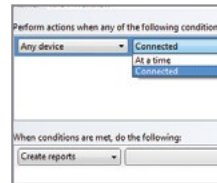
Graph View

Time	Time Zone	Delta
11:37 PM	-04:00	+00:00:00
11:37 PM	-04:00	+00:01:00
11:37 PM	-04:00	+00:02:00
11:37 PM	-04:00	+00:03:00
11:37 PM	-04:00	+00:04:00
11:37 PM	-04:00	+00:05:00
11:37 PM	-04:00	+00:06:00
11:37 PM	-04:00	+00:07:00
11:37 PM	-04:00	+00:08:00
11:37 PM	-04:00	+00:09:00
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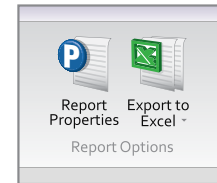
Tabular Data View



Alarm Notifications



Automation



Export to Excel