

## Personal Wx Station<sup>TM</sup>

Last updated September 25, 2018

The Personal Wx Station is a handheld appliance which tells you everything about your personal weather conditions: Wind speed, wind chill, temperature, relative humidity, head index, dewpoint, absolute pressure, pressure altitude, and Density Altitude (including humidity effect!).

Who is it for? Boaters, Campers, Pilots, PPG, Hikers, Fishermen, Hunters.



1. Personal Wx Station from Radiant Technology. Yes, it's small.

## FEATURES & SPECIFICATIONS

- ✓ Small size, 4.54" x 1.66" (115mm x 42mm)
- ✓ Handheld; notches make it easy to grip
- ✓ Standard coin battery power is included (CR2032)
- $\checkmark$  English + Metric units
- ✓ Operating Temperature: 10 to +50C
- ✓ Operating Humidity: 10 to 90% RH
- ✓ Current consumption: 2.5ma; 5.0ma with backlight on
- ✓ Crisp LCD display a Radiant tradition
- ✓ Weight: 2 ounces (about 60 grams)
- ✓ Carrying case included

- ✓ Air Velocity
- ✓ Temperature
- ✓ Humidity
- ✓ Wind Chill
- ✓ Heat Index
- ✓ Dew Point
- ✓ Barometric Pressure
- ✓ Altitude
- ✓ Beaufort scale
- ✓ Density Altitude, calculated using temperature and relative humidity for better accuracy

Measurement	Units	Range	Resolution	Accuracy
Wind speed	m/s	0 to 30	0.1	±5%
	ft/min	0 to 5860	19	
	knots	0 to 55	0.2	
	km/h	0 to 90	0.3	
	mph	0 to 65	0.2	
Wind chill	°C	0 to 30m/s, -45 to 10	0.1	1
	°F	0 to 65 mph, -49 to 50	0.1	1.8
Temperature	°C	-29 to 70	0.1	1
	°F	-20 to 158	0.1	1.8
Relative humidity	%RH	0 to 100	0.1	±3%
Heat index	°C	0 to 100%RH,21.1 to 54.4	0.1	2
	°F	0 to 100%RH,70 to 130	0.1	3.6
Dew point	°C	-29 to 70	0.1	2
	~ °F	-20 to 158	0.1	3.6
Barometric pressure	hpa	10 to 1100	0.1	1.5
	mbar	10 to 1100	0.1	1.5
	inHg	0.29 to 32.48	0.01	0.05
Altitude	m	-700 to 9000	1	12
	ft	-6000 to 30000	1	50

## **Specifications:**

2. specifications including resolution and accuracy

## **OPERATION**

1. **Turning on and off.** Press the POWER button for 2 seconds to turn the personal wx station on. The unit automatically powers down after 10 minutes after the last button press.

To override the auto-down, power the unit up in this manner: hold the MODE button then press the POWER button. You'll see the POWER icon in the upper right part of the screen

WARNING: the unit will remain powered up until battery is exhausted.

- 2. Max / Min / Avg display. In any measurement mode, quickly press the POWER button to cycle between Max, Min and Avg display. You can cycle back to the normal mode.
- 3. Units selection. Briefly pressing UNITS switches between units. The type of units varies by function.
- **4. Hold function.** A longer press of the UNITS button will cause the display to hold the current value. However, in Altitude mode, this hold function is replaced by a "relative" function.
- 5. Backlight. Press the MODE button for two seconds, and the backlight will turn on.
- 6. Beaufort scale. This scale is always displayed on the left hand side of the screen.
- **7.** Changing functions. Press the MODE button briefly to switch between various displays and functions. Here's the order of available functions:

Wind speed  $\rightarrow$  Wind Chill  $\rightarrow$  Temperature  $\rightarrow$  Relative Humidity  $\rightarrow$  Heat Index  $\rightarrow$  Dew Point  $\rightarrow$  Barometric Pressure (absolute)  $\rightarrow$  Pressure Altitude  $\rightarrow$  Density Altitude

- 8. Pressure altitude meaning: Pressure altitude is the equivalent altitude of a standardized column of air. It is equal to your real altitude (subject to instrument error, of course), ONLY when current atmospheric conditions are standard. If your air pressure is high, the equivalent pressure altitude is lower than actual altitude. If air pressure is low, the reverse is true.
- 9. Density altitude notes: The density altitude screen is denoted by the simultaneous presence of "ft" and  $C^{\circ}$  on the screen. (Look at the picture, below.) Density altitude is pressure altitude corrected for temperature and for humidity. Hot temperatures and high humidity always raise your density altitude!



2. Density Altitude. Note "ft" and "C°" symbols. The simultaneous presence of these two symbols indicates you are looking at Density Altitude.

DISCLAIMER: Products from RADIANT Technology are not designed to be used in applications where their failure would endanger safe flight or human life in any way. They are intended solely for use in VFR conditions. They are not certified to meet any Technical Standard Order and are not produced under a Parts Manufacturing Authority (TSO / PMA). As a result, they are suitable only for use in experimental and ultralight aircraft, and in Light Sport Aircraft, if meeting the requirements of the respective manufacture.

WARRANTY: Your new RADIANT Technology instrument carries a one year warranty. Please contact us at <u>info@beliteaircraft.com</u> should your product need warranty service. International warranty service will be charged US\$50.00 for repairs, which includes return shipping after repair. Payment must be received before service begins.

RETURN/REFUND INFORMATION: Must be returned in new, resalable condition within 14 days.

CONTACT: <u>info@beliteaircraft.com</u>, 316-253-6746 / RADIANT Technology/Belite Enterprises LLC, 8610 E. 34<sup>th</sup> Street N. Wichita KS 67226