

WIRELESS

Data Logger Monitoring System



MadgeTech Wireless Monitoring System

The MadgeTech system accommodates a wide variety of industries and applications, and offers real-time, continuous monitoring, and configurable alarm notifications.

- Quick & Easy Setup
- Free Lifetime Support
- Text & Email Notifications
- Unlimited Scalability



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Wireless System Components

BUILDING YOUR DATA LOGGING SYSTEM



DATA LOGGER



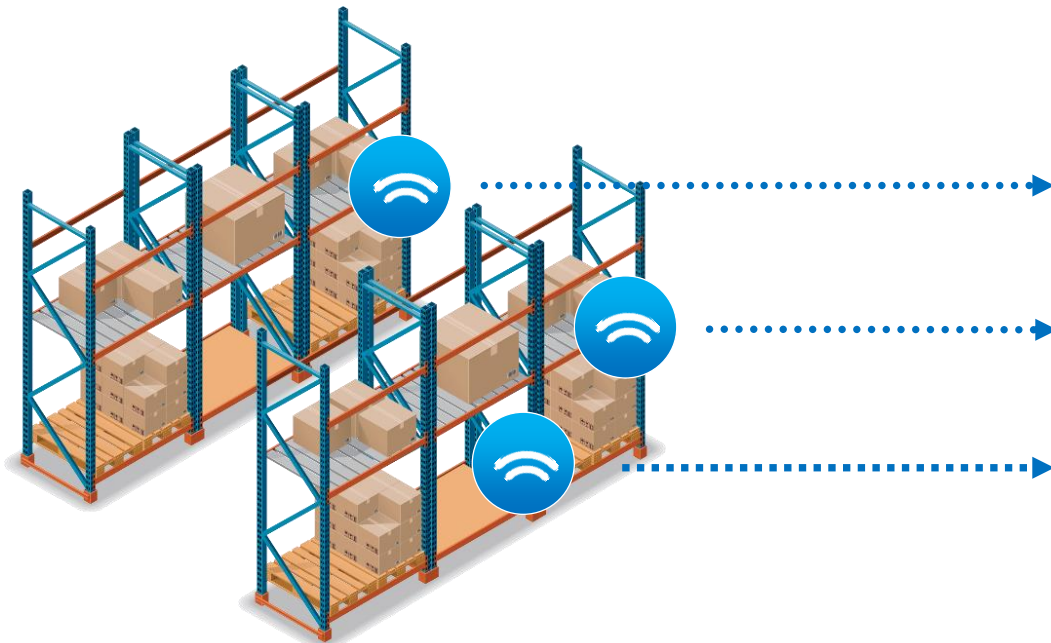
TRANSCEIVER



SOFTWARE

Wireless Network Overview

DATA LOGGER COMMUNICATION THROUGHOUT YOUR FACILITY



DATA LOGGERS



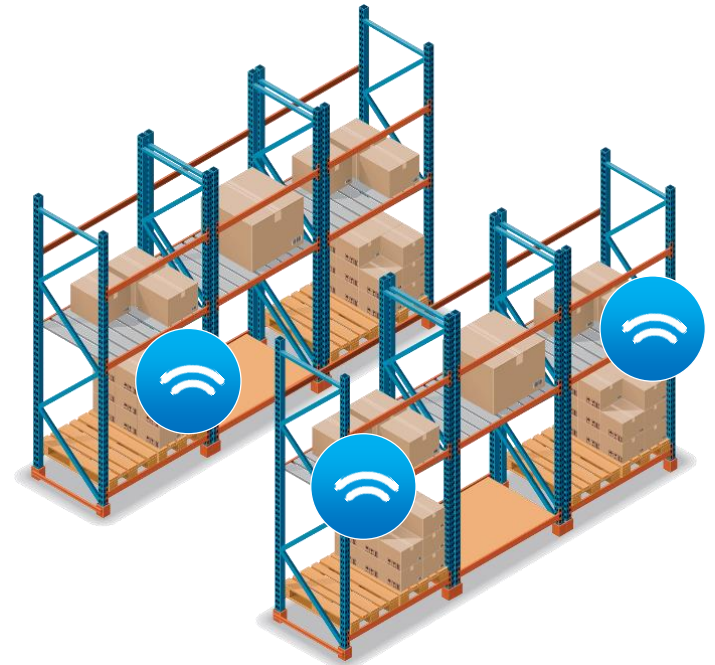
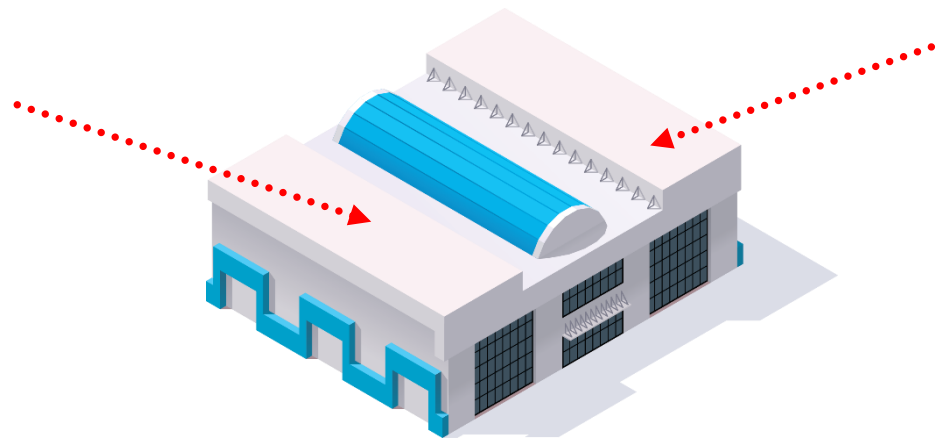
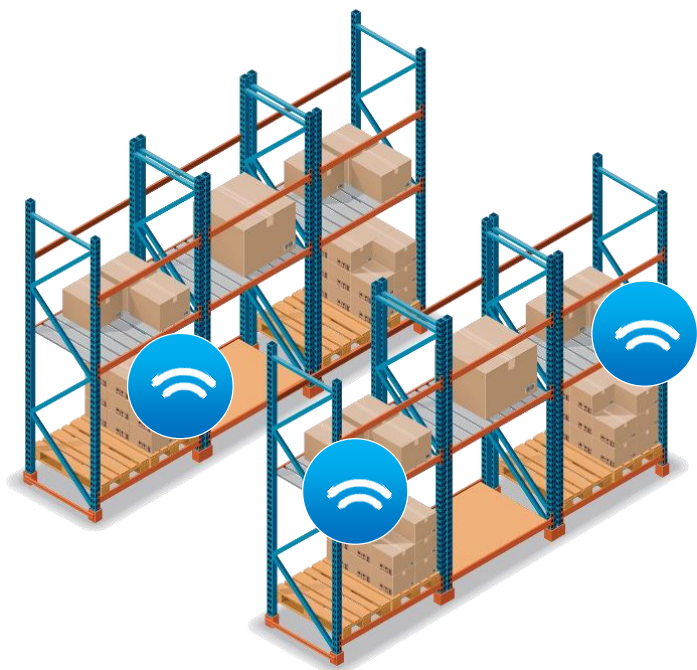
TRANSCEIVERS



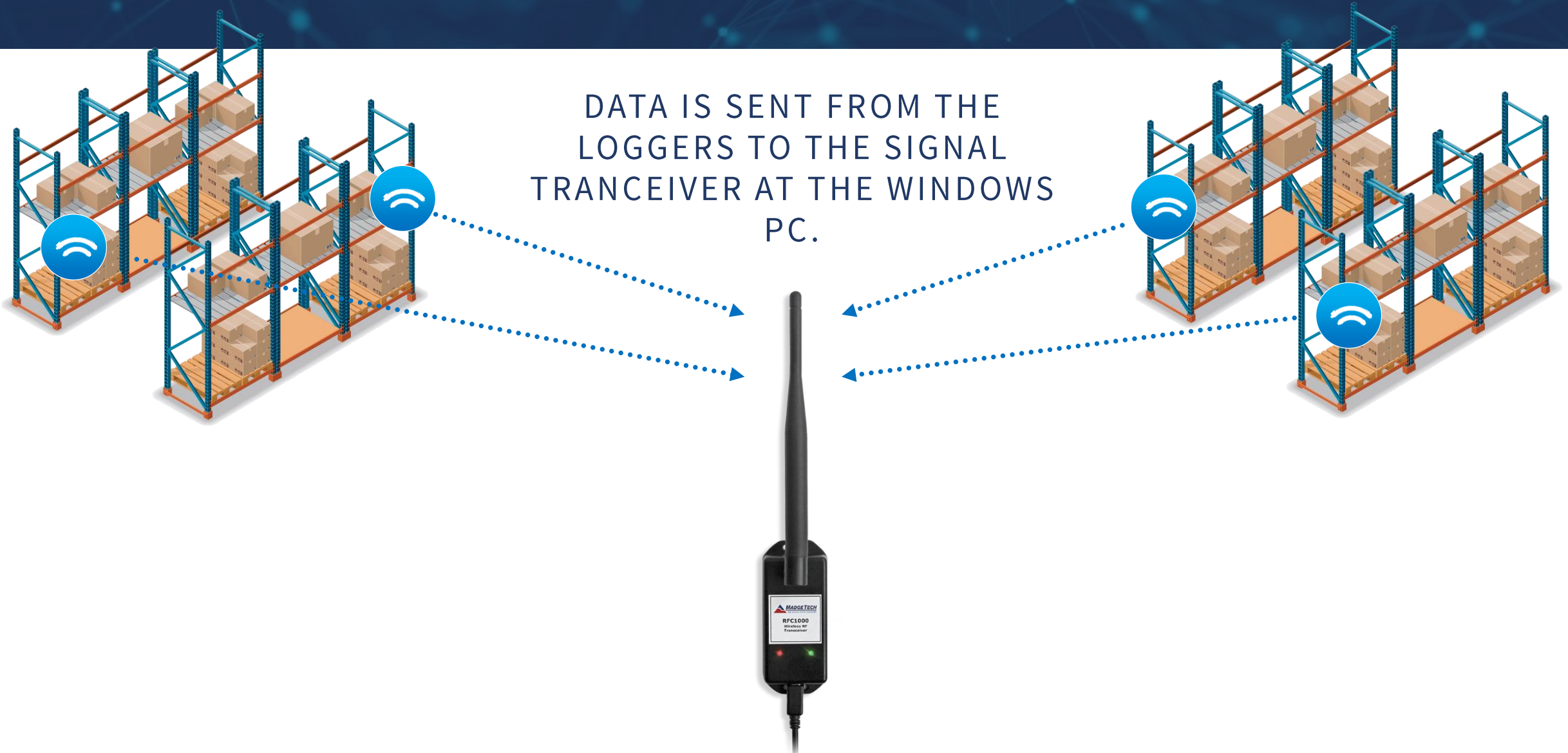
SOFTWARE

Quick & Easy Wireless Setup

DATA LOGGERS ARE DEPLOYED
THROUGHOUT THE FACILITY.

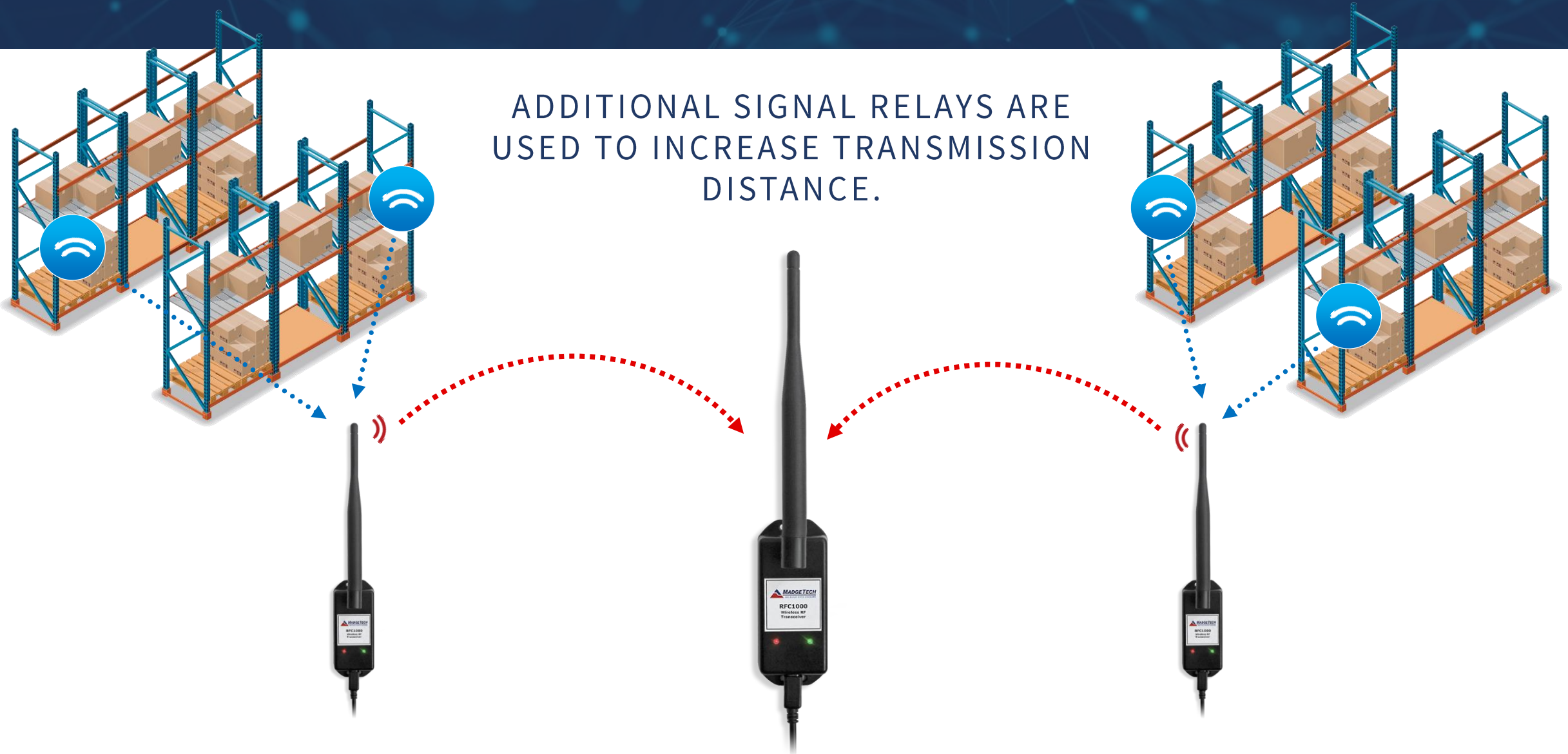


Quick & Easy Wireless Setup

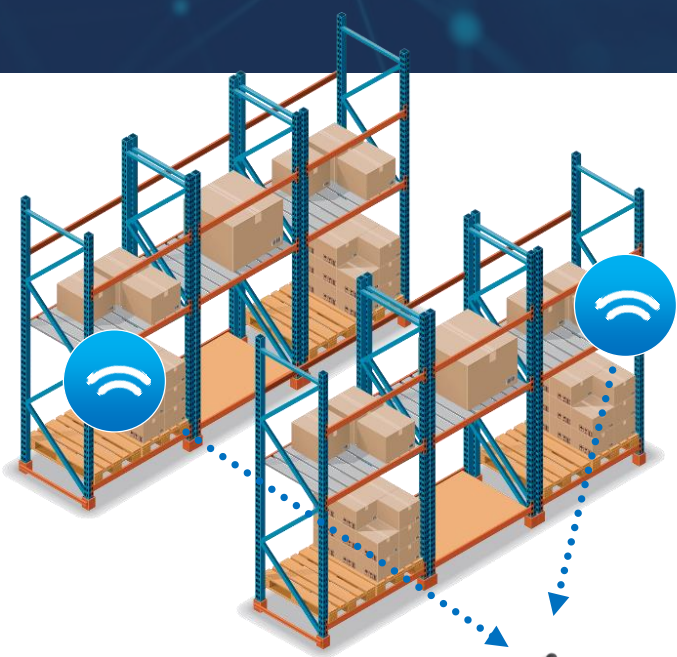


Quick & Easy Wireless Setup

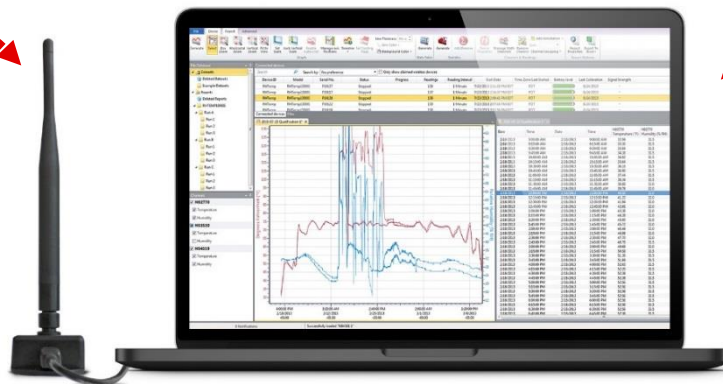
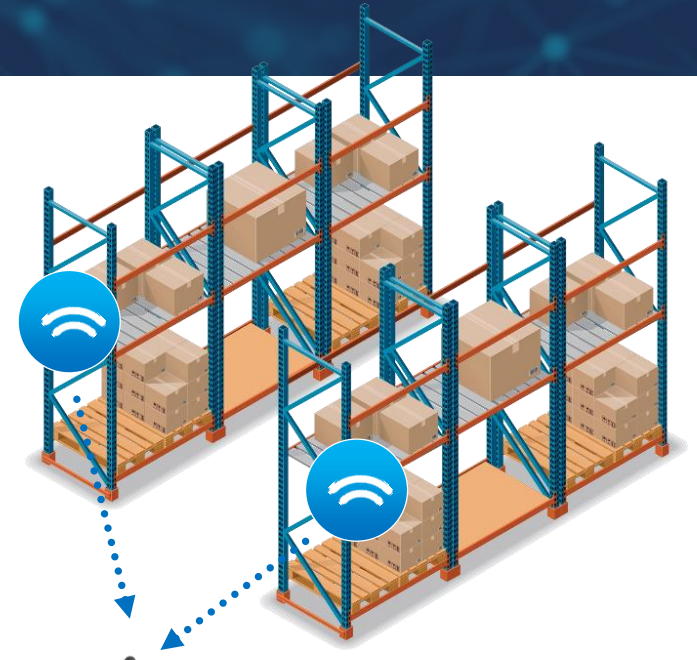
ADDITIONAL SIGNAL RELAYS ARE USED TO INCREASE TRANSMISSION DISTANCE.



Quick & Easy Wireless Setup

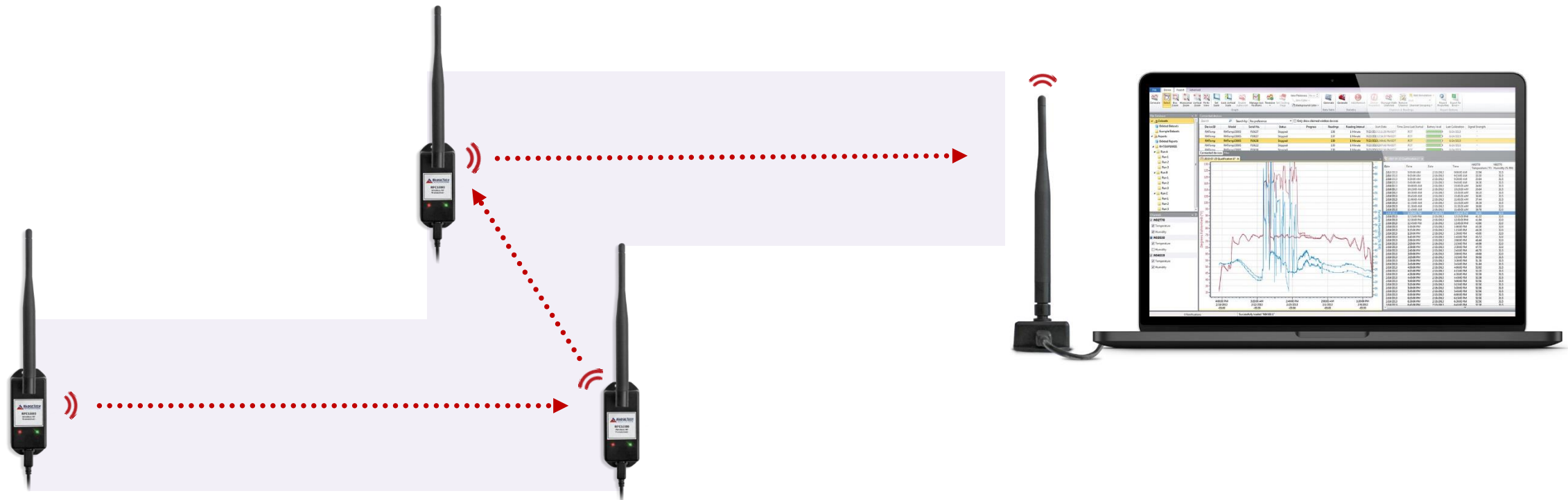


THE WINDOWS PC WITH
MADGETECH SOFTWARE RUNNING
DISPLAYS THE DATA.



Avoiding Wireless Interference

SIGNAL RELAYS ARE USED TO OVERCOME OBSTACLES OR OBSTRUCTIONS
UNITS ARE SIMPLY PLUGGED INTO ELECTRICAL OUTLETS IN THE DESIRED LOCATIONS





Wireless Data Loggers

2000A Series

WIRELESS DATA LOGGERS

Ideal for real-time, continuous monitoring and offer configurable alarm notifications.

Data is transmitted in real-time to a central PC, or directly to the MadgeTech Cloud.

- Ambient Temperature
- Remote Temperature
- Humidity
- Pressure
- Voltage
- Pulse
- Current
- Carbon Dioxide



2000A Series

WIRELESS DATA LOGGERS



RFTemp2000A
Ambient Temperature
Data Logger



RFRHTemp2000A
Humidity & Temperature
Data Logger



RFPRHTemp2000A
Pressure, Humidity &
Temperature Data Logger



RFTCTemp2000A
Thermocouple
Data Logger



RFRTDTemp2000A
Precision RTD Data
Logger



RFVolt2000A
Voltage Data Logger



RFPulse2000A
Pulse Data Logger



RFCurrent2000A
DC Current Data Logger



RFCO2RHTemp2000A
CO₂, Humidity &
Temperature Data Logger



VTMS
Vaccine Temperature
Monitoring System

2000A Series Features

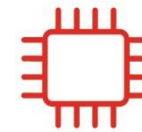
WIRELESS DATA LOGGERS



View Data in
Real-Time



Wireless
Communication



32,256
Readings



Audible & LED
Alarm
Indicators



External
Power
Supply



LCD
Screen



Text & Email
Alarm
Notifications



Wireless Meat Temperature Data Logger

- Complete Meat Process Monitoring (Cooking, Cooling & Storage)
- Equipped with a Rugged Piercing Probe
- Operating Environment: -20 °C to +100 °C (-4 °F to 212 °F)
- Splash-Proof (IP67)



Wireless Transceivers

RFC1000

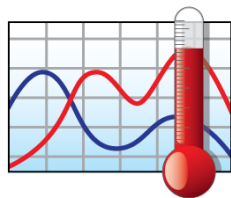
WIRELESS TRANSCEIVERS

Wireless Transceiver

- Long transmission range, for better performance in occluded environments such as ovens & refrigerators.
- External antenna allows flexibility with mounting positions in both orientation & proximity to obstructions.
- CE Approved
- Splash-Proof

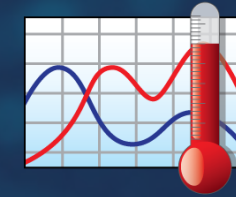


MadgeTech Software



Data Logger Software

MADGETECH 4 SOFTWARE

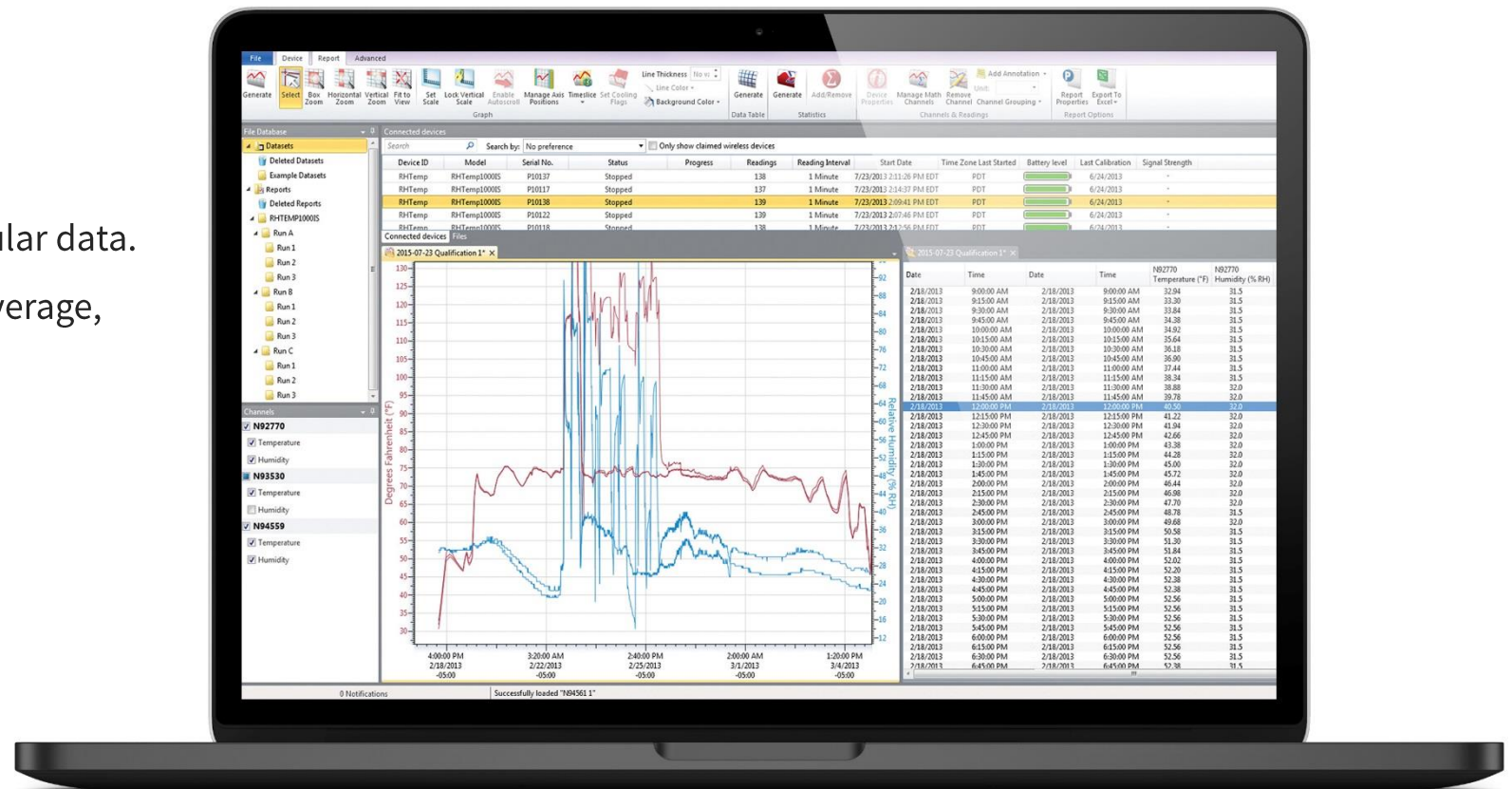


Powerful Data Analysis

- Customizable Reports
 - Graph, Tabular Data & Reports
- Annotate data points on the graph or tabular data.
- Statistics include minimum, maximum, average, time above temperature & more.

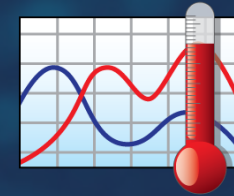
User Friendly

- Immediate device status information
- Digital calibration
- Automatic data saving
- Export to Excel



Getting Started

MADGETECH 4 SOFTWARE



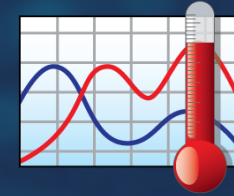
- All wireless loggers within range will be identified and displayed in the **Connected Devices** panel.
- Device information is displayed including **Device ID**, **Serial Number**, **Last Calibration Date** and **Battery Level**.
- Multiple devices can be connected, configured and operated simultaneously.

The screenshot shows the Madgetech 4 software interface. The main window has a menu bar (File, Device, Report, Advanced) and a toolbar with various icons for device control and management. The 'Connected devices' panel is active, displaying a table of connected devices. The table has columns for Device ID, Model, Serial No., Status, Readings, Reading Interval, Battery Level, Revision, Start Time, Last Calibration, and Signal Strength. One device is highlighted in yellow.

Device ID	Model	Serial No.	Status	Readings	Reading Interval	Battery Level	Revision	Start Time	Last Calibration	Signal Strength
RFTEMP	RFTemp2000A	Z00274					3.1.E			
RFTEMP	RFTemp2000A	Z00272	Stopped	24506	1 second		3.1.E	1/13/2014 9:39:05 AM EDT	3/22/2013	
RFTEMP	RFTemp2000A	Z00270					3.1.E			
RFTCTEMP	RFTCTemp2000A	Z00221					3.1.E			
RFRHTEMP	RFRHTemp2000A	Z00134					3.1.A			

Communication

MADGETECH 4 SOFTWARE



- To communicate and configure a wireless data logger, highlight the device within the **Connected Devices** panel and then click the **Claim** icon.
- Once a data logger is claimed, additional device information and configuration options are available.

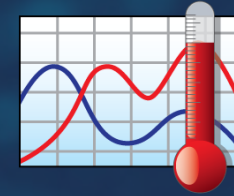
The screenshot displays the MadgeTech 4 software interface. The main window is titled "MadgeTech 4" and features a menu bar with "File", "Device", "Report", and "Advanced". Below the menu bar is a toolbar with various icons for device management, including "Quick Start", "Real Time Start", "Batch Start", "Stop", "Download", "Reset", "Manage Rules", "Alarm Log", "Properties", "Engineering Units", "Claim", "Release", and "Locate".

The "Connected devices" panel is active, showing a table of connected devices. The table has columns for Device ID, Model, Serial No., Status, Readings, Reading Interval, Battery Level, Revision, Start Time, Last Calibration, and Signal Strength. The device with ID "RFTEMP" and Model "RFTemp2000A" (Serial No. Z00272) is highlighted in yellow and has a status of "Stopped".

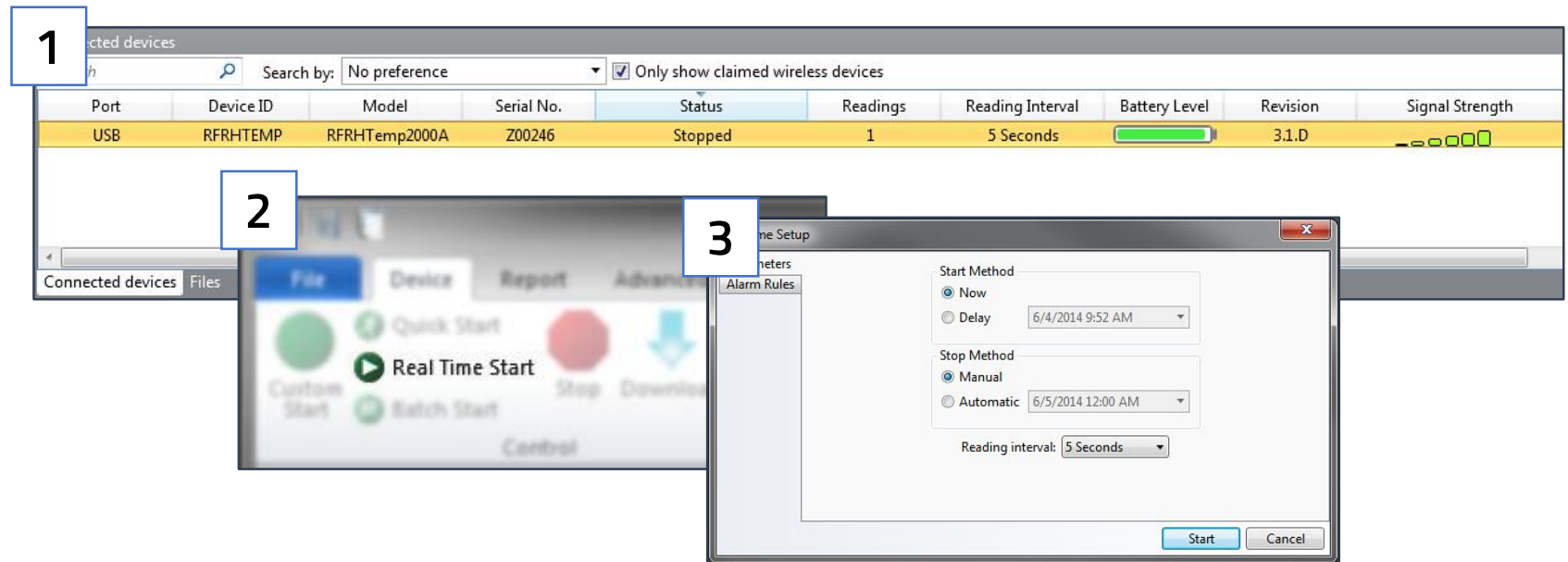
Device ID	Model	Serial No.	Status	Readings	Reading Interval	Battery Level	Revision	Start Time	Last Calibration	Signal Strength
RFTEMP	RFTemp2000A	Z00274					3.1.E			
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RFTEMP	RFTemp2000A	Z00270					3.1.E			
RFTCTEMP	RFTCTemp2000A	Z00221					3.1.E			
RFRHTEMP	RFRHTemp2000A	Z00134					3.1.A			

Start in Real-Time

MADGETECH 4 SOFTWARE

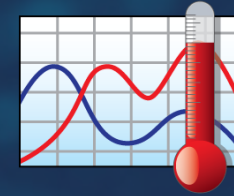


1. Select the device within the **Connected Devices** panel.
2. Select **Real-Time Start** from the Control tab in the top menu bar.
3. Choose your parameters for reading rate, immediate or delay start.



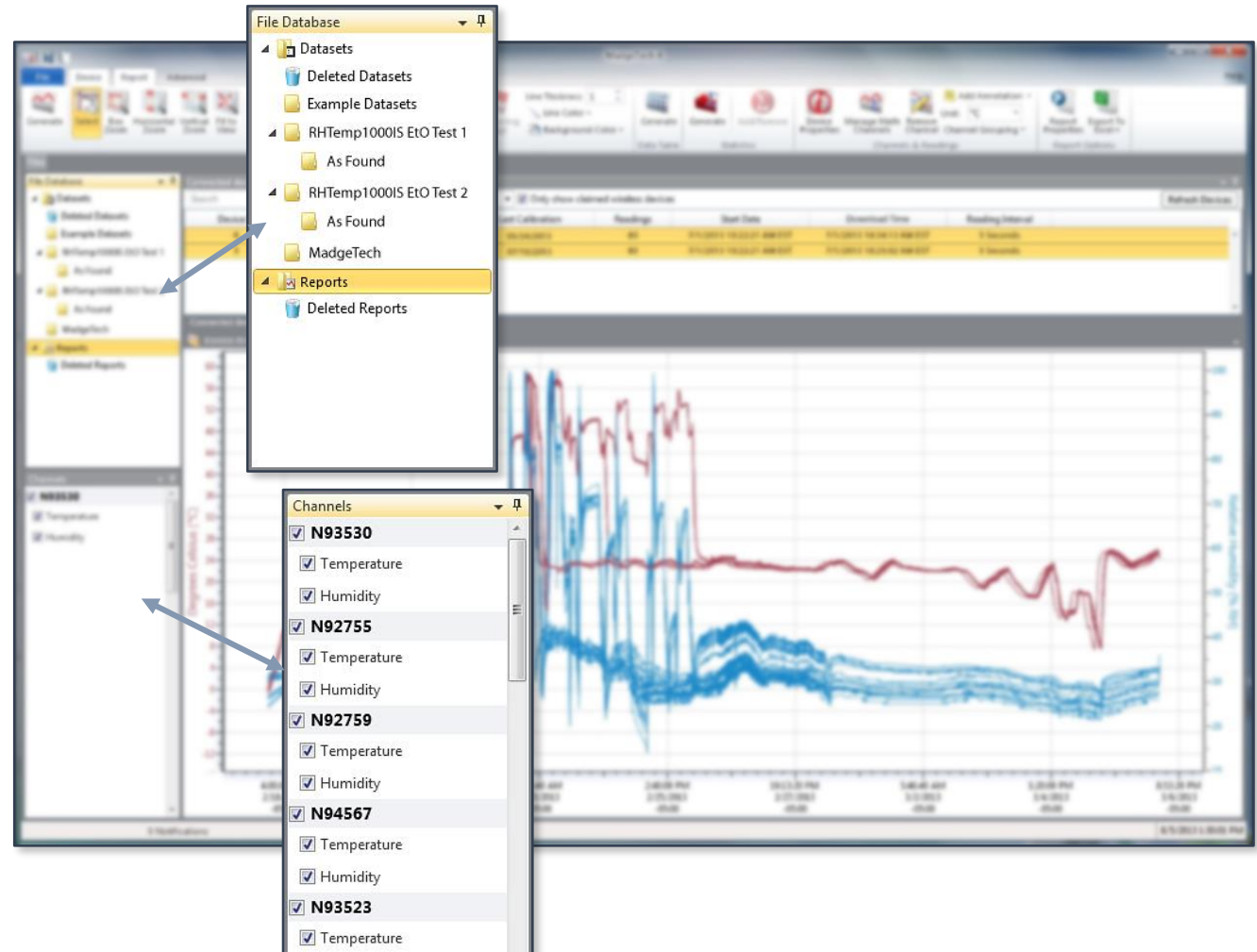
Data Analysis

MADGETECH 4 SOFTWARE



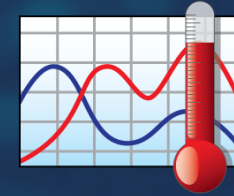
Data Handling & File Database

- As data is transmitted, it is saved to the built-in file database.
- Downloaded data is saved in the Datasets folder.
- When in Real-Time mode, a graph can automatically be generated and displayed.
- Customized graphs and compiled data can be saved to the Reports Folder.
- The look and feel is comparable to standard office software to aid in user friendliness and ease of use.

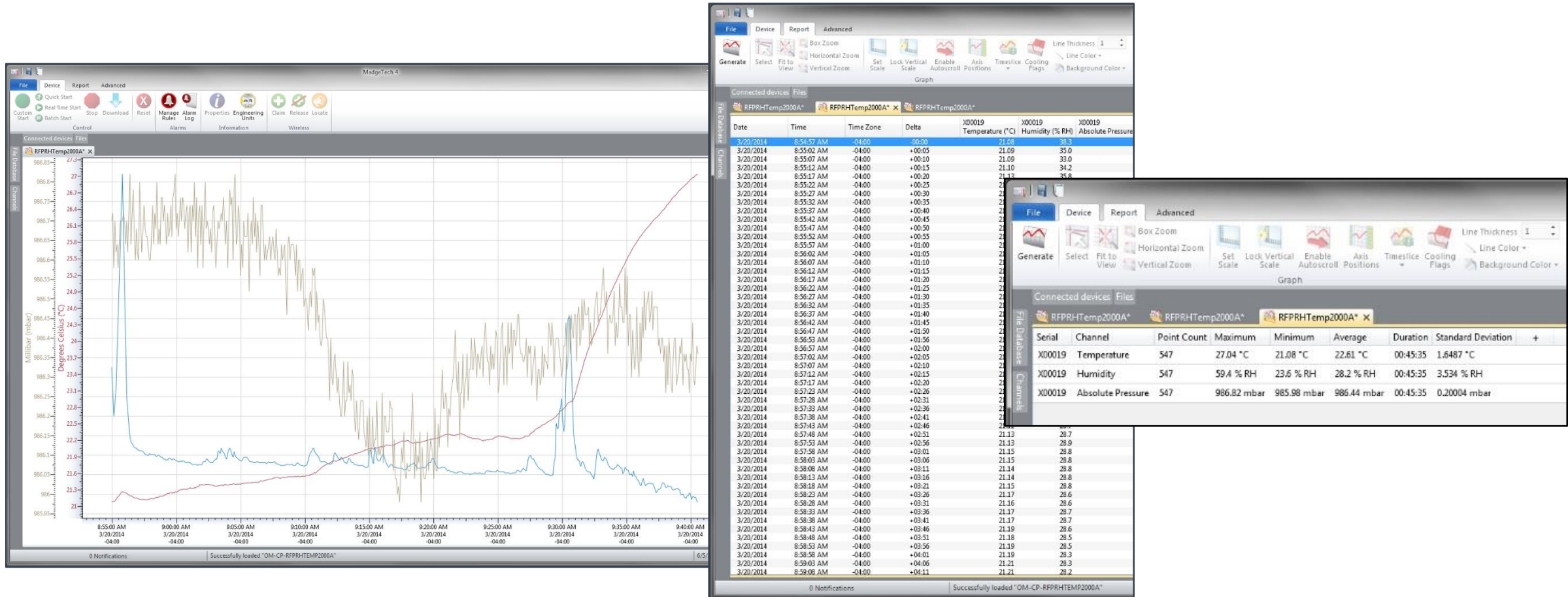


Data Analysis

MADGETECH 4 SOFTWARE

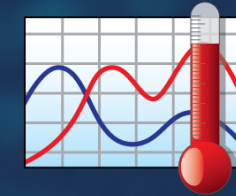


Graphs, Statistics & Tabular Data



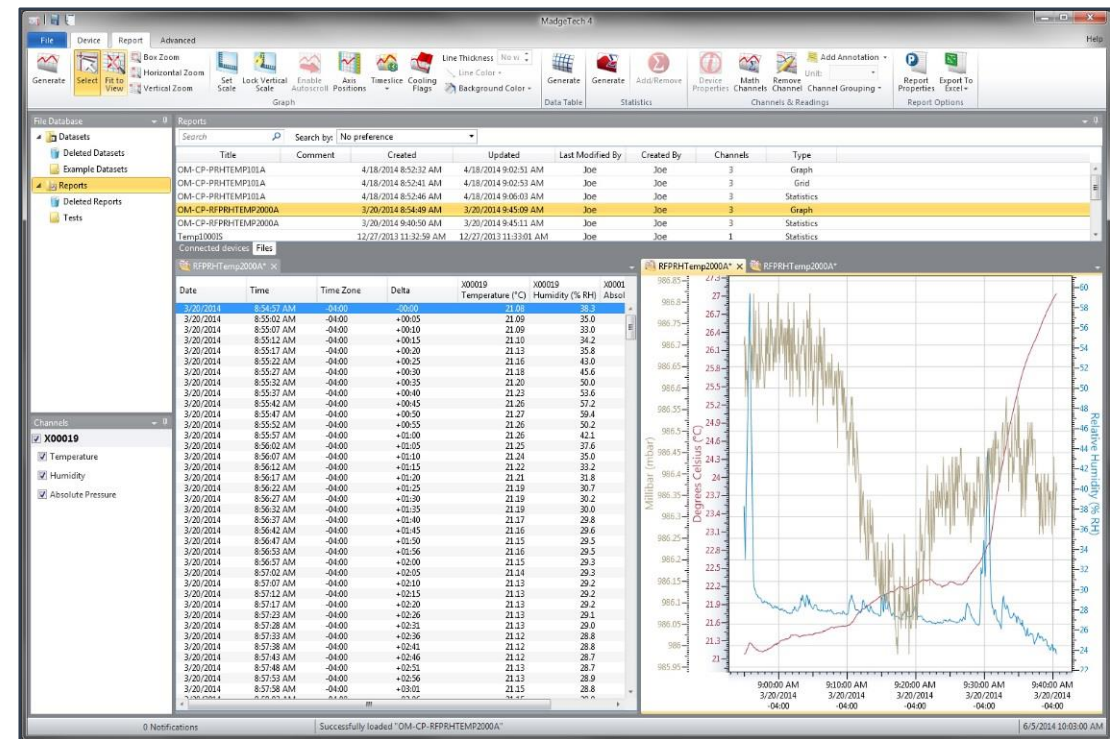
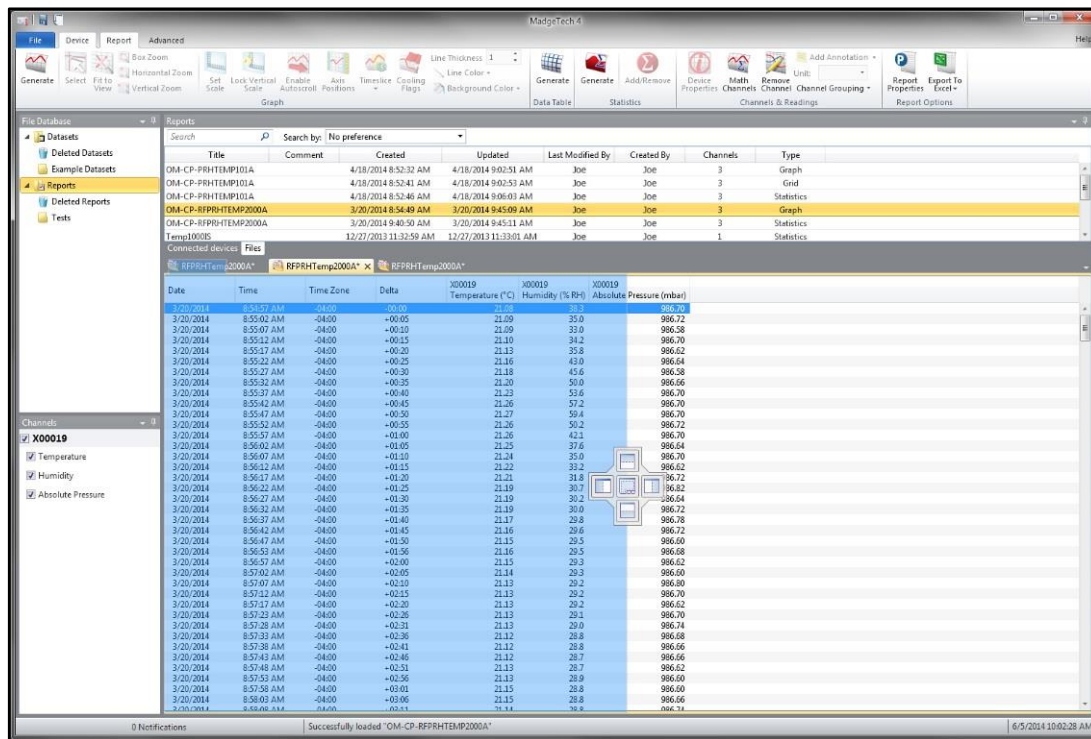
Data Analysis

MADGETECH 4 SOFTWARE



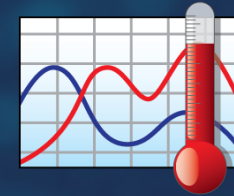
Customizable Interface

To increase efficiency, the MadgeTech software allows users to customize the layout of the screen multiple ways to better suit their needs.



Export to Excel

MADGETECH 4 SOFTWARE



Export With the Click of a Button

MadgeTech Software makes data review easy with the ability to export to Microsoft Excel.



	A	B	C	D
1	Device Name:	RFPRHTemp2000A	RFPRHTemp2000A	
2	Device Description:	Wireless Pressure, Temperature and Humidity Recorder	Wireless Pressure, Temperature and Humidity Recorder	
3	Serial Number:	X00019	X00019	
4	Device ID:	RFPRHTEMP	RFPRHTEMP	
5				
6				
		Time	Channel 1 Temperature (°C)	Channel 2 Humidity (% RH)
		014 8:54:57 AM	21.08	38.3
		014 8:55:02 AM	21.09	35
		014 8:55:07 AM	21.09	33
		014 8:55:12 AM	21.1	34.2
		014 8:55:17 AM	21.13	35.8
		014 8:55:22 AM	21.16	43
		014 8:55:27 AM	21.18	45.6
		014 8:55:32 AM	21.2	50
		014 8:55:37 AM	21.23	53.6
		014 8:55:42 AM	21.26	57.2
		014 8:55:47 AM	21.27	59.4
19	3/20/2014	8:55:52 AM	21.26	50.2
20	3/20/2014	8:55:57 AM	21.26	42.1
21	3/20/2014	8:56:02 AM	21.25	37.6
22	3/20/2014	8:56:07 AM	21.24	35
23	3/20/2014	8:56:12 AM	21.22	33.2
24	3/20/2014	8:56:17 AM	21.21	31.8



Aiding in 21 CFR Part 11 Compliance

MadgeTech 4 Secure Software aids customers in compliance with 21 CFR Part 11 requirements. The software ensures standards in which electronic files are considered equivalent to paper records, saving time and effort.

- MadgeTech 4 Secure Software Package
- IQ/OQ/PQ Protocols
- Software Validation Workbook





Aids in Compliance with FDA 21 CFR Part 11/820 and GxP Guidelines

Additional security benefits such as:



Audit Trails



Secure Data Files



Administrative Privileges



Electronic Signatures

MadgeTech Cloud Services



Features

MADGETECH CLOUD SERVICES

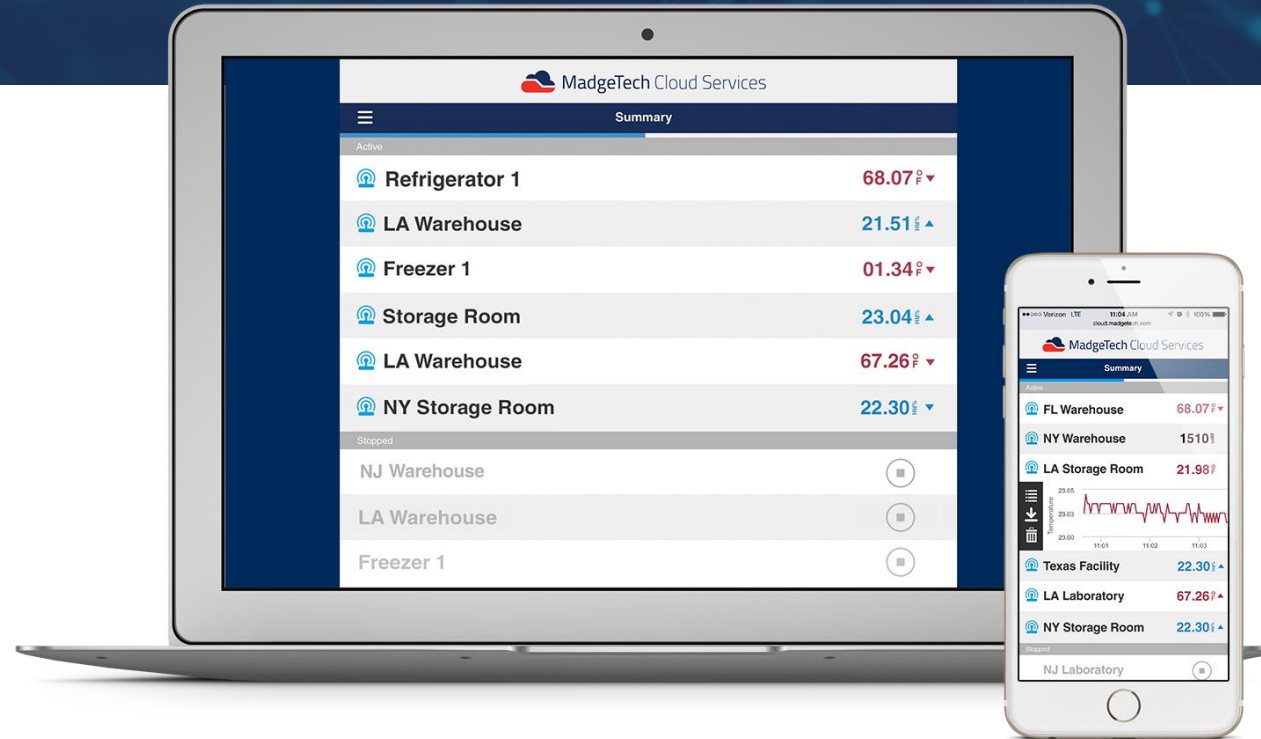


With MadgeTech Cloud Services, a wireless data logger system can securely transmit data in real-time to be viewed on any internet or data enabled device such as a computer, tablet or mobile device.



Features

MADGETECH CLOUD SERVICES



View Data in Real-Time



Access Data Instantly



Secure Solution



Email & Text Notifications



Quick & Easy Setup

RFC1000 Cloud Relay

MADGETECH CLOUD SERVICES



Wireless Data Logging Hub

- Transmits data directly to the cloud, eliminating the need for a Central PC.
- Real-time data can be viewed from any internet enabled device.

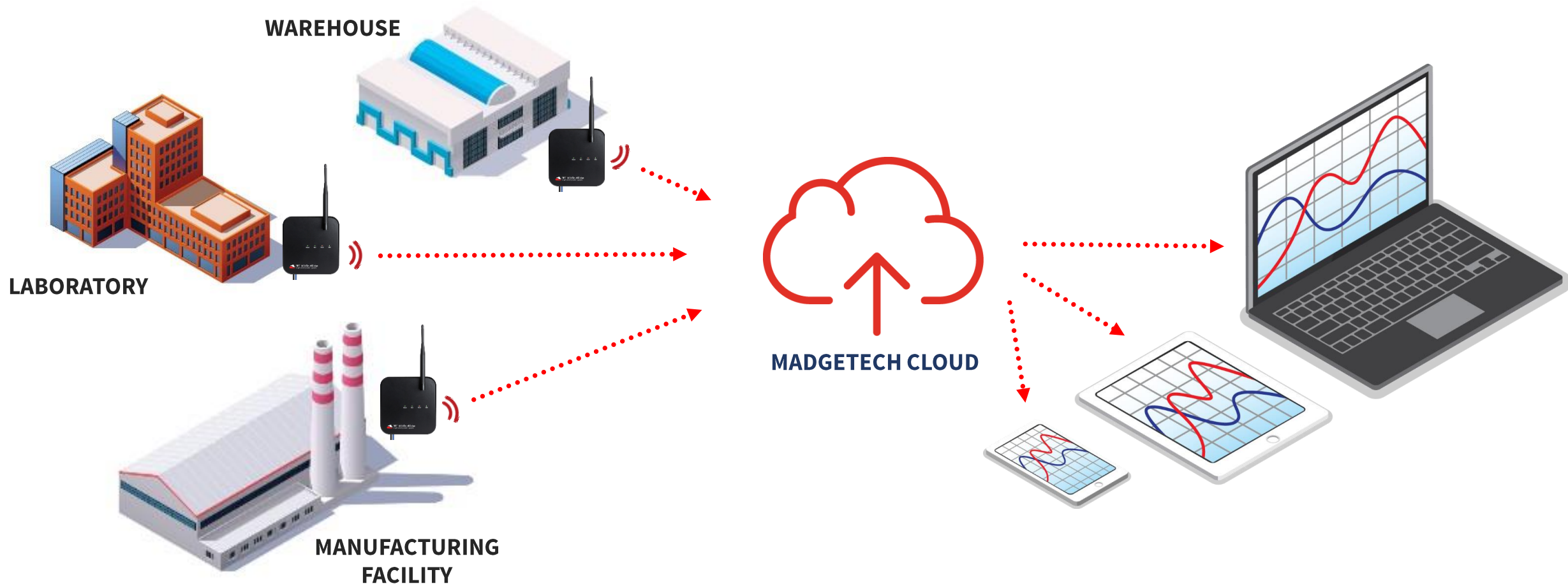
RFC1000 Cloud Relay

MADGETECH CLOUD SERVICES



RFC1000 Cloud Relay

MADGETECH CLOUD SERVICES



MadgeTech Customer Support



MadgeTech data loggers come with a one year manufacturers warranty.

Free support available for the lifetime of the product.

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