MONNIT®

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Monnit Wi-Fi Sensors Quick Start Guide

Inside the Box

You should find the following items in the box:

- Monnit Wi-Fi (MoWi™) Sensors
- 2 x AA Batteries for Each MoWi Sensor
- Quick Start Guide

Note: A MoWi USB programming cable is needed to add sensors to your wireless network. MoWi USB programming cables are available in the Monnit web store.

Quick Start Overview

- Create a Monnit user account, add Wi-Fi sensors and setup notifications.
- Program Wi-Fi sensors with network security settings and bring them online.
- View sensor data through the iMonnit Online Wireless Sensors System.

1. Create a Monnit User Account and Setup Sensor Network

If this is your first time using the iMonnit online system site, you will need to create a new account. If you have already created an account you can skip to the "Logging into the Online System" section. The following instructions will guide you through the account creation process.

1. In a web browser, navigate to https://www.imonnit.com.

2. Click the "Get Started Here" button to create an account.

Don't have an account?
Get Started Here
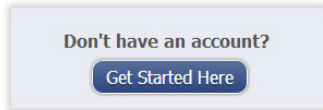
3. Follow the on-screen instructions to enter your account and contact information.

4. After entering your account and contact information, you will be prompted to create your first sensor network. Simply enter a name for this network and click "Create Sensor Network".

5. Next you will be prompted to assign a gateway. If you are only using Wi-Fi sensors, click "Skip This Step" at the bottom of the page.

Using Wi-Fi Sensors? Skip This Step   Assign Gateway   Cancel
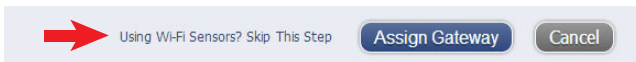
6a. Add the information from your Monnit Wi-Fi sensor then click the "Assign Sensor" button.

Sensor ID

Sensor Code

Sensor ID: ######
Sensor Code: XXXXXX

6b. On the next screen, enter a name for the wireless sensor and use the drop down to tell us how you are going to be using the wireless sensor. (This allows us to suggest settings for your sensor.) When finished, click the "Continue" button.

7. Confirmation Screen.
When you have finished adding the sensor, you will see a confirmation screen. At this point you can assign notifications to the sensor (see *Using The iMonnit™ Online Wireless Sensor System*) , assign additional sensors to your account or click "Done" to go to your sensors overview page.

2. Programming Monnit Wi-Fi Sensors With Network Security

Visit **www.mowisensors.com** to download the Monnit Wi-Fi sensor setup application. This application allows you to program your Monnit Wi-Fi sensors for accessing secured Wi-Fi networks.

1. Install and Launch the MoWi Sensor setup application.

2. Click on "Download Driver" and follow the on-screen instructions to download and install the USB programming cable driver.

Configure Your Wi-Fi Sensors

1. Install USB cable driver   Download Driver

3. Connecting Your Wi-Fi Sensor for Programming

- Insert two AA batteries into the MoWi sensor. Note: The LED will flash until the sensor has been configured to connect with a Wi-Fi network.

- Insert the USB side of the programming cable into an available port on your PC.

- Peel back the Wi-Fi sensor's label (where indicated) to access the programming port and insert the other end of the cable.

- When plugged in, the software image will change, confirming the sensor connection.

  Note: The sensor LED will flash when connected to the PC.

4. Select the Wi-Fi network and enter security credentials.

- You can enter your Wi-Fi network SSID manually, or use the connected MoWi sensor to search for an available wireless network. To search, click the arrow to the right of the SSID field and select "Search for Networks". The field will update with all available wireless networks within range. Select the one you wish to use.

4. Enter Wi-Fi network credentials

Wireless Network SSID:	NETGEAR04
Security Type:	WPA
Key / Passphrase:	••••••••••
Show Key:	☐

- After selecting the Wi-Fi network, choose the type of security used then enter the pass phrase. If using an open (non-secured) Wi-Fi access point, no pass phrase is needed.

5. Advanced Wi-Fi Configuration

If you would like to program the Wi-Fi sensor with custom DHCP settings or want to push the communication to a different server, click on "Advanced Settings" on the right side of the screen.

6. Configure The Sensor

- When all information has been entered, click the "Configure Sensor" button. The configuration information will be programmed on to the sensor. When the process is complete, you will see a successful operation pop-up. Click "OK" to close it.

- It is now safe to unplug the USB cable from the Wi-Fi sensor. Repeat this process for any more sensors that need to be configured for use with your Wi-Fi network. You will not have to enter the Wi-Fi settings again unless you choose to add sensors to a different Wi-Fi network or you close the software application.

7. Understanding the Wi-Fi sensor LED

When first powered on, the LED will flash green while looking for an authorized Wi-Fi network, then go off when connected. If the LED flashes red one of the following issues is ocurring;

- 1 Red Flash: Wi-Fi security credentials are denied.
  (Use the MoWi PC application to re-enter the correct Wi-Fi security credentials.)

- 2 Red Flashes: Wi-Fi connected but failed to resolve network settings (DHCP/DNS).
  (Check the DHCP is enabled on your Wi-Fi router or assign a static IP to your sensor using the MoWi PC application.)

- 3 Red Flashes: Wi-Fi connected, network resolved, but unable to access internet.
  (Check that your Wi-Fi router has an active internet connection.)

Note: By default the lights will only flash upon power-up or sensor programming to let you know if there are any issues. If you would like the LED to flash during normal operation (to signify radio communication), this setting can be enabled in your sensor configurations through iMonnit. Turning on this feature can impact battery life.

8. You are now ready to log into the iMonnit online sensor portal to view sensor data and configure additional sensor settings.

3. Using The iMonnit™ Online Wireless Sensor System

1. Understanding The Online Interface

When you log into the online system, the default view shows all of your sensors last recorded data.
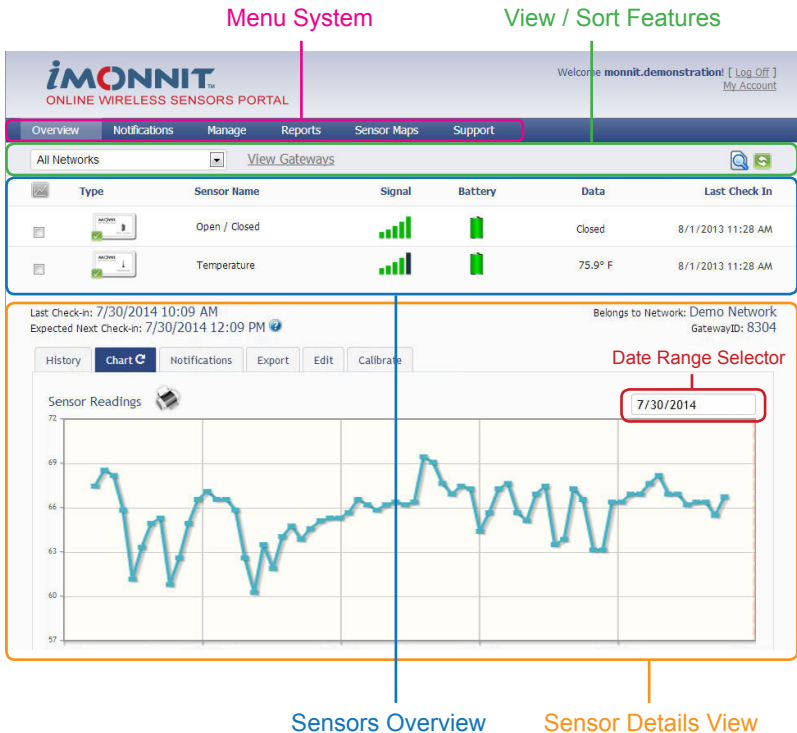
Menu System

Overview	- Shows all sensors in the account and their last readings.
Notifications	- Manage sensor notifications and show all sent notifications.
Manage	- Manage networks, sensors and gateways.
Reports	- Printable account and sensor network reports.
Sensor Maps	- Visual maps to help you track sensor placement.
Support	- Support information for using sensors and software.

View / Sort Features

This section allows you to sort the sensors being viewed and search for sensors on your account.

Sensor Overview

Displays sensors on your account with their last reading and status information. Clicking on a sensor row expands the "Sensor Detail View" allowing you to view detailed information for the selected sensor.

To the left side of each sensor row is an indicator to help you understand the current status of the sensor.

✅   Sensor is checking in and within user defined safe parameters.

❗   Sensor has met or exceeded a user defined threshold or triggered event.

❓   Sensor has not checked in (inactivity alert sent).

❌   No sensor readings will be recorded (Inactive)

Sensor Details View

Clicking on a sensor row on the "Overview" page expands the row to include a detailed sensor view for the selected sensor.

Select a tab to change between:

History	- Displays a history of the selected sensor's data.
Chart	- Displays a graphical view of the selected sensor's data.
Notifications	- Allows you to manage notifications for the sensor.
Export	- Allows you to archive data by exporting as a .csv file.
Edit	- Allows you to manage sensor settings.
Calibrate	- Available on certain sensor types to provide more accurate data.

Note: The data shown on the chart, notification, history and export tabs is based on the date range indicated on the upper right side of the sensor detail information. To change the date range, click inside the date box.

2. History and Chart Views.

Clicking on the "History" or "Chart" tabs within the sensor detail panel allows you to view the sensor's data history as time stamped data or in a graphical chart format.
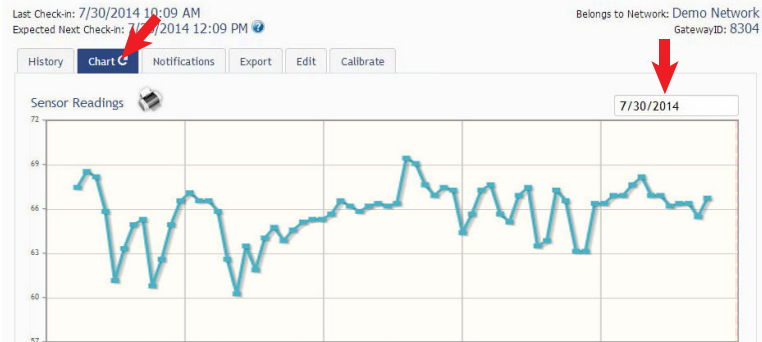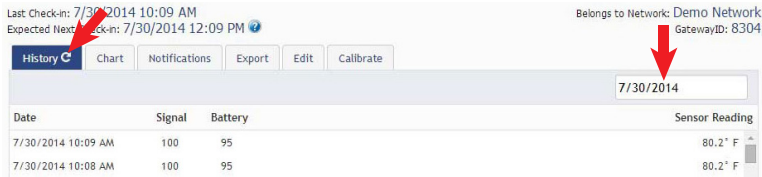
Note: To change the date range of the viewable information, click on the date range box at the top right of the sensor detail panel.

3. Configuring Sensor Settings

To edit a sensors operation settings, click on the sensor overview row to display the details view. Click on the "Edit" tab to access the sensor configuration panel.

The sensor edit panel allows you to set the primary configurations for the sensor. Mousing over the question mark icon by each setting will provide an explanation of that setting. When you have finished making changes, press the "Save" button at the bottom of this section.

Note: Be sure to click the "Save" button anytime you make a change to any of the sensor parameters. *All changes made to the sensor settings will be downloaded to the sensor on the next sensor heartbeat (check-in). Once a change has been made and "Saved," you will not be able to edit that sensor's configurations again until the sensor has downloaded the new setting.*

### 4. Editing and Adding Notifications

Notifications for a single sensor can be created, deleted or edited by clicking the "Notifications" tab in a sensor's detail view.

Notifications can be created, deleted or edited for any sensor or group of sensors by clicking on "Notifications" in the main menu.

Toggle On/Off   Click to Open Detail View   Send Test   Edit   Delete

When creating a notification, you will need to select the type of notification to create.
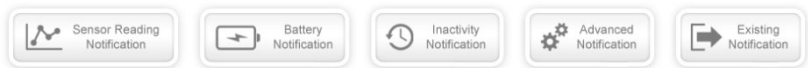
- **Sensor Reading Notification -** Reading notifications are sensor specific (i.e. water sensor = trigger alert when water present, temp sensor = trigger alert when temp is above 70F, etc.). When creating a sensor reading notification, you will need to choose the sensor type you are creating the alert for. The select box will only show sensor types that are currently being used on your sensor network.

- **Battery Notification -** Allows users to define a battery power percentage level that will trigger an alert from the system, warning them to replace batteries.

- **Inactivity Notification -** Set-up "Inactivity" notifications to alert you when your sensors have stopped communicating with the servers. Failure to set up an "Inactivity" notification will result in no email/SMS text being sent should your sensors stop communicating with the servers.

- **Advanced Notifications -** Allows the user to set notifications based on advanced rules, such as comparing past data points with the current one to determine if a notification should be sent.

- **Existing Notifications -** Use notifications that have already been created on your account with the selected sensor.

Notification Settings

This area allows the user to set notification parameters such as naming the notification, customizing the notification message and setting sensor conditions that will trigger the notification.


People to Notify

The list on the left shows all available users on the account. You can type into the search box to filter large lists of users. Select the user(s) to receive the notification and click the arrow button to add them to the recipient list. By default, email notifications are activated. Clicking the notification delivery method icon toggles them on and off (green is on, grey is off). If the user should receive text message notifications, click on the phone icon to turn it green.
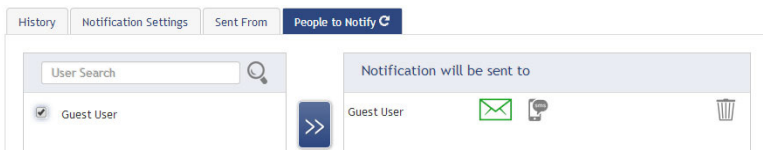

Sent From

Allows you to assign devices (sensors and gateways) that will cause the notification to be sent. When a notification is sent from the system, it will automatically include the device name and the data that caused the notification to be sent. A single notification can be assigned to multiple sensors or gateways. Sensor reading notifications can only be assigned to sensors of the same type. General notifications such as "battery status", can be assigned to any or all sensors.
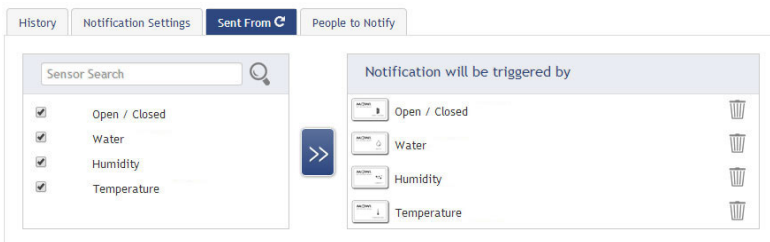
Devices to Notify

If you have a Monnit Control or Notifier A/V device on your network, you will also see a "Devices to Notify" tab. This will allow the notification to interact with these types of devices. Select a device from the list on the left and click the arrow button to add it to the recipient list. Clicking the control icon toggles their setting.
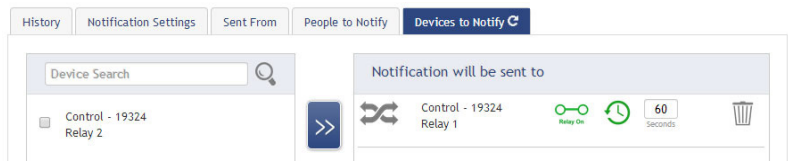
Note: Control devices have two relays per device that are controlled separately. You can turn a relay on, off or toggle the state. You can also set a duration by clicking on the timer icon. This will perform the selected toggle (on/off/toggle) for a set duration, then change back.

5. Exporting Sensor Data

Clicking on the "Export" tab within the sensor data window allows you to export sensor data to a comma separated value (.csv) file or send the sensor data to an external web source.
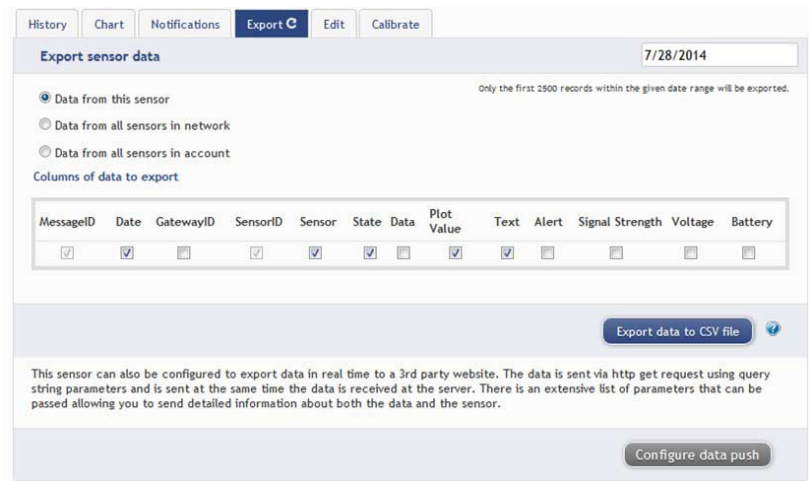
To export sensor data you must first select the date range for the data you want to export. Once the date range is selected, determine whether you want sensor data from the selected sensor only, from all sensors in the network or all sensors assigned to the account. When you are finished, click on "Export Data" at the bottom of this window. The data will be exported to a comma separated value (.csv) file format. Note: Only the first 2,500 records within the selected date range will be exported.

You can alternately send your sensors' incoming data to a 3rd party by clicking on the "Configure data push" button at the bottom of the window. From this area you can pass data from your wireless sensor network devices to another service in real time. This is done by coding the data into a url query then sending the data via http get request at the time data is received. There is an extensive list of parameters that can be passed, as

listed in the viewed window, that allow you to send detailed information about both the data and the sensor.

6. Calibrating Sensor Data

Certain wireless sensors can be calibrated for more accurate readings (ex. temperature sensors). If calibration is possible for a sensor, the "Calibrate" tab will be visible in the detail view. To calibrate a sensor, replace the last reading with the more accurate reading and click "Calibrate". All future readings from the sensor will be based off the new calibration setting.

7. Manage Sensor Networks

To view or edit information about your wireless sensor network(s), click on "Manage" in the main navigation. This area allows you to edit network details, create new sensor networks, and manage wireless gateways and sensors for your network(s).

Note: Some buttons and features are only visible if there is more than one sensor network setup on the account, such as the network selection box in the upper right corner.

If more than one sensor network is setup on the account, you can easily move gateways and sensors from one network to another by clicking on the "Move Device" button at the far right of the device's "Status" section.

If you clear a sensor's data, the data history is deleted from the entire system and can not be recovered. We recommend exporting a sensor's data history using the export function in the sensor details view ("Overview" page) before clearing the sensor's data if you want to have a record of the data.

Additional Information and Support

You can find additional information on using Monnit Wireless Sensors, including product documentation and video tutorials on the Monnit website at http://www.monnit.com/support.

Information to Users

The Monnit wireless products referenced in this Quick Start Guide have been tested and found to comply with the standards for FCC, IC and CE certifications. For certification information on individual products please view product data sheets or product specifications on the Monnit website.

FC CE Industry Canada

WARNING: *Changes or modifications not expressly approved by Monnit could void the user's authority to operate the equipment.*

For additional information or more detailed instructions on how to use your Monnit Wireless Sensors or the iMonnit Online System, please visit us on the web at http://www.monnit.com/support/.

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