

# DATA LOGGING SOLUTIONS WINE PROCESSING, STORAGE & TRANSPORT



VINEYARD SOLUTIONS



WINE PROCESSING



WINE SHIPPING



WINE STORAGE

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.

# 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



# 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

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

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 and Bottling

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 from -40 °F to +176 °F (-40 °C to +80 °C) through the entire wine processing cycle. The MicroTemp's stainless steel casing makes it inert to most common fluids and operates with user-replaceable batteries for to up one year.



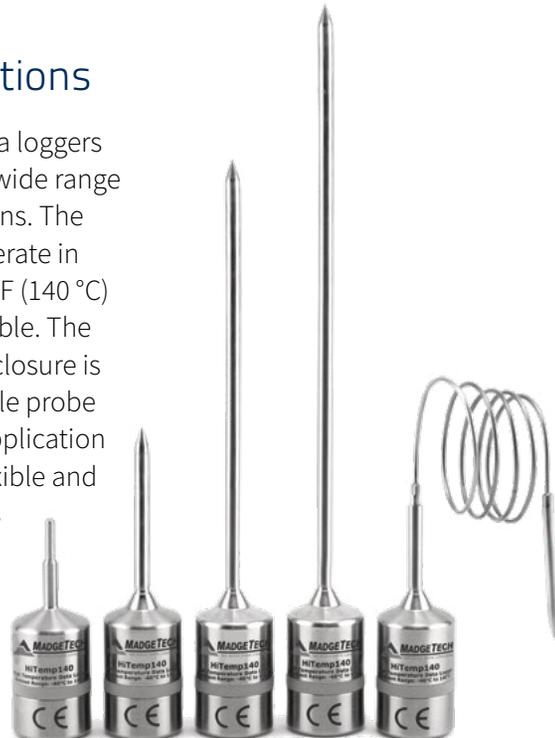
## Cleaning Verification and Validation

The **HiTemp140-M12** data logger and **CIP Probe** are designed to be used in wine processing plants where clean-in-place applications need to be verified and validated. CIP applications frequently require high temperature sanitizing methods. The HiTemp 140-M12 and CIP probe offer accurate temperature readings that can be integrated with the MadgeTech Software for real-time monitoring. When using the CIP Probe, the logger is capable of measuring temperatures of up to 500°F. The logger can be programmed for immediate start or delayed start up to 18 months in advance.



## Processing Applications

The **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.



## 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.





# SHIPPING DATA LOGGERS

## Portable Temperature and Humidity Monitoring

Most wine damage occurs during transport due to lack of monitoring. To make sure wine quality is preserved, the **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 and Vibration Monitoring

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** is specifically designed for documenting dynamic environments such as moving vehicles during wine transportation. When the device is running, the shock parameter samples at 512 Hz and at the user specified reading rate, the device writes the peak values (g-force) from the samples to memory. The device can be started and stopped directly from your computer for easy access to data and its small size allows it to fit almost anywhere.



# WIRELESS STORAGE DATA LOGGERS

## Wireless Wine Cellar Monitoring

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.

### Features

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

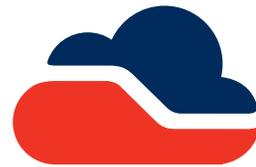
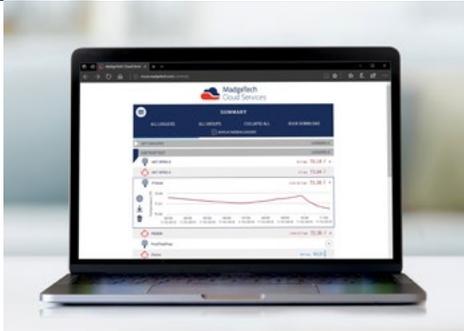


**RFRHTemp2000A**  
Wireless Temperature and Humidity Data Logger with LCD display on wall mount.



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

# ACCESS DATA INSTANTLY FROM ANYWHERE IN THE WORLD



## MadgeTech Cloud Services

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

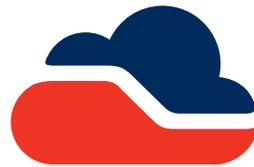
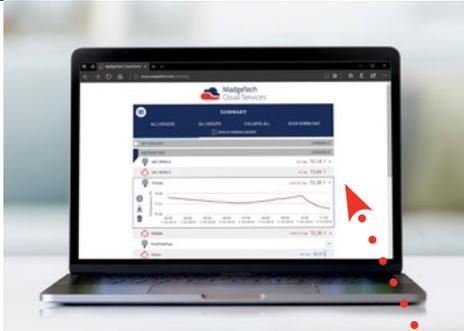


Access Data  
Instantly



Email and Text  
Notifications

# TRANSMIT DATA TO THE MADGETECH CLOUD



## MadgeTech Cloud Services



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

# 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

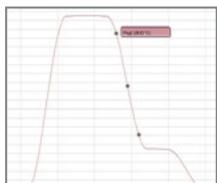
**MadgeTech 4 Software** can communicate with multiple loggers through multiple interface cables. Capable of simultaneous start, stop and download of over 100 devices, this software serves as your virtual command center for large scale facilities and small. Display your data in graphs, with tabbed views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



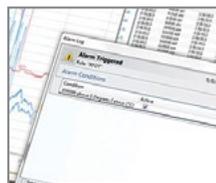
Cooling Flags



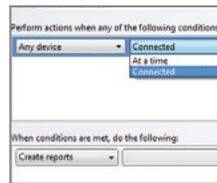
Graph View

Time	Time Zone	Delta
1:13:37 PM	-04:00	-00:00:00
1:14:37 PM	-04:00	+00:01:00
1:15:37 PM	-04:00	+00:02:00
1:16:37 PM	-04:00	+00:03:00
1:17:37 PM	-04:00	+00:04:00
1:18:37 PM	-04:00	+00:05:00
1:19:37 PM	-04:00	+00:06:00
1:20:37 PM	-04:00	+00:07:00
1:21:37 PM	-04:00	+00:08:00
1:22:37 PM	-04:00	+00:09:00
1:23:37 PM	-04:00	+00:10:00
1:24:37 PM	-04:00	+00:11:00
1:25:37 PM	-04:00	+00:12:00

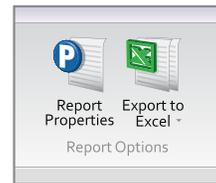
Tabular Data View



Alarm Notifications



Automation



Export to Excel

## 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