

W820 Professional Bluetooth Weather Station



1. In the package:

- Indoor unit
- Outdoor all-in-one sensor
- Power adaptor
- Wall mount
- Extending rod
- Plastic connector
- Bag of screws for mounting.
- Mini screwdriver











2. The outdoor sensor:

The outdoor sensor is an all-in-one sensor. It measures: Rain fall UV Temperature Humidity Wind speed Wind direction

When installing the outdoor sensor you have several options to mount the sensor. 1. Use the wall hanger directly with outdoor sensor.



2. Use the wall hanger and the extension rod together with plastic connector.



Frequency: 433MHz

Transmission range: up to 100 meters in open area.

Obstacles, such as thick walls, radio frequency interference, power grids, magnets or other electrical devices close to either sender or receiver, may compromise the actual distance. Requires: 4 x AA Batteries, LR061.5V

3. Setup your weather station:

- Connect the power adaptor and on the backside of the main unit insert the power adaptor jack.

- Open the batteries cover on the outdoor sensor with the provided mini screwdriver and insert the batteries according to the polarities.





- You are now able to choose the channel of the outdoor sensor. It is present to channel 1.
- Slide the on/off switch to on.
- Close the battery door again and fasten the screws. You now have 1 minute to connect with the indoor unit.

4. Connect the outdoor sensor with the Indoor unit:

- Press and hold " **A**" until you see the LCD flashing.
- Once connection has been established the LCD should stop flashing and the values of the outdoor sensor will appear on the LCD. Device will automatically establish the "CH" choice made on the outdoor sensor.

Troubleshoot:

- If no values appear after the LCD has stopped flashing the outdoor sensor is not found by the main unit.
- Try to remove and insert the batteries again. Remember to slide the on/off switch to on.

5. Switching between indoor and outdoor values:

- Single touch on the " ****" will scroll between channels and the indoor values.
- Remember you can connect up to 3 outdoor sensors to one main unit.
- Set it to " ()" and the Main unit will scroll between each outdoor sensor connected from channel 1 to channel 3 in loop.

6. Setting the time and preferred units:

- There are 2 ways to set the time on the main unit.
- The easiest way is to connect the main unit with your mobile phone or tablet and sync the time and date.
 - o Simply open the application, which is free for download on the Google Play Store or the Apple Store.
 - o The main unit and the smart device will automatically connect through the built in Bluetooth 4.0 BLE.
 - o In the application you will find in sync time in the settings.
 - o Simple choose sync and the time and date from your smartphone will be synced with the main unit.
- Manually you can change the time by:
 - o Hold and press the "MODE" button until the LCD flashes 24Hr
 - o Now you can choose between 24/12Hr settings
 - Choose with " \blacktriangle \blacksquare " and confirm with MODE.
 - o Year/Month/Day
 - Choose with " \bigstar \checkmark " and confirm with MODE
 - o Hour/Minute
 - Choose with " \blacktriangle ∇ " and confirm with MODE
 - o Language for the Date display
 - Choose with " \blacktriangle \checkmark " and confirm with MODE
- Unit changes continued from Language.
 - o C/F setting
 - Choose with " \blacktriangle \triangledown " and confirm with MODE

o Air pressure hPA/mb

Choose with " \blacktriangle \blacksquare " and confirm with MODE

o Rain fall mm/in

Choose with " \blacktriangle \blacksquare " and confirm with MODE

• To change the Wind speed units- KM/H | MP/H | m/s | knots | beaufort o Press and hold the "WIND" button for 3 seconds each time to change the wind units.

7. Setting the Alarm:

- Touch MODE once Alarm time is displayed.
- Hold and press MODE until HR starts flashing o Choose with "▲▼" and confirm with MODE
- To switch the alarm on/off.
- Touch MODE once Alarm time is displayed.

o Press " \blacktriangle \blacksquare " to arm/disarm the alarm.

8. Rain:

- Touch Rain button to switch between the Daily, Weekly, Monthly or Total rain fallen.
- To clear current values, o Choose which values you wish to clear. (DAILY, WEEKLY, MONTHLY or TOTAL) o Then press and hold the RAIN button. This will delete the given values.
- Max of 999.99mm or 99.99in.
 - o The weather station has a max display of 999.99mm or 99.99in If reached clear the data as described above to continue measurements.

If MAX is reached the rain values will not continue to be recorded.

9. Wind:

- Touch Wind button to switch between the Average wind speed recorded or current (GUST) wind speed.
- See above how to change units Point 5.

It can display 16 different wind directions (N means North, S means South, SW means Southwest, etc.)

Beaufort	knots	km/h	mph	m/s	Description
1	1 - 3kn	1.9 - 6.4	1.18 - 4	0.5 - 1.8	light air
2	4 - 6kn	6.5 - 12.0	4.1 - 7.4	1.9 - 3.3	light breeze
3	7 - 10kn	12.1 - 19.4	7.5 - 12	3.4 - 5.4	gentle breeze
4	11 - 15kn	19.5 - 28.7	12.1 - 17.9	5.5 - 7.9	breeze
5	16 - 21kn	28.8 - 39.8	18 - 24.7	8.0 - 11.0	fresh breeze
6	22 - 27kn	39.9 - 50.9	24.8 - 31.6	11.1 - 14.1	strong breeze
7	28 - 33kn	51.0 - 62.0	31.7 - 38.5	14.2 - 17.2	near gale
8	34 - 40kn	62.1 - 75.0	38.6 - 46.6	17.3 - 20.8	gale
9	41 - 47kn	75.1 - 87.9	46.7 - 54.6	20.9 - 24.4	strong gale
10	48 - 55kn	88.0 - 102.8	54.7 - 63.9	24.5 - 28.5	storm
11	56 - 63kn	102.9 - 117.6	70 - 73.1	28.6 - 32.6	violent storm
12	>63kn	> 117.6	> 73.1	>32.6	hurricane

10. MAX/MIN:

• Touch MAX/MIN button to switch between the maximum, minimum or current values. This is for all the values displayed on the main unit.

11. Alert:

- Touch Alert button to set an alert for the MAX currentwind speed "GUST" or min outdoor temperature.
 - o Press Alert to choose either Wind or Temperaturex
 - o Once chosen Press and Hold Alert until values are flashing.
 - Choose with " $\blacktriangle \nabla$ " and confirm with ALERT

12. Dew Point and Heat index:

Dew Point and Heat index can be switched between by pressing " $\mathbf{\nabla}$ " in normal mode.

The dew point indicates the temperature at which air reaches saturation point and condenses.

What is the HEAT index?

"Heat index (HI) or humiture or humidex is an index that combines air temperature and relative humidity in an attempt to determine the human-perceived equivalent temperature— how hot it feels. The result is also known as the "felt air temperature" or "apparent temperature". For example, when the temperature is 32 °C (90 °F) with very high humidity, the

heat index can be about 41 °C (106 °F)

The human body normally cools itself by perspiration, or sweating. Heat is removed from the body by evaporation of that sweat. However, relative humidity reduces the evaporation rate because the higher vapor content of the surrounding air does not allow the maximum amount of evaporation from the body to occur. This results in a lower rate of heat removal from the body, hence the sensation of being overheated. This effect is subjective; its measurement has been based on subjective descriptions of how hot subjects feel for a given temperature and humidity. This results in a heat index that relates one combination of temperature and humidity to another."

Source: Wikipedia.com

13. UV:

The UV index is displayed on the LCD based on UV IDEX. Which goes from 0-11.

UV	Index Description	Media graphic color	
0 - 2.9	"Low" danger from the sun's UV rays for the average person	Green	
3 - 5.9	"Moderate" risk of harm from unprotected sun exposure	Yellow	
6 - 7.9	"High" risk of harm from unprotected sun exposure	Orange	
8 - 10.9	"Very high" risk of harm from unprotected sun exposure	Red	
11+	"Extreme" risk of harm from unprotected sun exposure	Violet	

14. Moon Phase:

The weather station uses preset data to show the moon phase



F: decreasing 3/4

A: New moon B: Increasing crescent D: Increasing 3/4 E: Full moon G: Last half H: decreasing crescent

15. Weather Forecast:



Note: The Weather Station provides weather forecasts for the next 12 – 24 hours based on the pressure changes in the atmosphere. The coverage RADIUS is between 30 and 50 miles. The weather forecast is given on the basis of pressure changes in the atmosphere and is 70-75% correct. Since weather conditions can never be predicted with 100% certainty, we cannot be held responsible for any loss as a result of an aberrant weather forecast.
Note: You can find information about your local air pressure at DMI's website.

16. ICE Warnings:

Frost indicated by the symbol " $\frac{1}{2}$ " will appear on the screen next to the WIND CHILL index, when the temperature at the outdoor sensor drops below 4 c.

17. Sea Level Pressure:

Atmospheric pressure at sea level is the result of the force of gravity on the matter above sea level (the atmospheric gases). The amount of matter is not constant due to the height and density of the atmosphere (mostly due to temperature and water content/humidity). In terms of an international (ISO) standard, it is defined to be 101325 Pa or 101.3 kPa (kilo-Pascals) at a temperature of 15 °C. In meteorology outside of the United States, hPa (hectoPascal) is most commonly used (=1013.25 hPa)

How To Use Your free application:

The weather station is equipped with a smart Bluetooth 4.0 chip. This allows you to collect the date from the weather station onto your smartphone. Simple follow these steps:

- 1. On your smart device download either on Google's $\ensuremath{\mathbb{R}}$ Play Store or Apple's $\ensuremath{\mathbb{R}}$ App Store the APP Ventus .
- 2. Open the application and make sure your Bluetooth is switched on and that the weather station turned on by either batteries or power cord.
- 3. Select Blue-Weather Station on the app and wait for the app to connect with your weather station.





Automatic time and date setting:

Once the application and the weather station has paired, the smart device will sync the time directly with weather station, saving you the time to set up anything on the weather station itself.

Selection of units:

- Go to settings and select Units.



- Here you are able to set any unit available on the weather station.



View of current and history data:

From the main screen after connection simply click on any of the "dials" on the screen. You will here be able to enter the data collected by the outdoor sensor and the weather station.

- Indoor/Outdoor temperature with 24 hour history



iPod 🕈	12	05	18 🗖
K Back			
	πus	TEMPERATU	IRE HISTORY
OUTDOOR TE	MPERATURE		Set Alarm 🛕
Ĵ	28	3.3	°C
			HEAT 28 "
MN 25 °	max 28 [∞]	AVG 26 °	POINT 14 1
INDOOR TEMP	PERATURE		Set Alarm 🔔
Ĵ	31	.7	°C
	• •		HEAT 30 "
MN 27 °	MAX 31 °	AVG 29 °	DEW POINT 12 "
Bluev	Veather	Blue	2 Waather



- Indoor/Outdoor







- Air Pressure

- Moon/Tide



- Wind speed and direction

- Rain data



- UV





Setting alerts sounds:

- Go to settings and then tap Alarm Sound"



You can set an alert for each of the functions:

- Go to each individual function (Rain, Temperatue, Air Pressue...etc) click on the "Set Alarm"

Sharing your data:



If you have bought 2 units, you are able to control them via 1 app. Simply rename them according to their placement.

Go to settings and change it under sensor name





WEEE declaration

If at any time in the future you should need to dispose of this product please note that: Waste electrical products should not be disposed of with household waste. Please recycle where facilities exist. Check with your Local Authority or retailer for recycling advice. (Waste Electrical and Electronic Equipment Directive)

RoHS REACH

