



# WiFi Setup Guide


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# 1. Weather Server Registration Guide

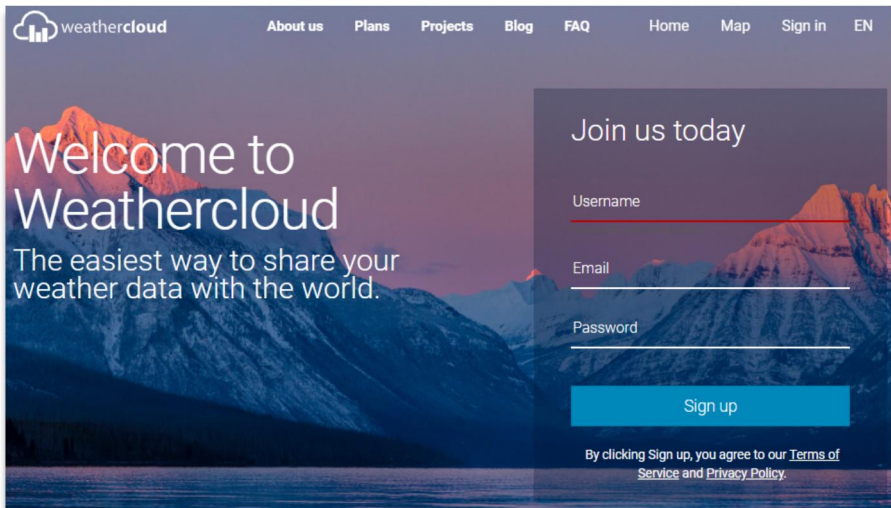
 **Note:** If you have registered the Weathercloud and wunderground account before, only need to create **“New Device”** to add your new weather station information.


 **Note:** You can register one or both of wunderground and weather cloud to upload the weather data.

## 1.1 Sign up on Weathercloud.net

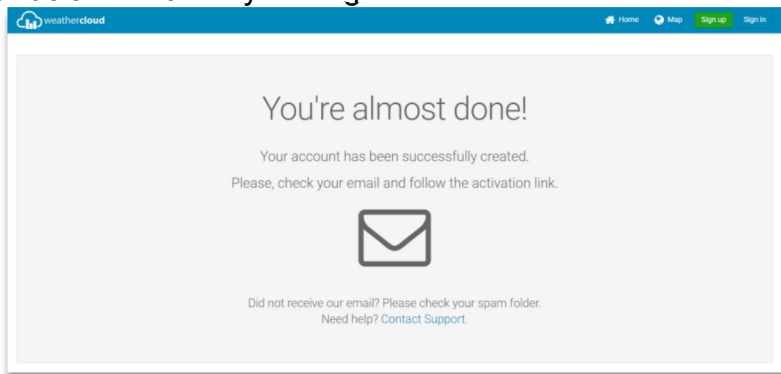
 **Note:** You are advised to register on computer desktop or laptop for better experiences.

1) Visit the ***https://www.weathercloud.net*** website, then input a Username, Email and Password as show in Figure 1, and click the “Sign up” button to create your free account.

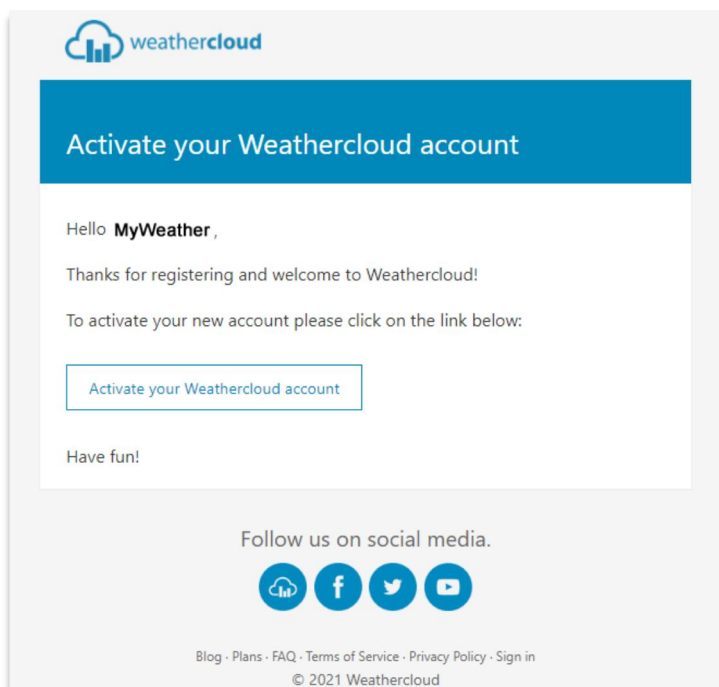


 **Note:** Create and Input new password on **“Join us today”** page, not your personal Email password. (No privacy will be exposed)

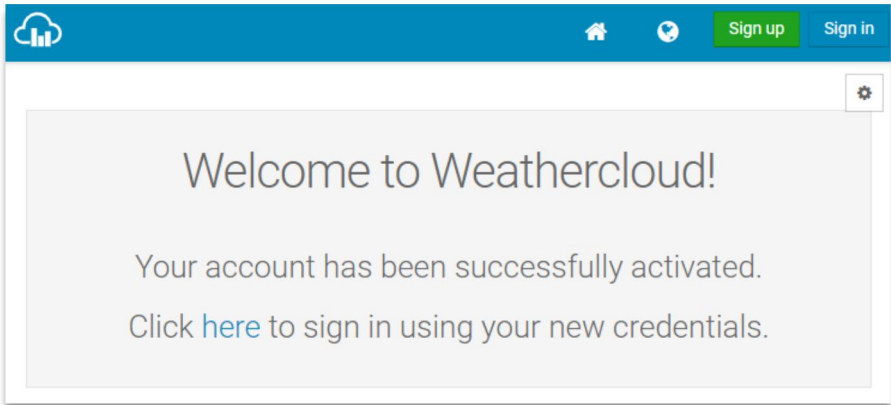
2) You will receive an **prompt page** from Weathercloud **activation Email** in your registered mailbox .



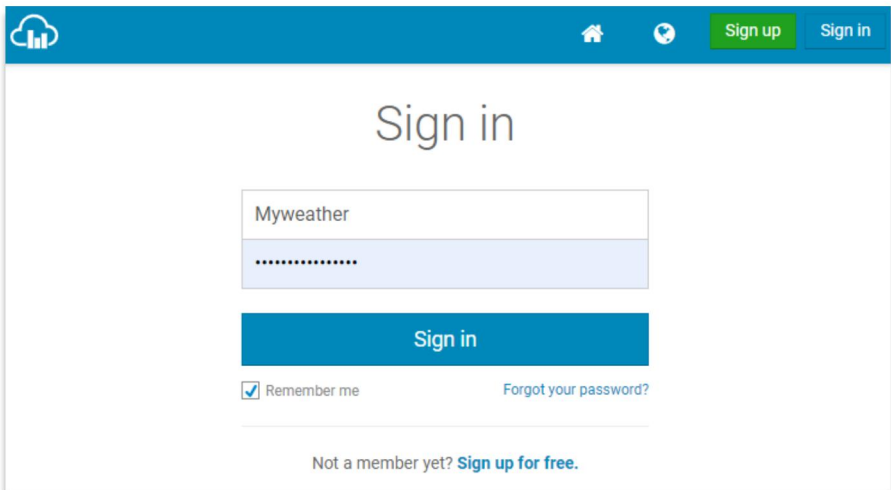
3) Check your registered email, confirm and click **“Activate your Weathercloud account”** button.




4) Click the **“Sign in”** button to enter the account login page of Weathercloud.




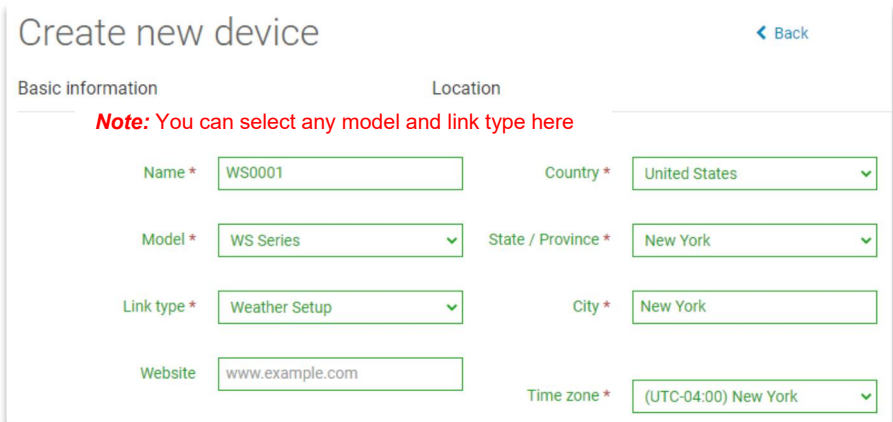
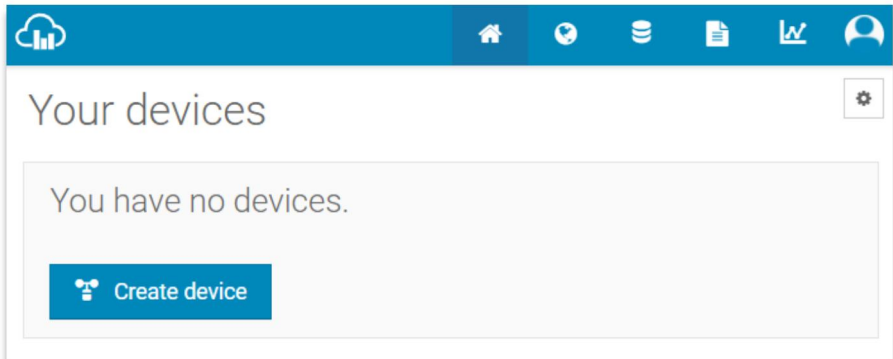
5) Input the previous **“Sign up”** Username (Email address) and password to log into the weathercloud.



 **Note:** Choose **“Remember me”** to save the Username and password avoid repeated input in the future.

6) Select “Create device” button and input the information about your weather station and location. Blanks with Red \* must be filled in.

 **Note: You can select any weather station Model and Link Type here.** The both parameters have no influence on the functionality.



Create new device [← Back](#)

Basic information Location

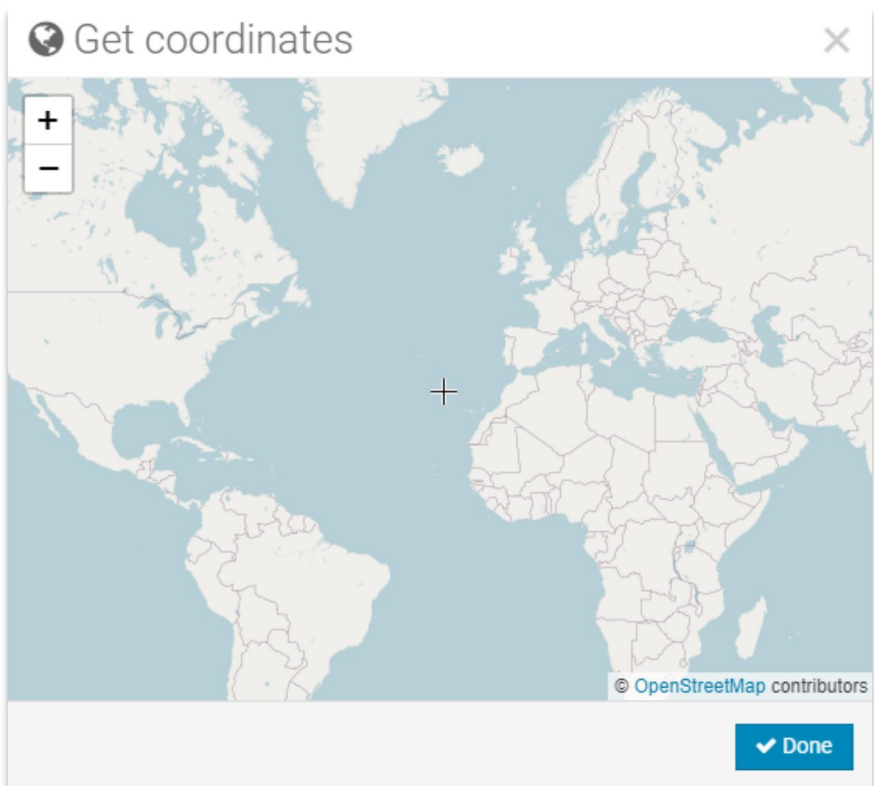
**Note: You can select any model and link type here**

|             |  |                    |   |
|-------------|--|--------------------|---|
| Name *      | <input type="text" value="WS0001"/>          | Country *          | <input type="text" value="United States"/>        |
| Model *     | <input type="text" value="WS Series"/>       | State / Province * | <input type="text" value="New York"/>             |
| Link type * | <input type="text" value="Weather Setup"/>   | City *             | <input type="text" value="New York"/>             |
| Website     | <input type="text" value="www.example.com"/> | Time zone *        | <input type="text" value="(UTC-04:00) New York"/> |

7) Click “**Get Coordinates**” to identify your location on the map. The cross in the middle of the map should now mark at the location of your weather station. Use the buttons “+” and

“-” to zoom in or out on the map as displayed. You can move the cross on the map to your own accurate location and click the **“DONE”** button.

|             |  |             |   |
|-------------|--|-------------|---|
| Website     | <input type="text" value="www.example.com"/> | Time zone * | <input type="text" value="(UTC-04:00) New York"/> |
| Description | <input type="text"/>                         | Coordinates | <input type="button" value="Get coordinates"/>    |
|             |  | Latitude *  | <input type="text"/>                              |
|             |  | Longitude * | <input type="text"/>                              |
|             |  | Elevation   | <input type="text" value="0.0"/> m                |
|             |  | Height      | <input type="text" value="0.0"/> m                |



8) Once complete the parameters of Longitude and Latitude, click the **“Create”** button at the bottom side.

Coordinates

Latitude \*

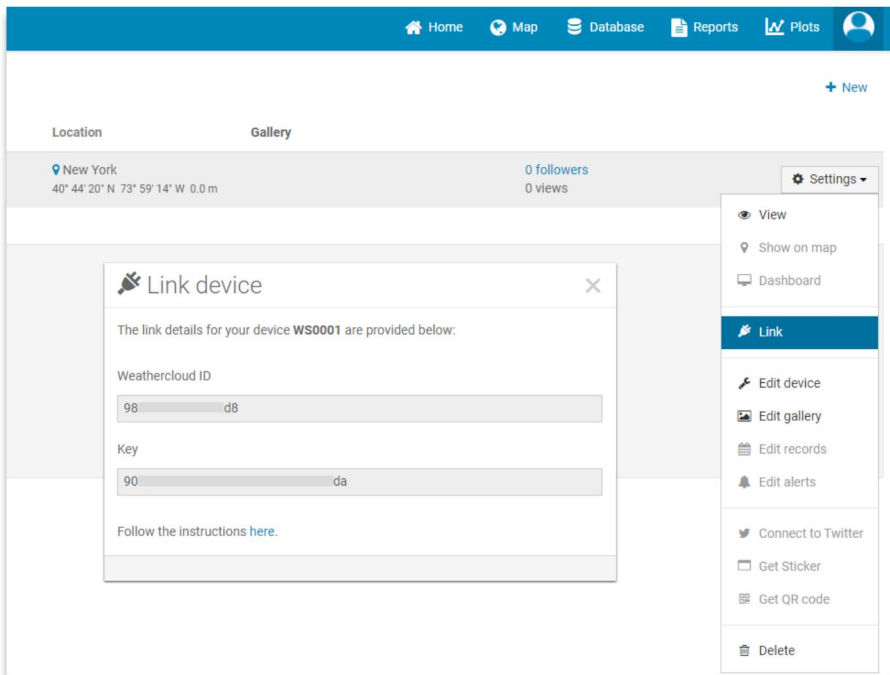
Longitude \*

Elevation  m

Height  m

9) The device is successfully added into the Weathercloud as below image. Pls click **“link”** in the **settings** button to record the **“weathercloud ID”** and **“Key”** information for later use (**Section 3.1**).

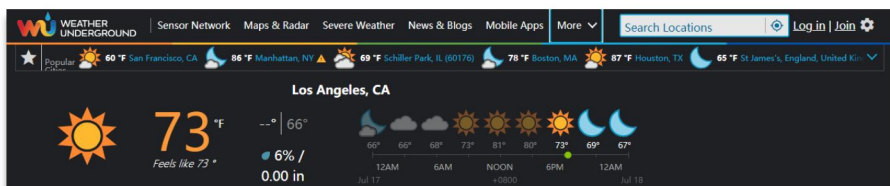
| Status   | Name   | Model           | Location                                      | Gallery   |
|----------|--------|-----------------|---|---|
| Unlinked | WS0001 | Other WS Series | New York<br>40° 44' 22" N 73° 59' 14" W 0.0 m | 0 followers<br>0 views<br><input type="button" value="Settings"/> |



 **Note:** The “*weathercloud ID*” and “*Key*” also will be sent to your registered email.


## 1.2 Sign up on Wunderground.com

1) Visit the “<https://www.wunderground.com>” website, and select “**Join**” button to create a free account.



2) When you enter into the **sign up** page, input the Email and password, then click “**Sign up for free**” button to create your own account.




[Sensor Network](#)
[Maps & Radar](#)
[More](#)

[Log in](#) | [Join](#)

Popular Cities
 San Francisco, CA 60 °F Fair
 Manhattan, NY 83 °F Fair
 Schiller Park, IL (60176) 69 °F Mostly Cloudy
 Boston, MA 78 °F Partly Cloudy
 Houston, TX 87 °F Partly

## Member Account

### Join Weather Underground

- Choose adding your webcam or personal weather station.
- You can delete your account at any time from your member settings.

The Weather Company needs your email to create your Weather Underground account.

Email

myweather@\_\_\_\_\_com ✓

Password (5-30 characters) [Show](#)

..... ✓

Confirm New Password:

.....


I agree to the [Terms of Use](#)

[Sign up for free](#)

[Already have an account? Sign in](#)

3) When the registration completed successfully, **“Welcome”** prompt page will show as below.

[X CLOSE](#)



## Welcome!

You are now an official Weather Underground member.

|  |   |
|--|---|
| <p><b>Personal Weather Stations</b></p> <p>Join our global community connecting data from environmental sensors like weather stations and air quality monitors. Provide rich hyperlocal weather data today.</p> <p><a href="#">Learn More About Weather Stations</a></p> | <p><b>Category 6™</b></p> <p>Keep up with the latest weather news and happenings. Check out our Category 6™ news site with update articles written by our resident meteorologist, Bob Henson.</p> <p><a href="#">Read the Latest Weather News</a></p> |
| <p><b>Weather Maps</b></p> <p>Check out our extensive catalog of weather maps ranging from Radar to 12 Hour Surface Forecast.</p> <p><a href="#">View Our Maps Catalog</a></p>   | <p><b>Wundermap</b></p> <p>Our Wundermap is also one of most data rich interactive weather maps on the market today.</p> <p><a href="#">Check Out Wundermap</a></p>   |

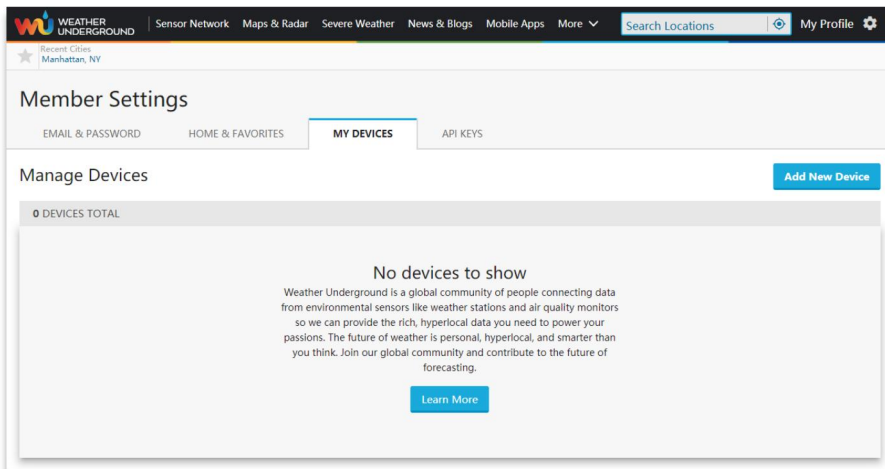
4) Click the **“Log in”** button to input your registered email and password, then click **“Sign in”** button to **Member Settings**.

The screenshot shows the 'Member Account' sign-in page on the Weather Underground website. The page has a dark blue header with the Weather Underground logo and navigation links: Sensor Network, Maps & Radar, Severe Weather, News & Blogs, Mobile Apps, and More. A search bar and 'Log in | Join' links are also present. Below the header, there are weather forecasts for several locations: San Francisco, CA (56°F Fair), Manhattan, NY (84°F Mostly Cloudy), Schiller Park, IL (60176) (67°F Cloudy), Boston, MA (76°F Clear), Houston, TX (84°F Fair), and St James's, England, United Kingdom (WC2H 7DE) (64°F Clear). The main content area is titled 'Member Account' and features a 'Sign in to Weather Underground!' heading. Below this, there are input fields for 'Email' (containing 'myweather@' and '.com') and 'Password' (with a 'Forgot your password?' link). A 'Sign in' button is centered below the fields. At the bottom, there is a link for 'Don't have an account? Sign up' and a section for 'Terms of Use | Privacy Policy' with a note: 'Please read these terms carefully. By using Weather Underground or signing up for an account, you're agreeing to these terms.'


The screenshot shows the 'Member Settings' page on the Weather Underground website. The header is similar to the previous page but includes a 'My Profile' link. The main content area is titled 'Member Settings' and has four tabs: 'EMAIL & PASSWORD' (selected), 'HOME & FAVORITES', 'MY DEVICES', and 'API KEYS'. The 'EMAIL & PASSWORD' tab is active and contains three sections: 'Change Your Email' with fields for 'Current Email' (myweather@.com) and 'New Email Address', a 'Save Email Settings' button; 'Change Your Password' with fields for 'Current Password', 'New Password' (with a 'Show' link), and 'Confirm New Password', a 'Save Password Change' button; and 'Your Membership' showing 'Status: Free Membership' and 'Signed Up: 7/17/21' with a 'Delete Account' button.

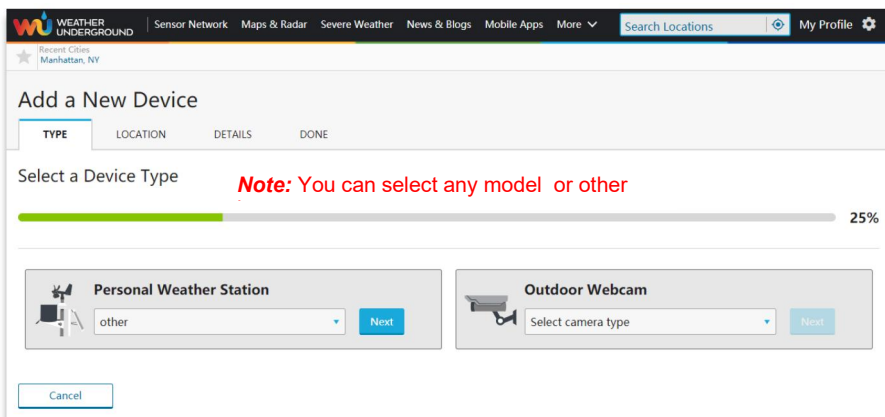
5) Select **“My Devices”** tab and click **“Add New Devices”** button to the **“Select a Device Type”** page.

 **Note:** In **“Add New Devices”** page , set the **“TYPE”**, **“LOCATION”**, **“DETAILS”** and **“DONE”** page step by step until 100% completion .



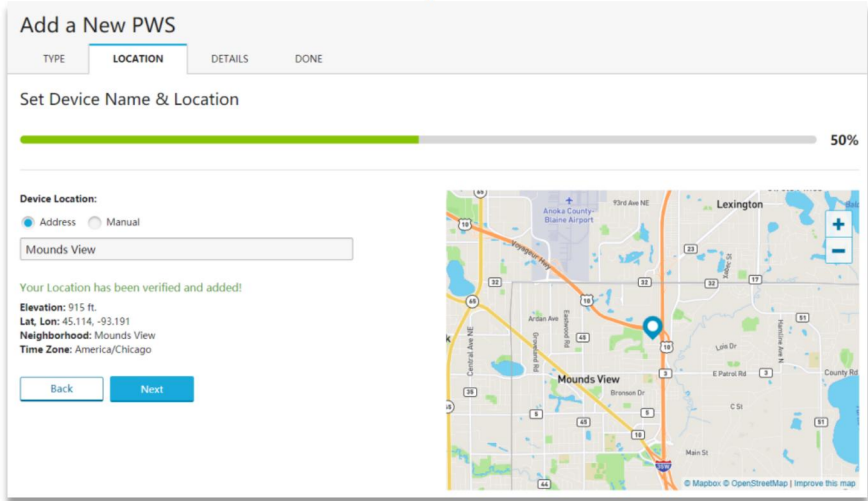
5.1) In the **“Type”** page, click **“Personal Weather Station”** drop-down list to select the your personal weather station type, and click the **“Next”** button to the **“Location”** page.

 **Note: You can select any Model or Other in the below Personal Weather Station blank.** The parameter have no influence on the functionality.

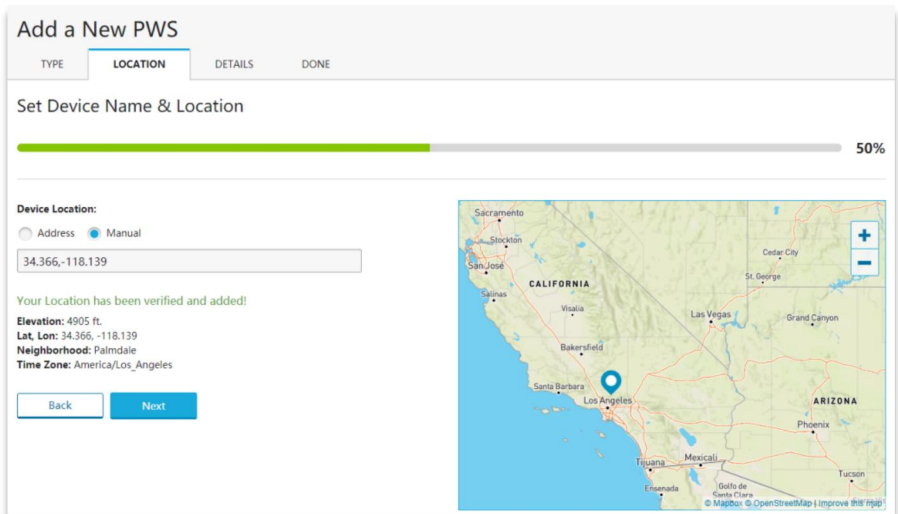


5.2) Device Location **“Address”** or **“Manual”** Option Set  
**Address Option:** Simply enter the detailed address close to

the location of your personal weather station. The database of Wunderground website will automatically find the associated address and shows on the map.



**Manual Option:** Zoom in or Zoom out the map to click the accurate address of your personal weather station on the map and the details will show on the left automatically.



5.3) Once you finished the **“LOCATION”** page, click the next button to **“DETAILS”** Page.

6) In **“DETAILS”** Page, the blanks with red **“Required”** are mandatory fields, and it's no need to change the filled fields. Click the **“I Accept”** option and **“Next”** button to **“DONE”** Page.

The screenshot shows the 'Add a New PWS' page on the Weather Underground website, specifically the 'DETAILS' tab. The page has a progress bar at the top indicating 75% completion. Below the progress bar, there are several input fields and dropdown menus, each with a red '(Required)' label. The fields are: 'Name' (containing 'WS0001'), 'Elevation' (containing '4905'), 'Device Hardware' (containing 'other'), and 'Height Above Ground' (containing 'Ft. Above Ground'). There are also dropdown menus for 'Surface Type' and 'Associate Webcam' (containing 'Select WebCams'). At the bottom of the form, there is a privacy notice section with a '(Required)' label and two radio buttons: 'I Accept' (selected) and 'I Deny'. Below this, there is an 'Email Preferences' section with a checkbox for 'I would like to receive PWS notifications.' and two buttons: 'Back' and 'Next'.

7) In **“DONE”** Page, the device **“Station ID”** and **“Station Key”** are shown, copy and record the information for late use (**Section 3.1**).

**Add a New PWS**

TYPE LOCATION DETAILS **DONE**

**Registration Complete!**

100%

Congratulations! Your personal weather station is now registered with Weather Underground.

Enter the information below to your weather station software.

Your PWS  
 Station ID: K[redacted]I1  
 Station Key: D[redacted]d

[Copy credentials](#)

[View Devices](#)

Configure Your Software

**Note:** In “*DONE*” Page, click the “*View details*” button, your weather station and the associated station ID and Key will also be displayed.

**Member Settings**

EMAIL & PASSWORD HOME & FAVORITES **MY DEVICES** API KEYS

**Manage Devices** [Add New Device](#)

2 DEVICES TOTAL


| Name                   | Location                | Status  | ID           | Key       | Type | Manage   |
|------------------------|-------------------------|---------|--------------|-----------|------|--|
| <a href="#">W50001</a> | Palmdale (Palmdale), CA | Offline | KCA PALMD241 | NHWX9E834 | PWS  | <a href="#">Edit</a>   <a href="#">Delete</a>   <a href="#">Copy credentials</a> |

Items per page: 10 1 - 2 of 2 < >


## 2. WiFi Setup of Display Console


**Note:** Place the distance between the router and display console less than 16ft (5m) to ensure that the WiFi signal is stable.

## 2.1 Connect End-Device to Display Console WiFi

When you first power up (AC Adapter) the console, or press and hold the **MIN/MAX** button for three seconds in normal mode, the WiFi icon  will flash to signify that it has entered **WAP (wireless access point) mode**, and is ready for WiFi settings.

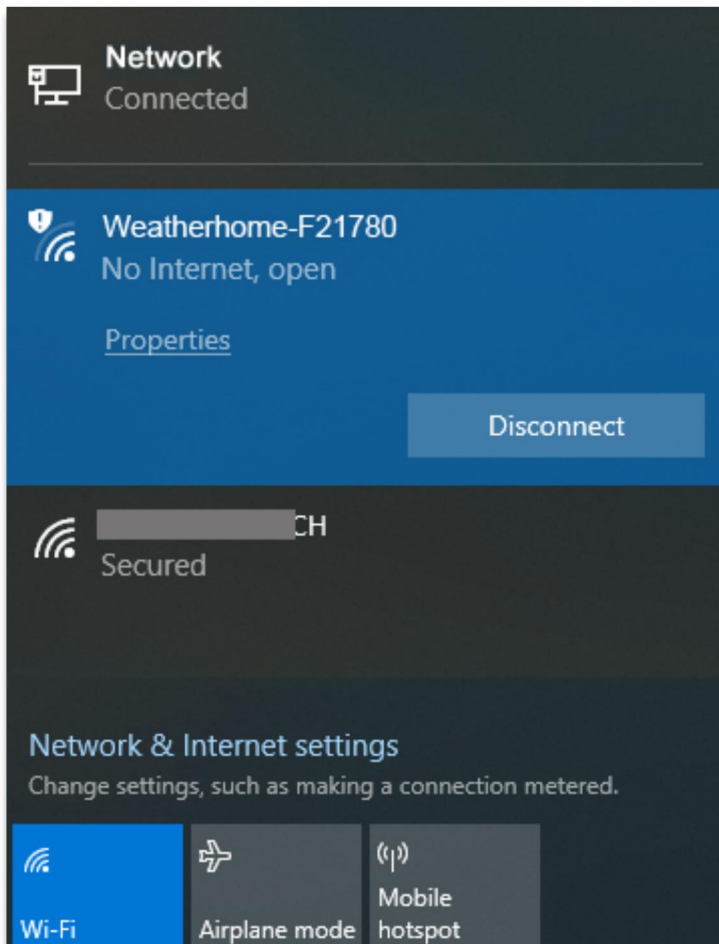
You can use your personal Laptop(PC), Tablet, or Smart Phone to connect the WiFi of the display console. The console network name begins with “**Weatherhome**” and a unique code.

 **Note:** After completing the WiFi setting of display console, return your End-Device to your normal default WiFi connection.

 **Note:** In WAP You cannot connect two or more devices at the same time when WAP mode.

### 2.1.1 Connect Laptop (PC) to Display Console WiFi

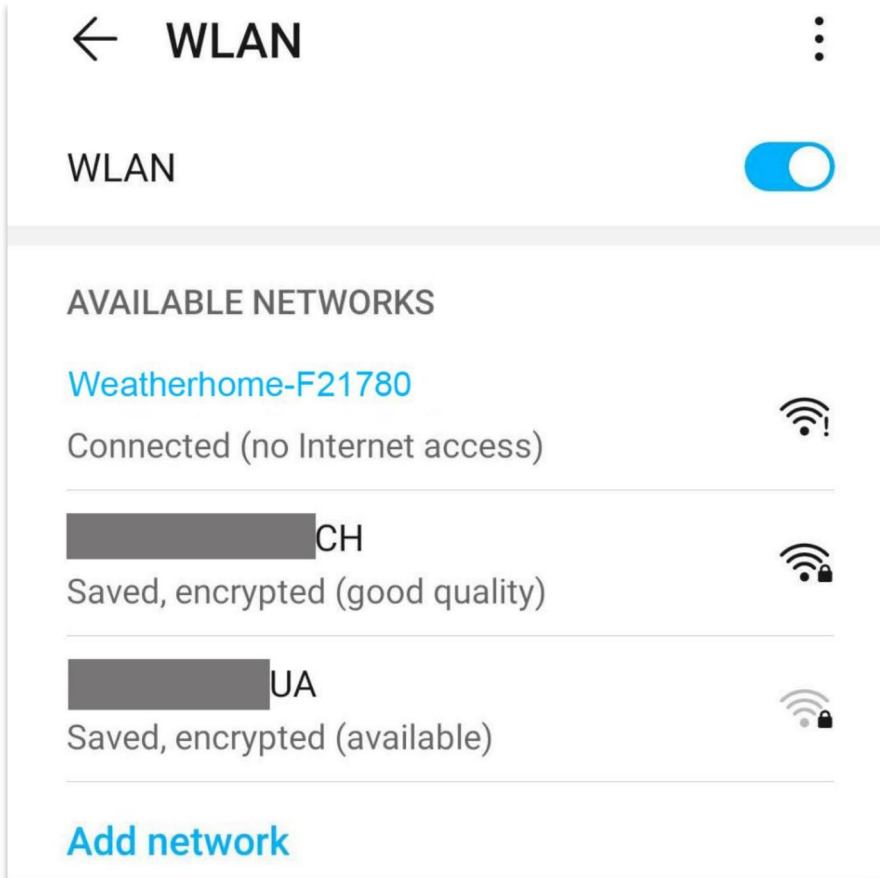
In Windows or MAC, select the PC network settings of your WLAN icon (or search “change WiFi settings” from computer) and connect to the WLAN network “**Weatherhome**” as show in following figure.



### 2.1.2 Connect Tablet, or Smart Phone to Display Console WiFi


Click the **“Setting”** icon on the Tablet or Smart phone, and select the WLAN, then connect to the **“Weatherhome”** network as show in following figure.





### 3. Display Console Web Page Configuration

Once you have connected your End-Device to the weather station display console WLAN, enter the following IP address ***http://192.168.5.1*** into address bar of any internet browser to enter the configuration page of the display console.

 **Note:** Some browsers treat ***192.168.5.1*** as a search result. In such cases, make sure that you also include the protocol ***“http://”*** ( ***“http://192.168.5.1”*** instead of ***“192.168.5.1”***).

## 3.1 Console Network and Weather Server Setup

The screenshot shows a web browser at the URL `http://192.168.5.1/`. The page title is "Weather Setting".

**Wi-Fi network setup**

- Network:  → Select your WiFi Router(SSID) (Support only 2.4 GHz Router)
- Password:  → Router's WiFi Password
- Status: Connected. IP: 192.168.10.217 → Status display connected IP (Success) Once Click the Save key

**Weather server setup**

- Upload wunderground.com  → Confirm to upload into wundergournd.com
- ID:  → Enter Your Station ID
- Password:  → Enter Your Station Key
- Upload weathercloud.net  → Confirm to upload into weathercloud.net
- ID:  → Enter Your Weathercloud ID
- Key:  → Enter Your Weathercloud Key

→ Press Save to Confirm the Setting

**Note:** WLAN Networks with hidden SSIDs cannot be recognized for the “Network” entry. If the SSID of your WLAN is hidden, you will have to enter it manually.

**Note:** When Input station ID and key, copy and paste source text strictly (Take notice of space and upper or lower case of letters here).

## 3.2 Time Zone Setup

**Time Zone Settings(default: 0h).** Based on the number of hours from Coordinated Universal Time, or Greenwich Mean Time (GMT).

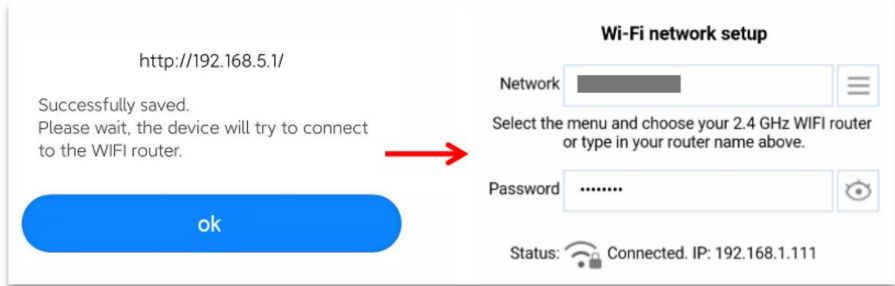
The following table provides times zones throughout the world. Locations in eastern hemisphere are positive, and locations in the western hemisphere are negative.

| <b>Hours from GMT</b> | <b>Time Zone</b>  | <b>Cities</b>              |
|-----------------------|---|----------------------------|
| -12                   | IDLW: International Date Line West  | ---                        |
| -11                   | NT: Nome  | Nome, AK                   |
| -10                   | AHST: Alaska-Hawaii Standard<br>CAT: Central Alaska<br>HST: Hawaii Standard | Honolulu, HI               |
| -9                    | YST: Yukon Standard   | Yukon Territory            |
| -8                    | PST: Pacific Standard   | Los Angeles, CA, USA       |
| -7                    | MST: Mountain Standard  | Denver, CO, USA            |
| -6                    | CST: Central Standard   | Chicago, IL, USA           |
| -5                    | EST: Eastern Standard   | New York, NY, USA          |
| -4                    | AST: Atlantic Standard  | Caracas                    |
| -3                    | ---   | São Paulo, Brazil          |
| -2                    | AT: Azores  | Azores, Cape Verde Islands |

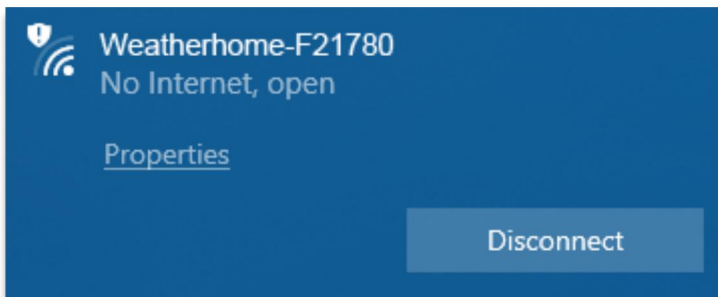
| <b>Hours from GMT</b> | <b>Time Zone</b>   | <b>Cities</b>              |
|-----------------------|--|----------------------------|
| -1                    | WAT: West Africa   | ---                        |
| 0                     | GMT: Greenwich Mean<br>WET: Western European                           | London, England            |
| 1                     | CET: Central European  | Paris, France              |
| 2                     | EET: Eastern European  | Athens, Greece             |
| 3                     | BT: Baghdad  | Moscow, Russia             |
| 4                     | ---  | Abu Dhabi, UAE             |
| 5                     | ---  | Tashkent                   |
| 6                     | ---  | Astana                     |
| 7                     | ---  | Bangkok                    |
| 8                     | CCT: China Coast   | Beijing                    |
| 9                     | JST: Japan Standard  | Tokyo                      |
| 10                    | GST: Guam Standard   | Sydney                     |
| 11                    | ---  | Magadan                    |
| 12                    | IDLE: International Date<br>Line East<br>NZST: New Zealand<br>Standard | Wellington, New<br>Zealand |

### 3.3 Save The Configuration Data Permanently

Check again all the settings you have filled in the configuration website of display console, if you confirm that all information is correct, click the button labeled **“Save”** to finally confirm.



When the web settings have been saved, disconnect your End-Device from the display console WLAN by clicking the **“Disconnect”** Button, or the display console will automatically exit WAP mode.



### 3.4 WiFi Connection Status






**WiFi icon is always on:** The display console is connected with your WiFi router.



**WiFi icon keep flashing:** WiFi signal is not stable or the display console is trying to connect the router.



**WiFi icon is gone:** The display console is not connected to the WiFi router.

When the console successfully connects to your any website of weather servers, the data signal icon  will appear on the LCD display(at the right of the outdoor humidity). If the data signal icon  is flashing, the weather station display console is currently uploading to the server. If the icon  disappears, the console is not connected to the weather server for more than 30 minutes.

### 3.5 Time Server Sync Status

After the display console has connected to the internet, it will attempt to connect the internet time server to obtain the time. Once the connection succeeds and the console's time has updated, the SYNC icon will appear on the LCD. The time will automatically synchronize to the internet per an hour.



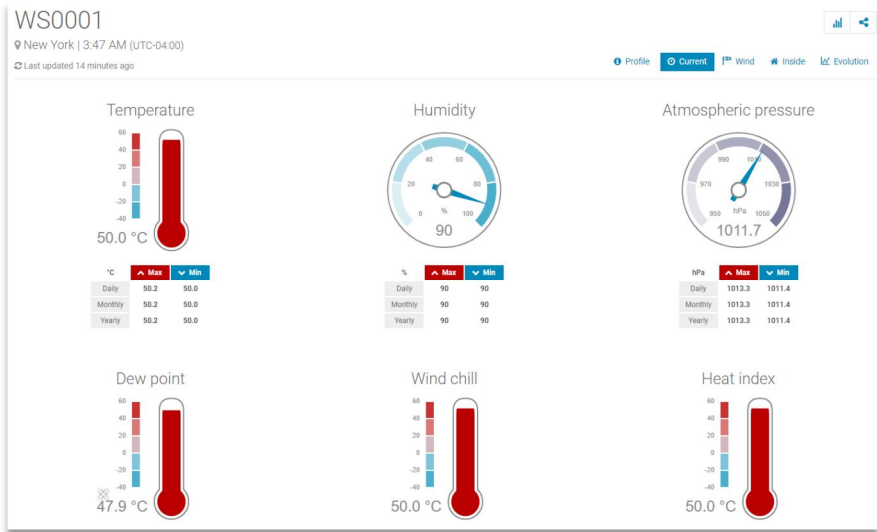
**Note:** when WiFi connected successfully, the console time will updates automatically without manually setting.

## 4. View the Weather Station Data Via Internet

### 4.1 View your weather station data on weathercloud

Log into <https://www.weathercloud.net/> with your previously registered Email and Password, you will be automatically directed to the weather data of your weather station (If it has

recently synced data to Weathercloud).

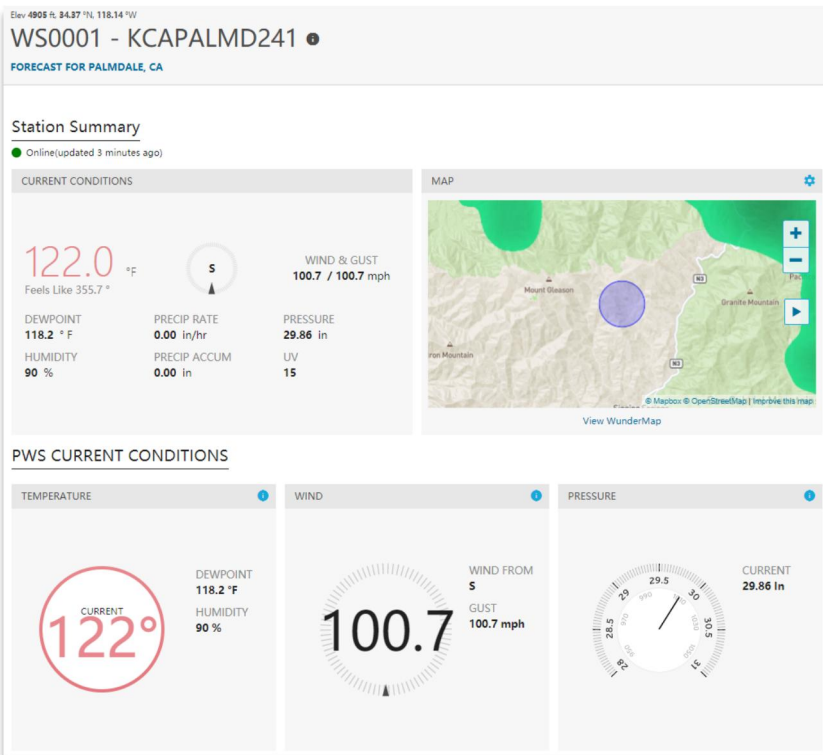


## 4.2 View your weather station data on wunderground

Log into <https://www.wunderground.com/> with previously registered Email and Password.

Or Visit:

<https://www.wunderground.com/dashboard/pws/STATIONID>, where STATIONID is your weather station ID (example, KCAPALMD241).



## 5. Firmware Upgrade on Display Console

You may get the latest firmware of the console as below

### 5.1 *Connect the WiFi of Display Console firstly (Refer to Part 2)*

5.2 Once WiFi connected, enter the following IP address into the browser's address bar: ***http://192.168.5.1/upgrade.html***, the following website page will be displayed on your browser.



weather home upgrade

---

Firmware Version: V1.2.4, User bin: user2.bin

---

File:

Select File

---

Upgrade

5.3 Now click **“Select File”** button and select the binary file (extension “.bin”) intended for updating your display console.

weather home upgrade

---

Firmware Version: V1.2.4, User bin: user2.bin

---

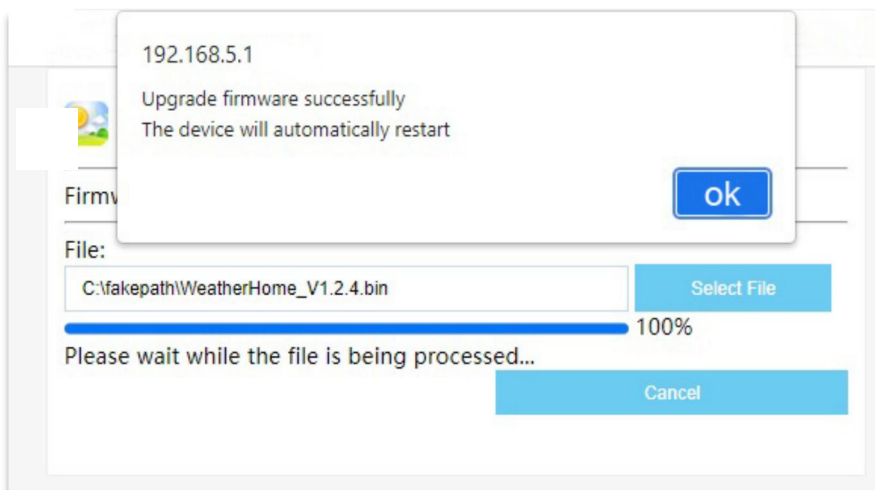
File:


Select File

---


Upgrade

5.4 Click **“Upgrade”** and start to update. Once the process has been successfully completed, a prompt page will remind you that the WiFi firmware will automatically restart.



 **Note:** In this upgrade process, only update the **WiFi firmware**, the console doesn't reset, once the upgrade is completed, the console will automatically exit WAP mode.

## 6. Trouble Shooting Guide

|   |  |
|---|--|
| <p>WiFi does not display on console</p> | <p>Check your router for problems.</p> <p>Check WiFi symbol on the display. If wireless connectivity is successful the WiFi icon  will be displayed all the time</p> <ul style="list-style-type: none"> <li>Make sure your modem WiFi settings are correct (network name, and password).</li> </ul> <p>Make sure the console is plugged into AC power. The console will not connect to WiFi when powered by batteries</p> |
|---|--|

|   |   |
|---|---|
|   | <p>only.</p> <p>The console only supports and connects to 2.4GHz routers. If you own a 5 GHz router, and it is a dual band router, you will need to select 2.4GHz in operation</p> <p>The console does not support guest networks.</p>  |
| <p>Data not reporting to <a href="http://www.wunderground.com">www.wunderground.com</a> or <a href="http://www.weathercloud.net">www.weathercloud.net</a></p> | <p>Confirm your station key is correct. It is the password you registered on Wunderground.com.</p> <p>Your Wunderground.com password cannot begin with a non-alphanumeric character (a limitation of Wunderground.com, not the station). Example, \$worknet is not a valid password, but worknet\$ is valid.</p> <p>Confirm your station ID is correct.</p> <p>Make sure the date and time is correct on the console. If incorrect, you may be reporting old data, not real time data.</p> <p>Make sure your time zone is set properly. If incorrect, you may be reporting old data, not real time data. Check your router firewall settings. The console sends data via Port 80.</p> |

## 7. WiFi Specifications

|  |  |
|--|--|
| <b>WiFi Standard:</b>                                    | 802.11 b/g/n   |
| <b>WiFi Console RF Frequency:</b>                        | 2.4 GHz  |
| <b>Device Compatibility:</b>                             | Build-in WiFi with WAP Mode, Smart Device (laptops, computers, smart phones and smart pads). |
| <b>Web Browser Compatibility:</b>                        | HTML 5 (such as the latest versions of Chrome, Safari, IE, Edge, Firefox or Opera).          |
| <b>Line of sight WiFi RF transmission (in open air):</b> | 80ft (20m)   |