

Data Logging Solutions for

# Wine Processing, Storage & Transport





## Simplifying How the World Measures & Records Data

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MadgeTech, Inc. is a global company, based in New England and founded on old-fashioned principles, customer service, quality, and trust. MadgeTech's President, Norman Carlson, started the company in 1996 and charted the growth of the product lines and services while maintaining those solid core principles.

Our 'Can Do' team of engineers and technical staff consistently incorporate new and innovative ideas into our data loggers. In short, we push the envelope, raising the bar in innovation and quality. Our competitors have praised us by adopting many of our ideas as their own. Over time, MadgeTech has become the industry standard in the data logger market. MadgeTech continuously develops new, cutting-edge products, creating solutions for our customers around the world in industries across the board. Our growing network of distributors has expanded our presence to markets far beyond our home-headquarters in

New Hampshire, our products are now sold in over 100 countries around the world.

Our employees are committed to quality and customer satisfaction. Behind the full range of MadgeTech's products and services is the cumulative expertise of experienced engineers, manufacturing and electronic professionals and technicians. Our knowledgeable sales team can offer technical advice to assist in selecting the right product for each application, as well as providing after-sales support.

MadgeTech is dedicated to providing customers with reliable, affordable products, hassle-free ordering, and excellent service, saving customers time and money. It is our goal to earn your trust in meeting your needs and providing innovative solutions. The products and services that bear the MadgeTech name come with quality assurance and the best support in the industry today.

Norman E. Carlson,

Founder & President

# Data Logging Solutions for Temperature & Humidity Critical Applications in Wine Production & Processing

MadgeTech offers data loggers specifically for wine processors to monitor temperature and humidity exposure throughout production steps, shipping and storage. These devices are designed to ensure product quality from vineyard to bottle. Wine processors have guidelines for temperature and humidity to preserve the quality, freshness and intended taste of the product. By utilizing data loggers, these parameters can be monitored during fermentation, shipments and storage, simplifying the process every step of the way. MadgeTech's series of wine data loggers are small and durable, allowing them to easily integrate into all aspects of processing.



Vineyard Solutions



Wine Processing



Wine Shipping & Transport



Wine Storage



# Vineyard Solutions

Wine begins its journey in a vineyard. Unsurprisingly, this is also where environmental monitoring begins. As with all types of agriculture, environmental monitoring plays an important role in ensuring conditions remain favorable for proper growth and plant development. MadgeTech's line of environmental data loggers can monitor temperature, wind speed and additionally monitor rainfall.



## Rainfall Data Logging System

### Rain101A

The **Rain101A** is a complete system to accurately measure and record rainfall over long periods of time. The Rain101A can record up to 6 inches of rainfall every hour and 131 inches of rainfall total. The Rain101A only records to memory when rainfall is present, maximizing the amount of time the system can record. The Rain101A features a 10 year battery life, 4 Hz reading rate, a multiple start/stop function and 406,323 reading storage capacity.

The Rain101A comes complete with an Rain101A data logger, weatherproof enclosure, tipping bucket rain gauge, 50 ft of cable and the IFC200 interface cable and software package.



# Wind Speed Data Logging System

## Wind101A

The **Wind101A** is a complete system to accurately measure and record wind speed. The Wind101A data logger can measure and record data for up to 500,000 readings. The device can be started and stopped directly from a computer with the user-friendly MadgeTech software.

This wind speed recording system comes complete with the Wind101A data logger, weatherproof enclosure, a three-cup anemometer and all the necessary cabling to quickly get up-and-running.





# Wine Processing Data Loggers



## Fermentation & Bottling

### MicroTemp

The **MicroTemp** is a miniature, submersible temperature data logger. At only 2.6 in (66 mm) tall and 0.7 in (18 mm) in diameter, this recorder can be placed within fermentation tanks or easily fit into most beverage bottles to monitor and record temperature through the entire wine processing cycle.



# Processing Applications

## HiTemp140

The MadgeTech **HiTemp140** series of data loggers are designed to be used in a wide range of wine processing applications. The versatile data loggers can operate in temperatures as high as 284 °F (140 °C) and are completely submersible. The food-grade stainless steel enclosure is available with rigid and flexible probe models, depending on the application requirements. A variety of flexible and ambient probe combinations are available.



*A variety of probe lengths are available.*

# Cleaning Verification & Validation

## HiTemp140-M12 and CIP Probe

The MadgeTech **HiTemp140-M12** data logger is designed to be used in wine processing plants where clean-in-place applications need to be verified and validated.



## IFC406

### Multiplexer Data Logger Interface

The **IFC406** Multiplexer Data Logger Interface was designed to simplify and expedite the data retrieval process by allowing for multiple devices to be connected into one interface. Each IFC406 allows for 6 data loggers to be connected. Up to three IFC406 units can be daisy-chained together to communicate with a total of 18 devices through 1 USB port.



To connect multiple IFC406 Interfaces together, simply join the units side by side, making sure the spring pin contacts are connected and magnetically joined.



# Shipping Data Loggers



## Portable Temperature & Humidity Monitoring

### TransiTempII & TransiTempII-RH

Most wine damage occurs during transport due to lack of monitoring. To make sure wine quality is preserved, the MadgeTech's **TransiTempII** can be placed in wine crates for temperature monitoring while wine is being shipped or stored. For temperature and humidity monitoring, the **TransiTempII-RH** is an ideal solution. The TransiTempII and TransiTempII-RH are low cost, splash proof temperature data logger that are ideal for shipping applications between the range of -40 °F to +176 °F (-40 °C to +80 °C). It is equipped with three LED's, green to signify that the logger is recording, orange indicates the user-set warning limits have been breached, and red indicates when the temperature alarm limits have been exceeded.



## Shock & Vibration Monitoring

### UltraShock

Like Temperature, vibrations can also spoil wine. If the wine bottle experiences severe vibration while shipping, it can introduce kinetic energy into the wine, which can chemically alter the wine. If long distance shipping is required, using a shock monitoring data logger can validate that the shipment remained safe. The **UltraShock** data logger can record any time the crate experiences shock and how much force was measured.





# Wireless Storage Data Loggers



## Wireless Wine Cellar Monitoring

RFRHTemp2000A & RFTCTemp2000A

MadgeTech has designed the 2000A wireless series which are capable of monitoring the temperatures of wine cellars, coolers and warehouses. This series includes a digital display to see the current reading, as well as minimum, maximum and average statistics based on the data recorded to memory. Data is also sent wirelessly back to a central PC through the RFC1000 mesh network.

The device in this series also include an audible alarm to alert users in close proximity. If the temperature or humidity exceeds the safe range, the audible alarm alerts the user to take immediate action.

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 coolers, freezers, and more.

All MadgeTech Wireless Data Loggers are compatible with the new **MadgeTech Cloud Services**, no additional hardware necessary! This new platform gives users instant access to real-time and recorded data from any location with an internet enabled device such as a tablet or mobile phone. For more information on MadgeTech Cloud Services, refer to page 11.

### Features

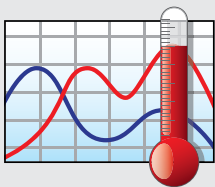
- LCD Screen
- Audible and LED Alarm Indicators
- Battery Life Indicator
- MadgeTech Cloud Compatible



◀ **RFRHTemp2000A**  
Wireless Temperature and Humidity Data Logger with LCD display on table mount.

**RFTCTemp2000A** ▶  
Wireless Thermocouple Based Temperature Data Logger with LCD display on wall mount.

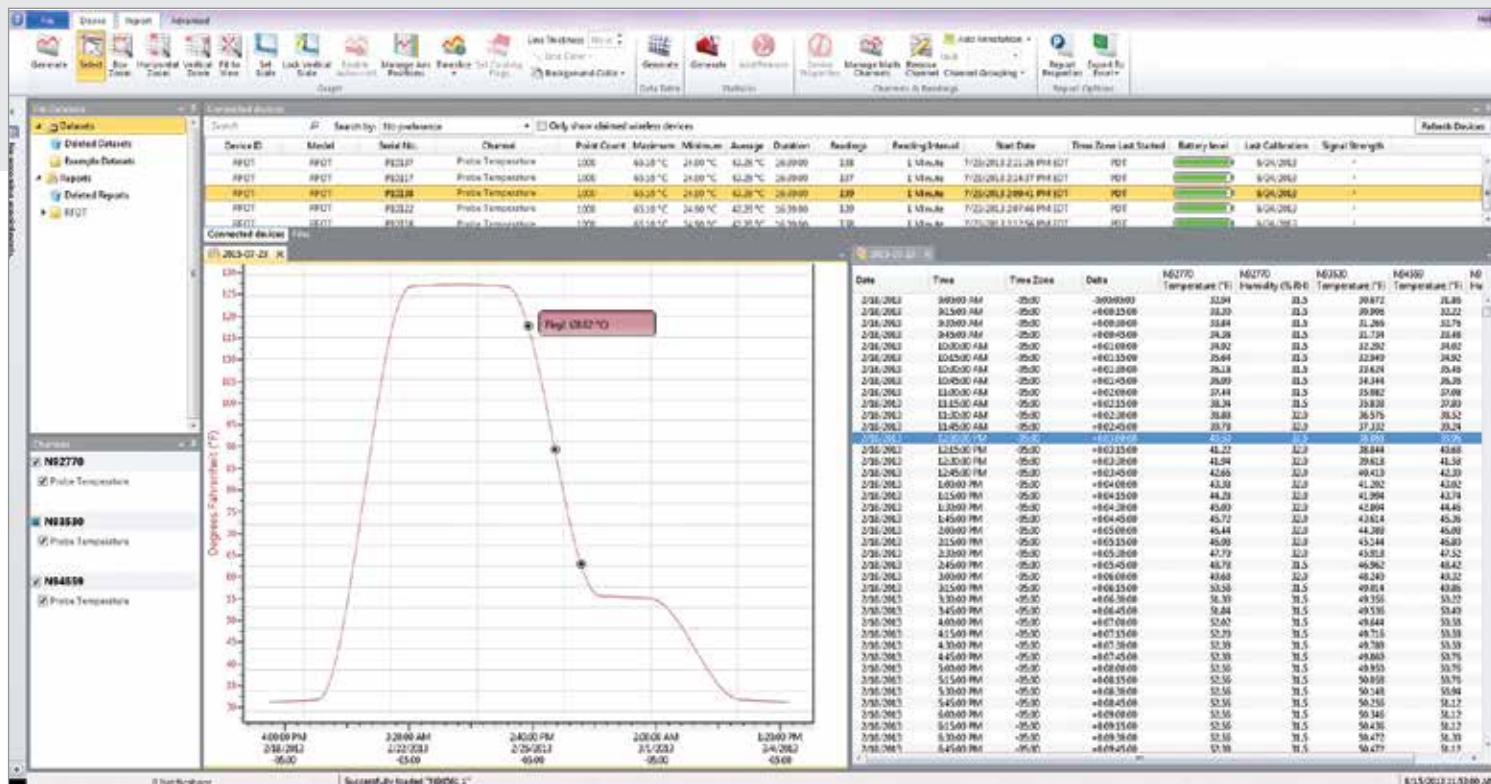




# MadgeTech Data Logger Software

This 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.

## Simple, Easy-to-use, Windows-based Software



Graph View



Tabular Data View



Statistics



Automation



Copy to Excel

## Software Features

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





# MadgeTech Cloud Services

Access Data Instantly and Securely  
from Anywhere in the World



The MadgeTech Cloud Hosted data logging platform provides continuous logging and monitoring of temperature, pressure, and humidity data while giving users instant access from any location. With MadgeTech Cloud Services, data loggers can securely transmit data in real time to be viewed on any internet or data enabled device such as a computer, tablet, or cell phone.

## Scalable Solution with Limitless Applications

With MadgeTech Cloud Services, this system is dynamically designed to perfectly fit applications requiring anywhere from a single data logger, to networks of hundreds of loggers in multiple locations. The MadgeTech Cloud platform provides facilities on-demand data supervision offering peace of mind and flexibility like never before.

## Monitoring and Logging Continuously

As a monitoring system, the MadgeTech Cloud allows for instant access to real time data in the palm of your hand. As a logging solution, recorded data is buffered and saved to the device's internal memory. This provides uninterrupted continuous monitoring even in the event of a power loss or network failure.

## Email & Text Message Alarm Notifications

The MadgeTech Cloud platform allows users to configure alarms to custom fit their needs. Notifications can be sent via email or text message the moment a threshold is exceeded. Notifications are also available on screen as well as audible and visual alerts directly on the device. When an alarm is triggered, users get immediate notifications via text message or email and have instant access to review the situation within seconds.



Quick &  
Easy Setup



View Data From  
Anywhere



Access Data  
Instantly



Secure  
Solution



Email & Text  
Notifications

## Compatible Data Loggers

- RFTemp2000A
- RFRHTemp2000A
- RFPRHTemp2000A
- RFCO2RHTemp2000A
- RFTCTemp2000A
- RFRTDTemp2000A
- Therm•Alert
- Therm•Alert-RH
- Therm•Alert-P



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