













WiFi Hints & Tips

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Device Key:

				Temperature and Humidity Sensor Device
				Temperature Only Sensor Device
				Temperature Thermistor Probe Sensor Device
				Temperature Thermocouple Probe Sensor Device
				Audible and Visual Alert Device
				Dual Channel Temperature Thermistor Probe Sensor Device
				Dual Channel Temperature Thermocouple Probe Sensor Device



Section 1.0 - Prerequisites

Ensure that you have the following:



21CFR WiFi Device



Micro USB Cable



Router or
Access Point



PC or Laptop
(running Windows 7, 8, 10)

System Set-Up

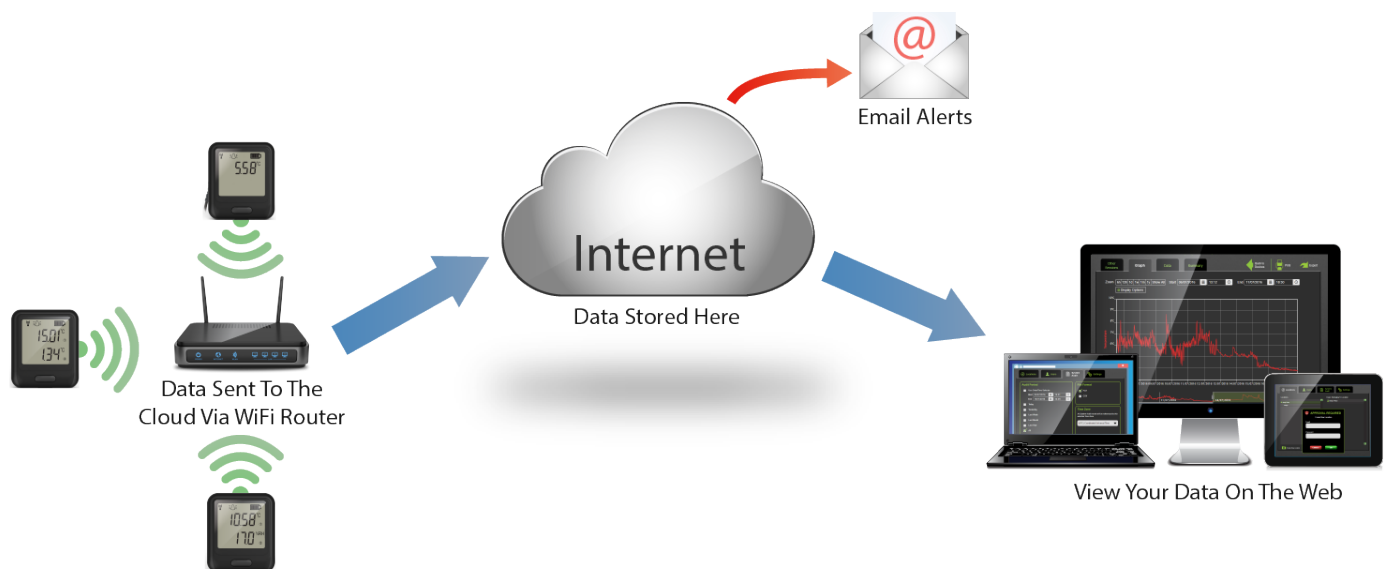
- 1 You will need the SSID and password for the wireless network. The password is sometimes referred to as the passphrase or passkey and often found on the rear of the wireless router.
- 2 Download and install the free 21CFR WiFi Sensor software from www.easylogcloud.com.
- 3 Make sure you 'allow' any security access highlighted by your Firewall or Antivirus program. Your system may automatically request this.
- 4 When you have installed the software an icon will be placed on your desktop.



Section 1.1 - Cloud Data Storage

Cloud Data Storage

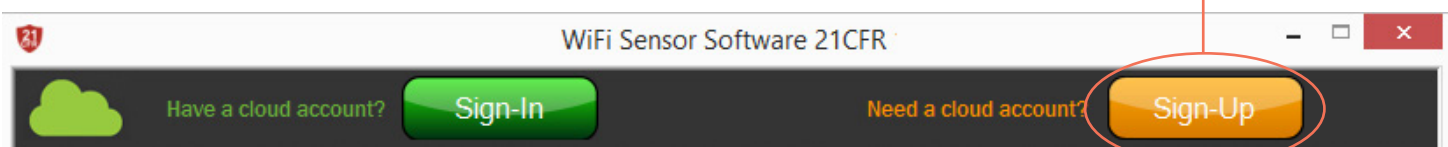
With Cloud data storage all your data is stored remotely on our secure servers . Data is transferred to our servers through the internet and is then accessible from anywhere via a web browser on any internet enabled device.



Section 2.0 - Signing Into A Cloud Account

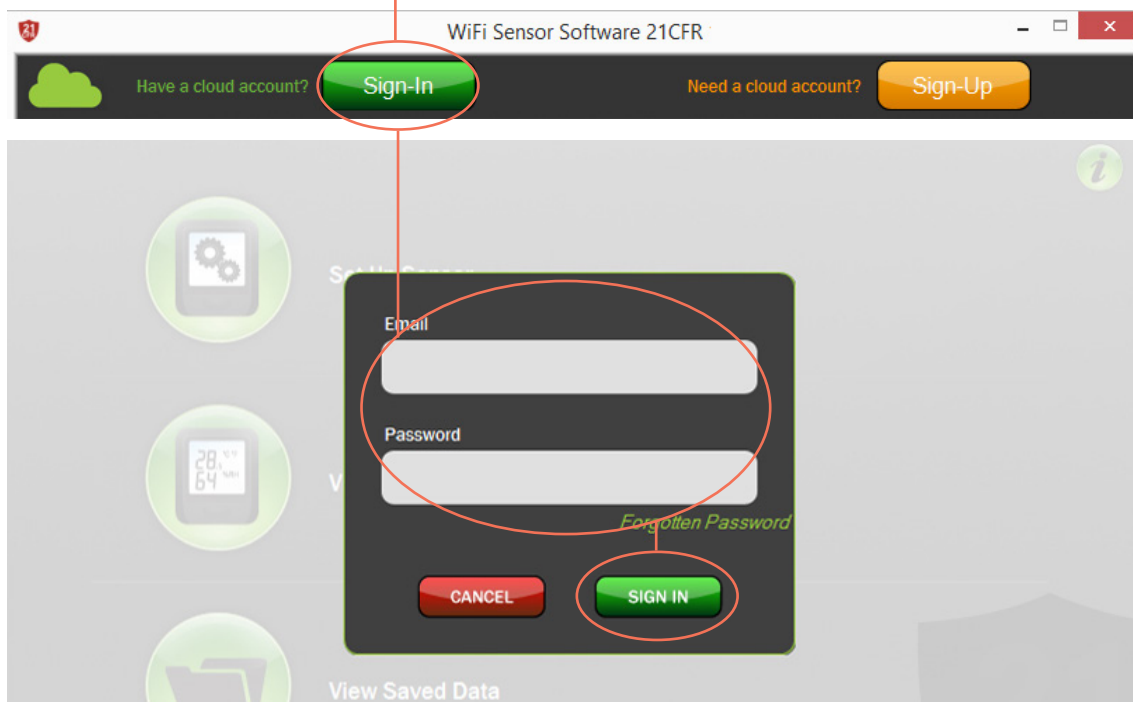
1 Start the EasyLog 21CFR WiFi software by double clicking the desktop icon.

2 If you don't have a EasyLog 21CFR Cloud Account click the orange 'Sign Up' button. If you do, go to Step 4.



3 Upon clicking the Sign Up button you will be taken to the Cloud sign-up web page, at which point you will be lead through the sign up process. Once completed please continue to Step 4.

4 To sign into your EasyLog Cloud Account on the WiFi Sensor Software click the green 'Sign In' button and then enter your account details into the fields that appear. Finally click 'Sign In' to log into your account.



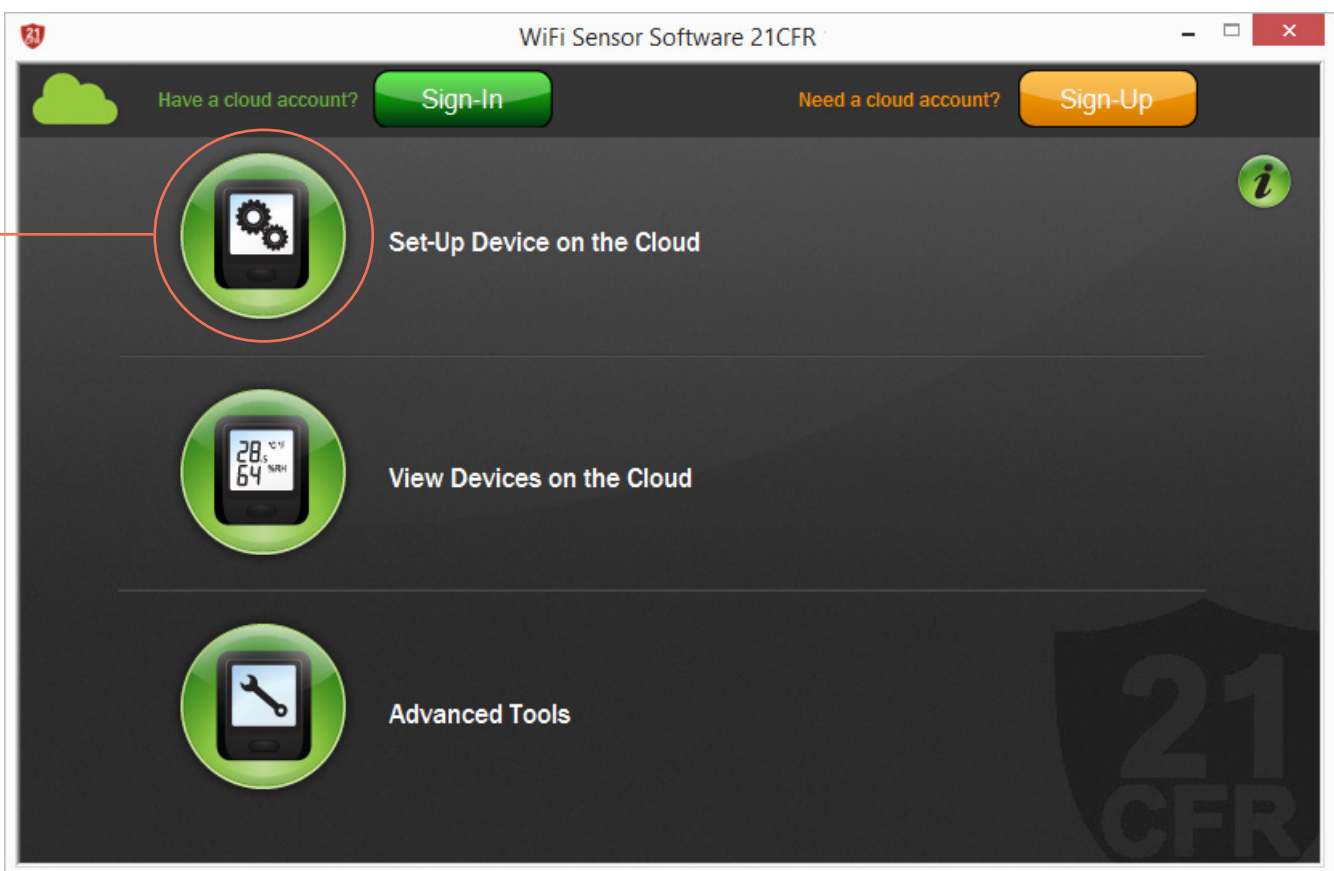
Section 3.0 - Connecting A Device & Network Set-Up

Device Set-Up

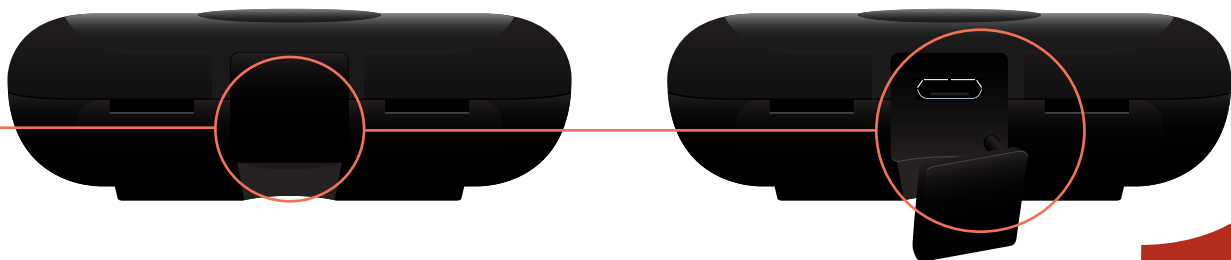
- 1 Start the 21CFR WiFi software by double clicking the desktop icon.



- 2 Click 'Set-Up Device on the Cloud' button.

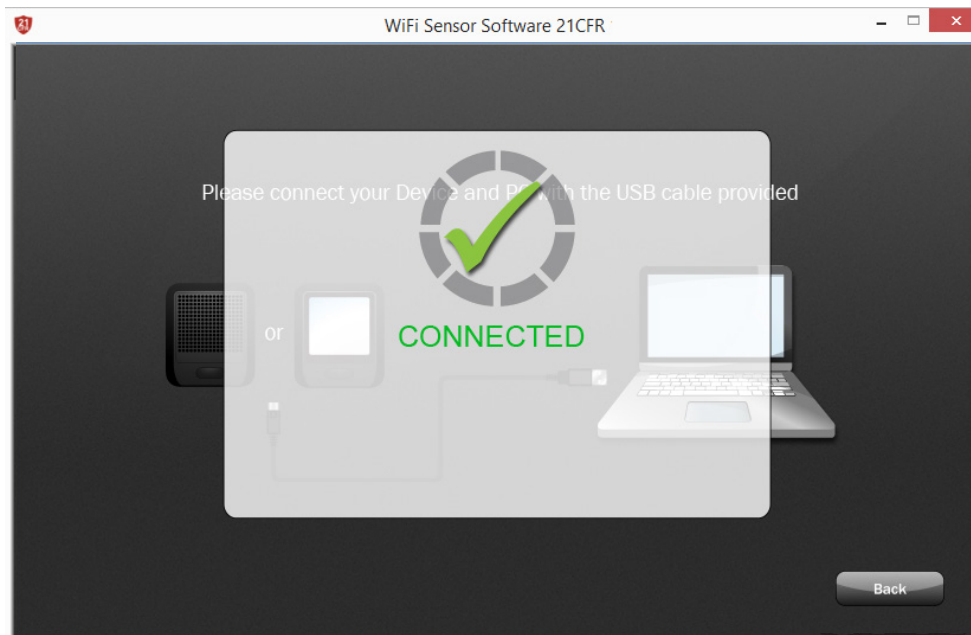


- 3 Connect the Device to your PC using the USB cable provided. The USB socket on the Device is protected by a rubber bung, remove this to gain access to the socket.



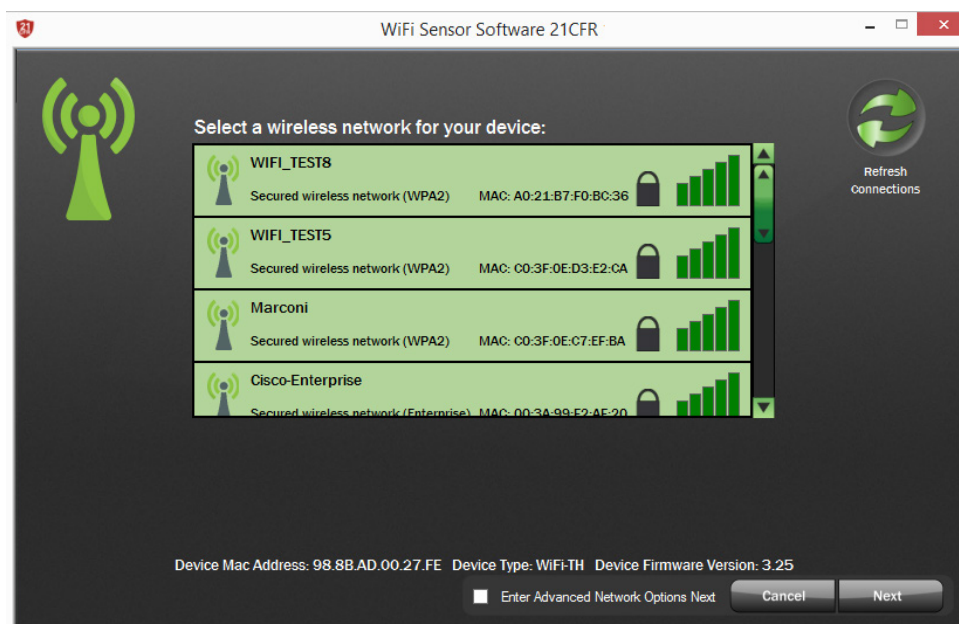
Section 3.0 - Connecting A Device & Network Set-Up

Note: If the Device connects successfully you will see the following screen. If it fails, check the cable is fully connected to the Device and PC. The software will automatically try again.



4 Scanning

When the message 'scanning' appears the Device is listening for wireless networks that are currently in range. Once scanning has completed a list of available networks will be displayed. If the list is blank press the 'refresh connections' button on the top right.



Section 3.0 - Connecting A Device & Network Set-Up

- 5 Select the network you wish to connect to.
- 6 If you use a hidden network simply scroll to the bottom of the list and select 'Join Other Network' and then fill in your network details.
- 7 Enter the password. Press 'Connect'. After the router has successfully connected press 'Next'.

Note: If the Device fails to connect to your wireless router the following screen will appear. Follow the on screen instructions and check the four points below.



- 1) Check your password
- 2) Click on the software refresh button
- 3) Re-orientate the position of your Device
- 4) Ensure your WiFi router is turned on and within range of the Device



Section 3.1 - Enterprise Networks



The screenshot shows the 'WiFi Sensor Software 21CFR' window. On the left is a green antenna icon. The main area is titled 'Select a wireless network for your device:' and lists four networks: Marconi2, SensorNetEnterprise, Marconi3, and Marconi. Each network entry shows its type (Secured wireless network (WPA2) or (Enterprise)), MAC address, and a signal strength bar. Below the list are fields for 'Username:' (containing 'user1') and 'Password:' (containing '*****'). To the right of the password field is an 'Authentication:' dropdown menu currently set to 'PEAP', with a list of options: PEAP, TTLS, and FAST. There are checkboxes for 'Show Character' and 'Remember Pass'. At the bottom, it displays 'Device Mac Address: 98.8B.AD.00.00.73', 'Device Type: WiFi-IH', and 'Device Firmware Version: 3.32'. At the bottom right are buttons for 'Enter Advanced Network Options Next', 'Cancel', and 'Next'. A 'Refresh Connections' button with a circular arrow icon is in the top right corner.

To configure an Enterprise network, enter your username and password. You will also need to select the Authentication type. If you do not know which one to use, please consult your IT administrator.

Section 3.2 - Advanced Network Configuration

If you need to configure additional network settings such as a static IP address, tick the Enter Advanced Network Options box before clicking 'Next'. If you are unsure, just click 'Next'.



Enter the IP address to configure the device along with the Subnet Mask and Default Gateway.

It is also possible to lock the Device so that it will only connect to one Wireless Access Point. This may be necessary if you have multiple Access Points with the same SSID. Enter the MAC Address of the Access Point.



Section 4.0 - Device Set-Up

- 8 Enter your device name. This page also shows the default settings for your device, any changes you wish to make can be done through your EasyLog 21CFR Cloud Account. Once you have entered your device name click 'Next'.

Note: For the TC, DTC, DTP+, TP and TP+ WiFi Sensor Devices this page will offer you a choice of probe type. Please select the one you wish to use with your device before continuing.



- 9 Once your device is set-up on your EasyLog 21CFR Cloud Account you will see this confirmation screen.



Click 'Finish' to return to the start screen.

Go to 21cfr.wifisensorcloud.com and Sign In to your account to view your devices.




Section 5.0 - Viewing Previously Saved Data

- 1 To view any files exported from your cloud account and saved on this PC, click on “Advanced Tools” and then “View Saved Data”. Only files exported in the text format can be viewed in this Software.




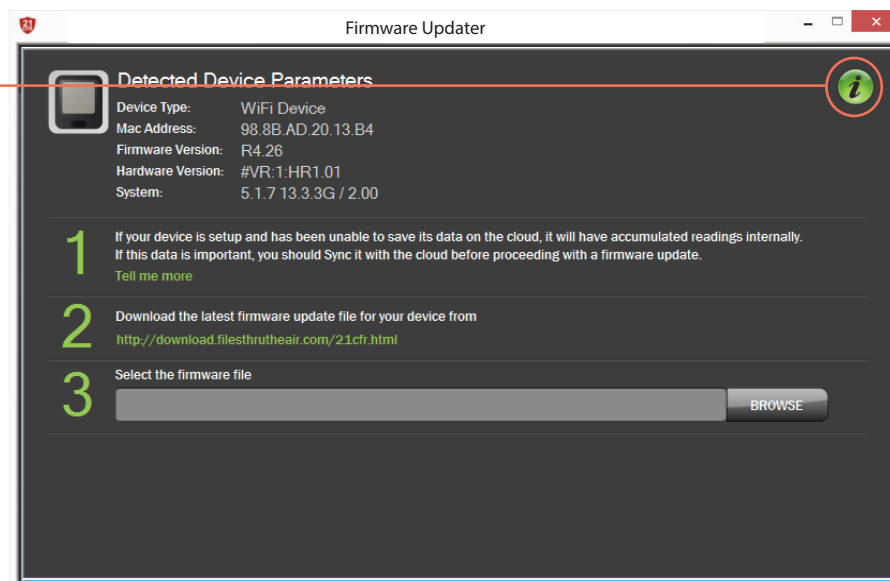
Section 6.0 - Firmware Updates

Device Firmware Updater

- 1 To ensure the best possible performance and to support the latest features, we recommend that your devices run the latest firmware versions. Click on the Firmware Updater icon  in Advanced Tools, to get started.



- 2 If you require assistance please use the Firmware Hints and Tips accessible from the  button on the Firmware Updater homescreen.



Section 7.0 - LCD Icons

LCD Icons

Signal Icon



(Not Displayed)
Not connected to a network



(Solid)
Communications with
Cloud OK



(Flashing)
Lost communications
with Cloud

Alarm Icon

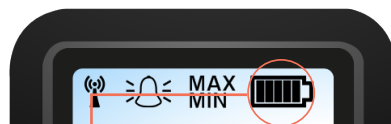


(Not Displayed)
No Alarms



(Flashing)
Alarm threshold triggered

Battery Icon



Battery OK



Solid with bars

Charging



Bars cycling

Battery Low - Recharge



One bar flashes

Max Icon



The Maximum recorded value is being displayed.

Min Icon



The Minimum recorded value is being displayed.



Probe has been disconnected from the device and it can no longer record data.

Section 7.1 - Device Screens

Device LCD Screens

Use the button on the Device to cycle through the display screens.



TH TH+ Temperature and Humidity Device Shown



Section 8.0 - Battery Life & Charging

Optimising battery performance:

The Devices can be powered in one of two ways:

- 1 Internal Battery Power
- 2 USB/Mains Power

Battery Power

These Devices contain rechargeable batteries. It is good practice to optimise your system to avoid excessive recharging cycles.

To do this be aware of the following;

Transmitting uses a lot of battery power. By increasing the time between transmissions the battery will last longer.

For example; for a short battery life transmit every minute, for a medium battery life transmit every 10 minutes and for a long battery life transmit once every hour.

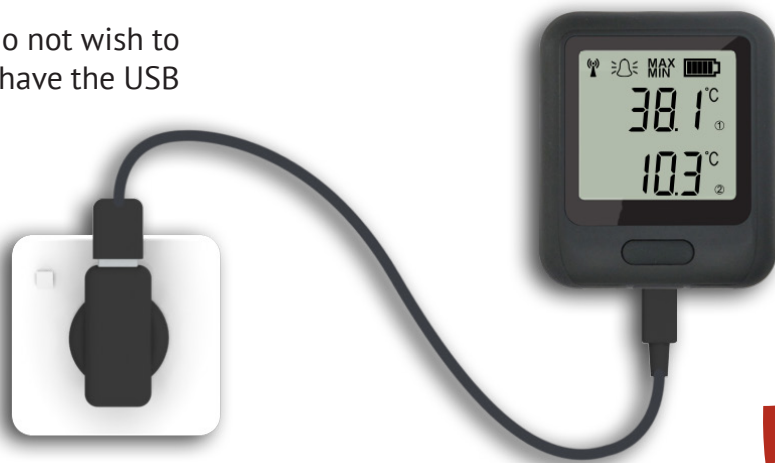
Battery Life and Power Supply

The product will arrive partly charged but ideally you should charge it for 24 hours before use for optimum performance. The battery can be recharged (unit must be between 0 - 40 °C) via a PC, a USB +5V wall adapter, or a portable USB battery pack using the USB lead provided. It can also be permanently powered by a USB wall adapter or USB battery pack.

Battery life is dependent on: transmission period, WiFi encryption method, WiFi encryption key rotation frequency (determined by the router/access point), signal strength between router/access point and WiFi device, presence volume and type of WiFi traffic from other devices, sample rate and operating temperature.

USB/Mains Power

If you have a critical process or do not wish to recharge Devices, you can opt to have the USB charger plugged in continuously.



Section 8.0 - Battery Life & Charging

Reset / Restore Sensor Device

1 Reset Device

Warning: The Device will retain all settings but may lose data that has not been transferred to the PC.

From the Sensor Home screen Press and hold the button for 10 seconds. Release when the LCD shows **rSt**

2 Restore Factory Settings

Warning: Only use restore when all other methods have failed.

A factory reset can also be performed, hold the button for 20 seconds until **FAR5** appears on screen. Doing this will return the Device to the factory state deleting all settings and clearing all previously recorded data.

