

# WIFI CONNECTION WEATHER STATION WH2626

## Operation Manual

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# 1. Introduction

Thank you for your purchase of our Wireless weather station with WiFi connection. The following user guide provides step by step instructions for installation, operation and troubleshooting.

## 2. Quick Start Guide

Although the manual is comprehensive, much of the information contained may be intuitive. In addition, the manual does not flow properly because the sections are organized by components.

The following Quick Start Guide provides only the necessary steps to install, operate the weather station, and upload to the internet, along with references to the pertinent sections.

Step	Description	Section
1	Power up remote sensor	3.2
2	Power up Display console	4.2
3	Set Up or Program Display Console	3.3.2
4	Install Sensor	3.4
<b>Optional</b>		
4	Configure WiFi	7
5	Register and upload to Weather Server	7

## 3. Setting Started

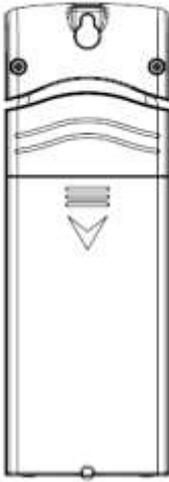
### 3.1 Contents

QTY	Item
1	Display Console Dimensions (LxHxW): 67.5 x 90 x 26.8 mm
1	Thermo-hygrometer transmitter Dimensions (LxHxW): 122 x 40 x 18 mm
1	Power Adapter
1	User manual

### 3.2 Outdoor Thermo-hygrometer Sensor Set Up

**Note:** To avoid permanent damage, please take note of the battery polarity before inserting the batteries.

Remove the battery door on the back of the sensor. As show in below:



1. Insert two AA batteries.
2. After inserting the batteries, the remote sensor will display temperature and humidity on the display, as shown in **Fehler! Verweisquelle konnte nicht gefunden werden..**



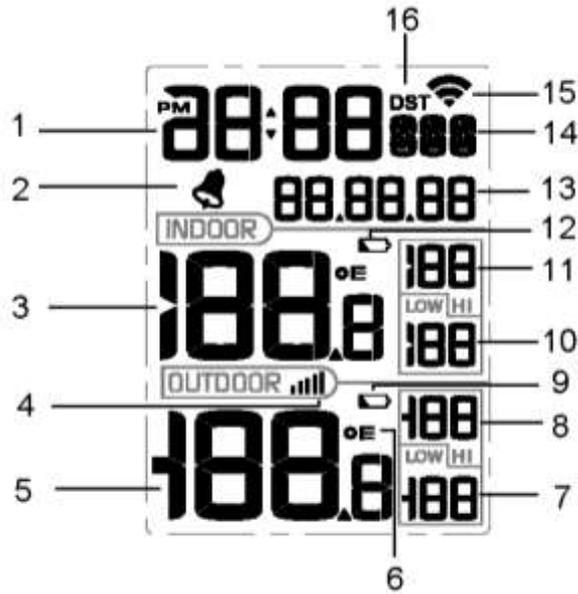
3. Close the battery door.

Note: We recommend lithium batteries for cold weather climates, but alkaline batteries are sufficient for most climates. We do not recommend rechargeable batteries. They have lower voltages, do not operate well at wide temperature ranges, and do not last as long, resulting in poorer reception.

**Note:** The outdoor humidity is not display on receiver side, but it will upload to internet, is publishing to Wunderground.com website.

### 3.3 Display console

### 3.3.1 Display Console Layout



1. Time	9. Indoor low battery indicator
2. Alarm icon	10. Low indoor temperature
3. Indoor temperature	11. Hi indoor temperature
4. RF icon	12. Outdoor low battery indicator
5. Outdoor temperature	13. Date
6. Outdoor temperature unit (C/F)	14. Week
7. Low outdoor temperature	15. WIFI icon
8. Hi outdoor temperature	16. DST

### 3.3.2 Display Console Set Up

Place the remote thermo-hygrometer about 2 to 3 meters away from the display console (if the sensor is too close, it may not be received by the display console).

1. Insert the power adapter into the power jack of the console, and plug in the adapter. The LCD display will beep once and then light up.
2. Remove the battery door on the back of the display. Insert two AAA (alkaline or lithium, avoid rechargeable) batteries in the back of the display console.

**Note:** To avoid permanent damage, please take note of the battery polarity before inserting the batteries.

**Note:** The batteries are intended for back-up power only. The backlight will remain on for 5 seconds when on back up battery power only. If you only use battery to power up display console, you must press LIGHT/SNOOZE key to light up the LCD before press any other key.

3. Replace the battery door.
4. After initialization, the console will instantly display indoor temperature, date and time. The remote search icon will turn on: 

**Do not touch any buttons** until the remote sensor reports in, otherwise the remote sensor search mode will be terminated and the search icon will turn off. When the remote sensor data has been received, the console will automatically switch to the normal mode, and all further settings can be performed.

### 3.4 Sensor Placement

It is recommended you mount the remote sensor outside on a north facing wall, in a shaded area, at a height at or above the receiver. If a north facing wall is not possible, choose a shaded area, under an eave.

Direct sunlight and radiant heat sources will result in inaccurate temperature readings. Although the sensor is weatherproof, it is best to mount in a well-protected area, such as an eave.

1. Use a screw or nail to affix the remote sensor to the wall, as shown in Figure a.
2. Hang the remote sensor up on string, as shown in Figure b.

**Note:** Make sure the sensor is mounted vertically and not lying down on a flat surface. This will insure optimum reception. Wireless signals are impacted by distance, interference (other weather stations, wireless phones, wireless routers, TVs and computer monitors), and transmission barriers, such as walls. In general, wireless signals will not penetrate solid metal and earth (down a hill, for example).

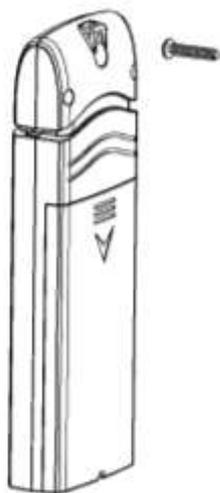


Figure a

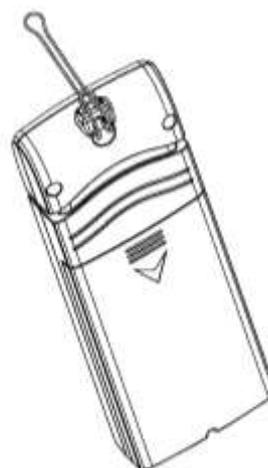


Figure b

### 3.5 Best Practices for Wireless Communication



**Note:** To insure proper communication, mount the remote sensor(s) upright on a vertical surface, such as a wall. **Do not lay the sensor flat.**

Wireless communication is susceptible to interference, distance, walls and metal barriers. We recommend the following best practices for trouble free wireless communication.

1. **Electro-Magnetic Interference (EMI).** Keep the console several feet away from computer monitors and TVs.
2. **Radio Frequency Interference (RFI).** If you have other same frequency devices and communication is intermittent, try turning off these other devices for troubleshooting purposes. You may need to relocate the transmitters or receivers to avoid intermittent communication.
3. **Line of Sight Rating.** This device is rated at 300 feet line of sight (no interference, barriers or walls) but typically you will get 100 feet maximum under most real-world installations, which include passing through barriers or walls.
4. **Metal Barriers.** Radio frequency will not pass through metal barriers such as aluminum siding. If you have metal siding, align the remote and console through a window to get a clear line of sight.

The following is a table of reception loss vs. the transmission medium. Each “wall” or obstruction decreases the transmission range by the factor shown below.

Medium	RF Signal Strength Reduction
Glass (untreated)	5-15%
Plastics	10-15%
Wood	10-40%
Brick	10-40%
Concrete	40-80%
Metal	90-100%

## 4. Display Console Operation

### 4.1 Display Console Initialization

After the console is connected to AC power, the console will display the software version number two seconds after power up.



The console will display all of the LCD segments for three seconds after power up, the indoor conditions will immediately update, and the outdoor sensor will register within a few minutes.



## 4.2 Button operation

The console has 5 buttons for easy operation:

Key	Description
<b>SET</b>	Press and hold the <b>SET</b> button 2s enter setting mode.
<b>+/Reset-MAX</b>	<ul style="list-style-type: none"> <li>Press the <b>+/Reset-MAX</b> button 5s, will reset high indoor/outdoor temperature to current reading</li> <li>While in SET mode, press to increase the value. Press and hold for two seconds to increase the value rapidly.</li> </ul>
<b>-/Reset-MIN</b>	<ul style="list-style-type: none"> <li>Press the <b>+/Reset-MIN</b> button 5s, will reset low indoor/outdoor temperature to current reading.</li> <li>While in SET mode, press to decrease the value. Press and hold for two seconds to decrease the value rapidly.</li> </ul>
<b>ALARM</b>	<ul style="list-style-type: none"> <li>Press and release the <b>ALARM</b> button to enter alarm mode.</li> <li>Press and hold the <b>ALARM</b> button 2s to enter alarm setting mode.</li> </ul>
<b>LIGHT/SNOOZE</b>	<ul style="list-style-type: none"> <li>Press and release <b>LIGHT/SNOOZE</b> button open the back light 5s.</li> <li>Press to exit the SET mode at any time.</li> </ul>

### 4.3 Set Mode

Press and hold the **SET** button for two seconds to enter the SET Mode. To proceed to the next setting, press (do not hold) the **SET** button.

To exit the SET mode at any time, press the **LIGHT / SNOOZE** button.

#### 4.3.1 BEEP



- Press the **SET** key for 2 seconds to select the beep section, ON/OFF section digits will start flashing, press the **+Reset-MAX** and **-Reset-MIN** button to select ON or OFF.

“BEEP ON” will make the Beep sound on every key press. If you do not want the beep sound to be heard, select “BEEP OFF”

#### 4.3.2 DST



- Press the **SET** key for 2<sup>nd</sup> time to select the DST section, ON/OFF section digits will start flashing, press the **+Reset-MAX** and **-Reset-MIN** button to select ON or OFF. (default: ON)

Note: DST time start at 1:00am GMT of the last Sunday in March and end at 1:00am GMT of the last Sunday in October.

#### 4.3.3 Time zone



- Press the **SET** key 3<sup>rd</sup> time to select the **Time zone** section, time zone section digits will start flashing, press the **+Reset-MAX** and **-Reset-MIN** button to select the value . (level: -12 to +12)

The default time zone setting value is 1 based on Germany DCF time (GMT+1)

#### 4.3.4 Time / Date



- Press the **SET** key 4<sup>th</sup> time to select the 12/24 hour format section (default: 24Hr).
- Press the **SET** key 5<sup>th</sup> time to select the hour section.
- Press the **SET** key 6<sup>th</sup> time to select the minutes section.
- Press the **SET** key 7<sup>th</sup> time to select YY-MM-DD, DD-MM-YY or MM-DD-YY format. (Default DD-MM-YY format)
- Press the **SET** key 8<sup>th</sup> time to select year.
- Press the **SET** key 9<sup>th</sup> time to select month.
- Press the **SET** key again time to select day.

Note: Press the **+ /Reset-MAX** and **- /Reset-MIN** button to set the value.

Note: If user to change minute value, second will auto clear to 0.

#### 4.3.5 Temperature



- Press the **SET** key 11<sup>th</sup> to select in/outdoor temperature unit (°C or F; default: °C).

Note: Press the **+ /Reset-MAX** and **- /Reset-MIN** button to select the unit or scrolls the value.

Press and holding the **+ /Reset-MAX** and **- /Reset-MIN** button for 2 second will increase/ decrease digits in great steps.

Note: Press **LIGHT/SNOOZE** button or key idle 30 second at any time, will return to normal mode.

### 4.4 Alarm mode

#### 4.4.1 View Alarm time

While in normal mode, press and release the **ALARM** key to view the alarm time.



#### 4.4.2 Time Alarm Setting

To enter the Alarm Mode, press and hold the **ALARM** key for two seconds (**ALARM + 2 seconds**). To advance each command, press (do not hold) the **SET** key.

Command	Function	Description	Settings
<b>ALARM + 2 seconds</b>	ALARM ON/OFF	Turn the Time Alarm On or Off.	Press <b>+ /Reset-MAX</b> to toggle between Time Alarm ON and Time Alarm Off
<b>SET</b>	Alarm Hour	Set the Alarm Hour Time	Press <b>+ /Reset-MAX</b> and <b>- /Reset-MIN</b> to increase or decrease the alarm hour.
<b>SET</b>	Alarm Minute	Set the Alarm Hour Minute	Press <b>TEMP/+</b> or <b>BARO/-</b> to increase or decrease the alarm minute.
<b>SET</b>		Exit Set Mode	

#### 4.4.3 Cancelling the Alarm

If the time alarm sounds, press the any key to silence the alarm. Press the **LIGHT/SNOOZE** key to enter snooze mode.

Note: Press **LIGHT/SNOOZE** button or key idle 30 second at any time, will return to normal mode.

#### 4.5 Temperature HI/LO reading

The HI/LO data is displayed the past 24 hour HI/LO reading.



#### Reset HI/LO temperature reading

Press the **+/Reset-MAX** button 5s, will reset HI indoor/outdoor temperature to current reading

Press the **+/Reset-MIN** button 5s, will reset LO indoor/outdoor temperature to current reading.

#### 4.6 Register New Transmitter

Press both the **+/Reset-MAX** and **-/Reset-MIN** button 5s, will unlock current transmitter and search new transmitter in the next 3 minutes.

If the signal is lost between the remote sensor (or transmitter) and the display console (or the receiver), to resynchronize, while in normal mode, Press and hold **+/Reset-MAX** and **-/Reset-MIN** button for 5 seconds, to register the outdoor transmitter. The sensor search icon will flash.

Please wait several minutes for the remote sensor reports in. Do not touch any buttons until synchronization is complete.

If the synchronization fails, reset the console by removing one battery from the display console, disconnect from AC power, wait 10 seconds, and reinsert the battery and reconnect AC power..

#### 4.7 Backlight Operation

1) With AC adaptor.

Press and hold the **LIGHT/SNOOZE** button 2s to keep the backlight continuously on.

User can press and hold the **LIGHT/SNOOZE** button 2s again to disable this function.

2) Without AC adaptor

Press the **LIGHT/SNOOZE** button the backlight will light on 3s

#### 4.8 Factory Reset/Clear Memory

When power on with DC Supply, press **SET** button reset all parameter to factory default.

## 5. Specification:

Outdoor data



		social network formed by observers from around the world.
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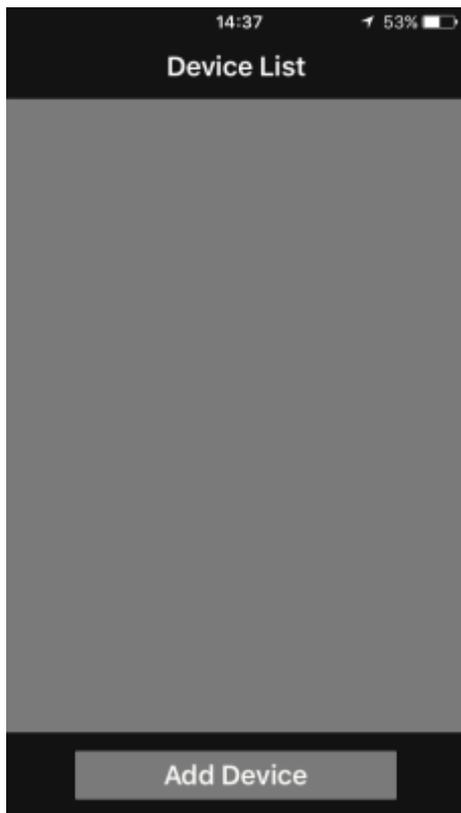
This weather station sends data to the Internet using your WiFi connection.

### 6.1 Connecting the Weather Station Console to WiFi

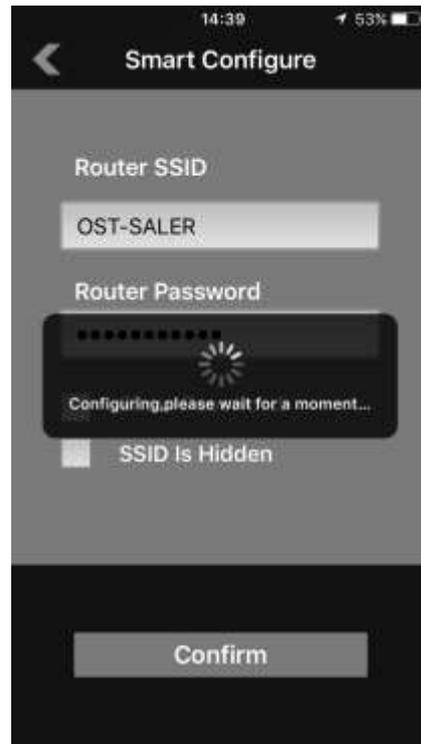
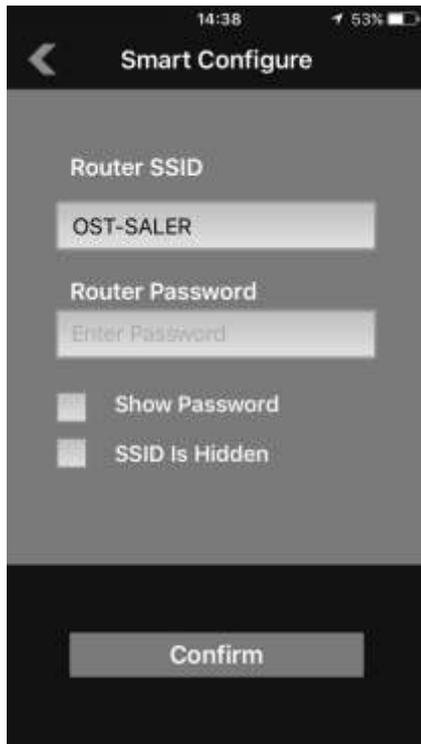
The WiFi feature only works when plugged into AC power due to higher energy requirements.

To connect the weather station to WiFi, you must first download the application from one of the following choices:

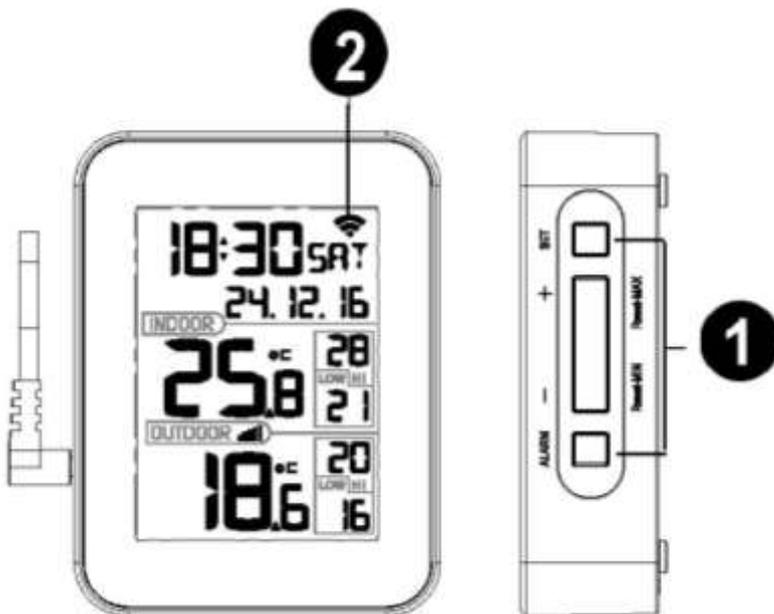
- Apple App Store
  - Google Play Store
1. From your mobile device, visit the Apple App Store or Google Play Store and search for the “**WS Tool**” application. Download this application to your mobile device.
  2. Run the WS Tool application, and select **Add Device**, as shown in **Fehler! Verweisquelle konnte nicht gefunden werden.**below figure



3. Make sure your mobile device is connected to your WiFi network. Enter the password for your router, and select Save, as shown in below figure.



4. If the WiFi icon is not flashing rapidly, (1) press and hold the **SET** and **ALARM** buttons at the same time for four seconds. (2) The WiFi icon will begin flashing rapidly, indicating the console is searching for your WiFi network.



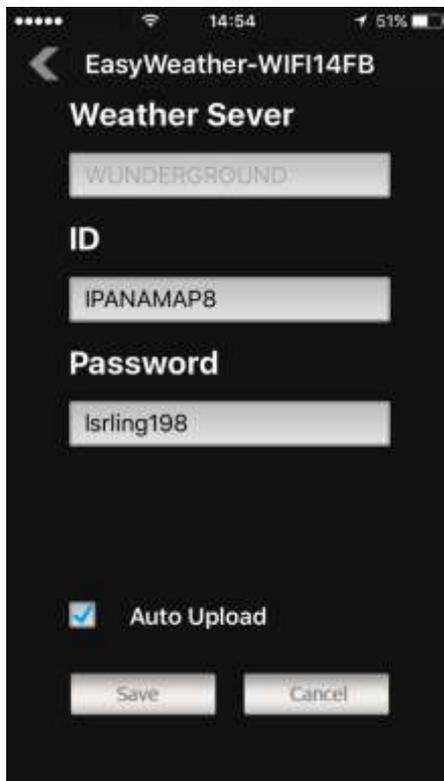
Wi-Fi icon  :

- 1) Not connected routers, don't show;
- 2) No network connection router, slow flash;
- 3) Connect the router with network, long bright;
- 4) Smart configure mode, fast flash.

5. Once the console has connected to your WiFi network, the devices Mac address and IP address will be displayed, as shown in below figure.



6. Enter your Wunderground.com and WeatherCloud.net Station ID, Password and StationNum (see Section 0).

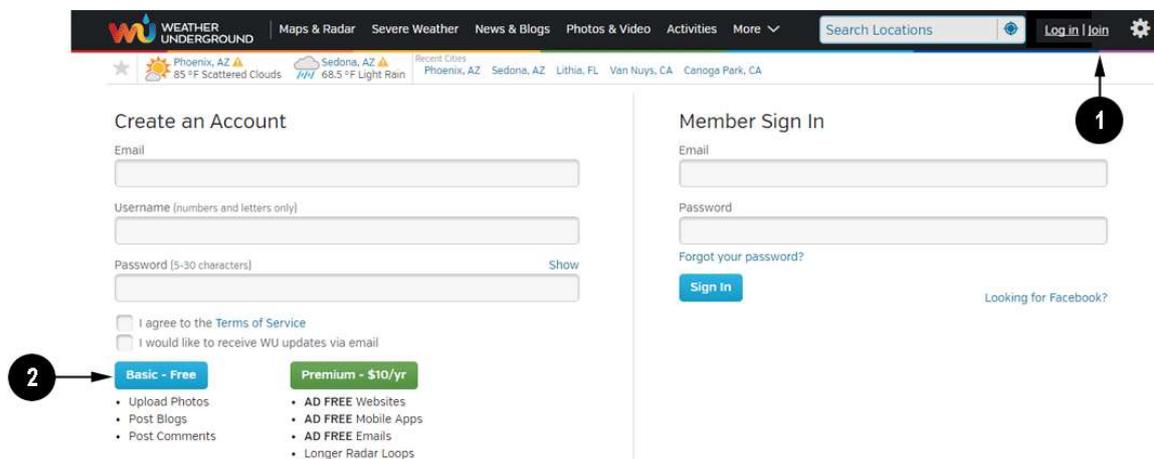


Now your weather station is connected for weather server. Download WU app to check your weather station records.

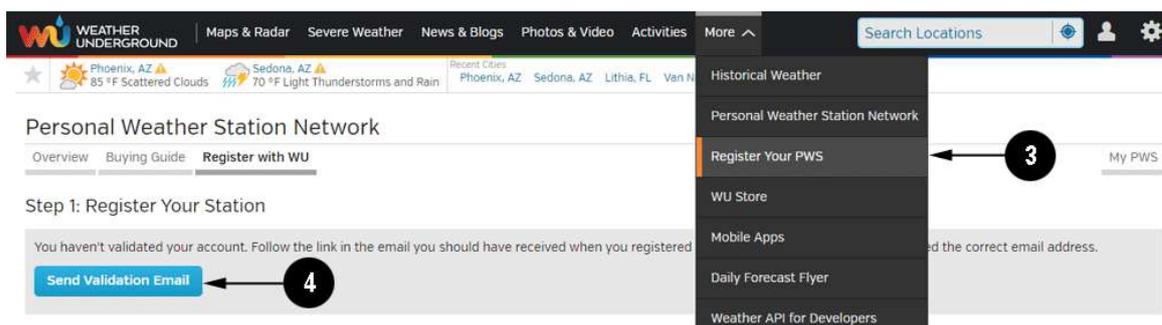
## 6.2. Registering with WeatherUnderground.com, WeatherBug.com and WeatherCloud.net

### 6.2.1 WeatherUnderground.com

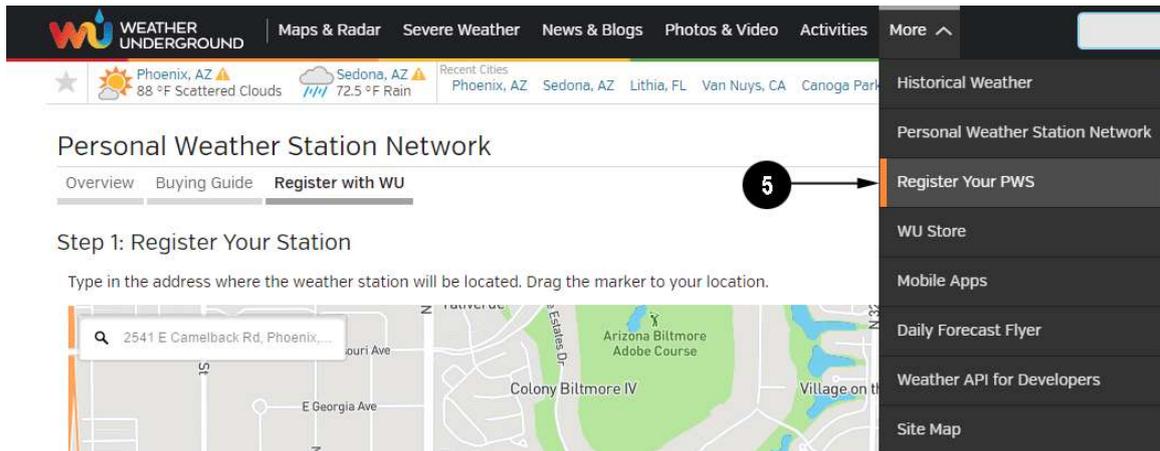
Visit Wunderground.com and select the **Join** link at the top of the page. Select the **Free** sign up option.



1. Select **More | Register Your PWS**.
2. Click **Send Validation Email**. Respond to the validation email from Wunderground (it may take a few minutes).



3. Select **More | Register Your PWS** again and enter all of the information requested.



4. After registering your station, make a note of the following:

- Station ID
- Station Key / Password

Enter the Station ID (ID), Station Key (Password) and Station Number (StationNum) into the WS Tool.

Below figure is an example, and your station ID and password will be different.

**Congratulations. Your station is now registered with Wunderground!**

You are almost done. Now go to your weather station software and add the following:

Your Station ID:  
**KAZPHOEN424**  
 Your Station Key/Password:  
**mdreeley**

**Note:** Your station ID will have the form: KSSCCCC###, where K is for USA station (I for international), SS is your state, CCCC is your city and ### is the station number in that city.

In the example above, KAZPHOEN424 is in the USA (K), State of Arizona (AZ), City of Phoenix (PHOEN) and #424.

### Viewing your Data on Wunderground.com

There are several ways to view your data on Wunderground:

#### Web Browser

Visit:

<http://www.wunderground.com/personal-weather-station/dashboard?ID=STATIONID>

where **STATIONID** is your personal station ID (example, KAZSEDON12).

(📶) La Barranca **KAZSEDON12** [\(About this PWS\)](#)  
Forecast for Sedona, AZ > 34.784 -111.742 > 4236 ft

PWS Data PWS Widgets WunderStation PWS Blog My PWS

**Status:**  
PWS viewed 1557 times since March 1, 2015

Radar Webcam Compare



[View webcams on WunderMap](#) [Add Webcam](#)

### Current Conditions

Station reported 16 seconds ago

**51.6 °F**

Feels Like **51.6 °F**

Wind from North  
Gusts **0.0 mph**

Dew Point:	25 °F	UV:	2
Humidity:	35%	Solar:	85 w/m <sup>2</sup>
Precip Rate:	0 in/hr	Soil Moisture:	--
Precip Accum:	in	Soil Temp:	--
Pressure:	30.03 in	Leaf Wetness:	--

☀️ 6:47 AM 🌇 6:28 PM

🌙 Waning Gibbous | 93% Illuminated

Weather History for Sedona, AZ [KAZSEDON12]

Previous Daily Mode March 8 2015 View Next

**Summary**  
Mar 8, 2015

	High	Low	Average		High	Low	Average
Temperature	52.2 °F	37 °F	44.6 °F	Wind Speed	0.9 mph	--	0 mph
Dew Point	25.9 °F	11.3 °F	17.8 °F	Wind Gust	2.5 mph	--	--
Humidity	40%	33%	37%	Wind Direction	--	--	ENE
Precipitation	0 in	--	--	Pressure	30.04 in	29.99 in	--

## WunderStation iPad App

Visit:

<http://www.WunderStation.com>

to download the WunderStation iPad app.



## Mobile Apps

Visit:

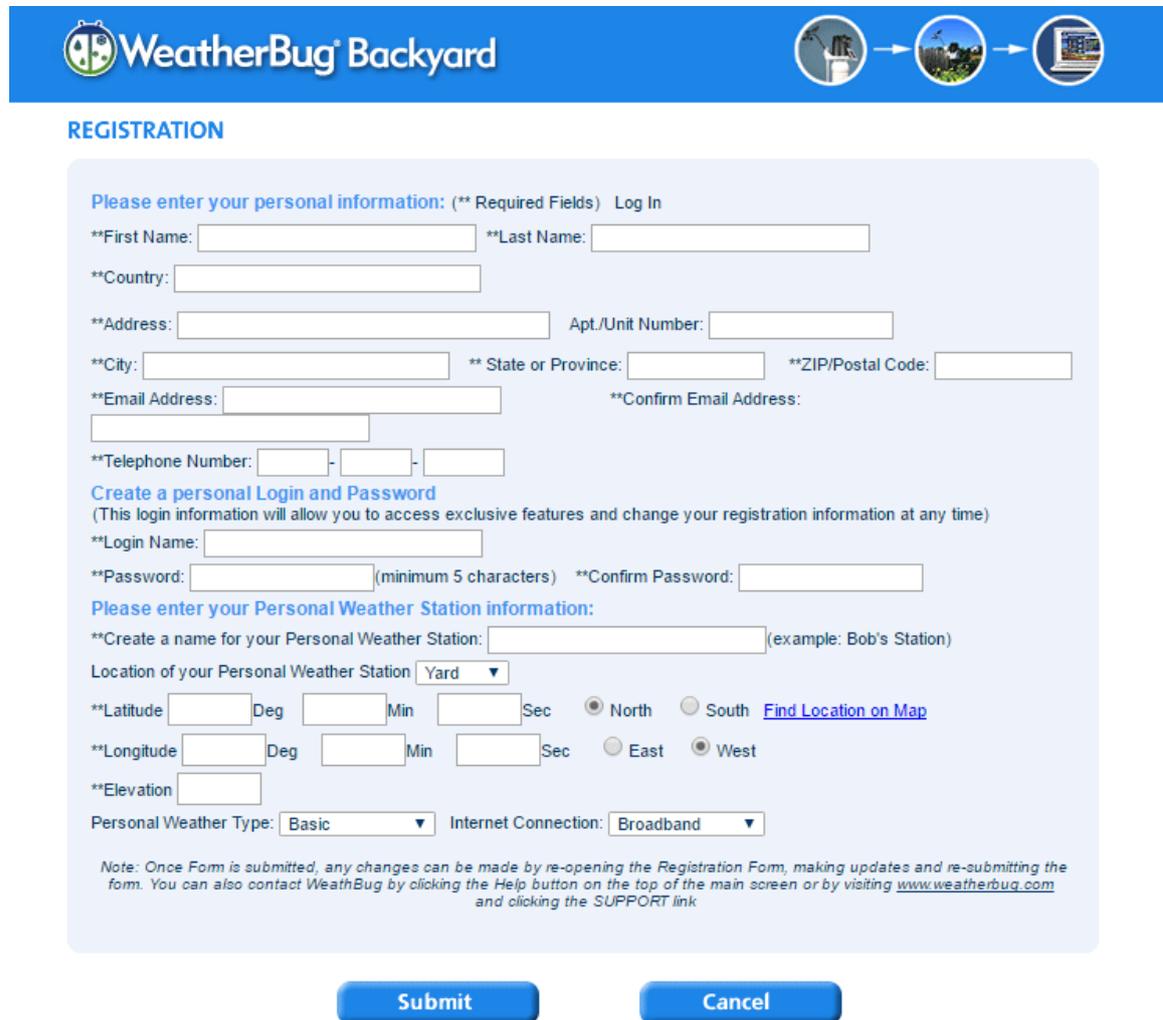
<http://www.wunderground.com/download/index.asp>

for a complete list of Mobile apps for iOS and Android. Alternately, you can find your data on your mobile device's web browser.



## 6.2.2 WeatherBug.com

Visit <http://pws.ensb.us/> and [Click here](#) to register your station.



The image shows a registration form for WeatherBug Backyard. At the top, there is a blue header with the WeatherBug logo and the text "WeatherBug Backyard". To the right of the header are three circular icons: a weather station, a person, and a computer screen. Below the header, the word "REGISTRATION" is written in blue. The form itself is light blue and contains several sections of input fields. The first section is titled "Please enter your personal information: (\*\* Required Fields) Log In". It includes fields for First Name, Last Name, Country, Address, Apt./Unit Number, City, State or Province, ZIP/Postal Code, Email Address, and Confirm Email Address. There is also a field for Telephone Number. The second section is titled "Create a personal Login and Password" and includes fields for Login Name, Password (with a note that it must be a minimum of 5 characters), and Confirm Password. The third section is titled "Please enter your Personal Weather Station information:" and includes a field for the station name (with an example "Bob's Station"), a dropdown menu for "Location of your Personal Weather Station" (set to "Yard"), fields for Latitude and Longitude (each with Deg, Min, and Sec sub-fields), radio buttons for North/South and East/West, a field for Elevation, a dropdown for "Personal Weather Type" (set to "Basic"), and a dropdown for "Internet Connection" (set to "Broadband"). At the bottom of the form, there is a note: "Note: Once Form is submitted, any changes can be made by re-opening the Registration Form, making updates and re-submitting the form. You can also contact WeatherBug by clicking the Help button on the top of the main screen or by visiting [www.weatherbug.com](http://www.weatherbug.com) and clicking the SUPPORT link". Below the form are two blue buttons: "Submit" and "Cancel".

After registering your station, make a note of the following:

- UserName
- Password
- Your Publisher ID
- Your Station Number

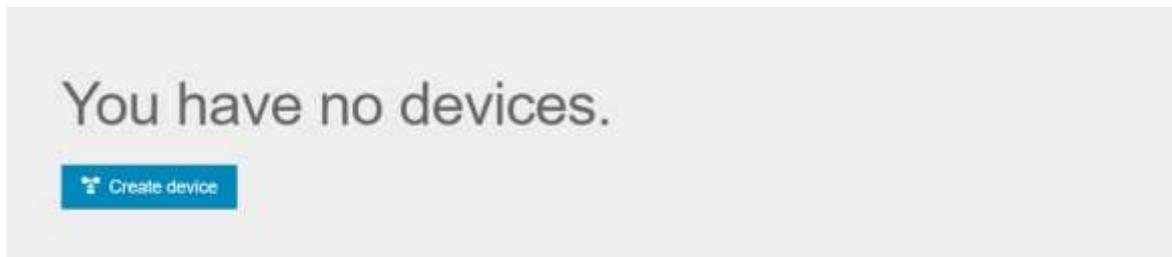
Enter the Publisher ID (ID), Password and Station Number (StationNum) into the Ambient Tool.

## 6.2.3 WeatherCloud

1. Visit WeatherCloud.net and enter a Username, Email and Password.



2. Respond to the validation email from WeatherCloud (it may take a few minutes).



3. Select **Create Device** and enter your weather station information. After registering your station, make a note of the following:

- Weathercloud ID
- Key

Enter the Weathercloud ID (ID), Key (password) into the Ambient Tool. Leave the Station Number (StationNum) blank.