

Model: CA87092 Instructional Manual

DC: 040920

Wind Speed Weather Station

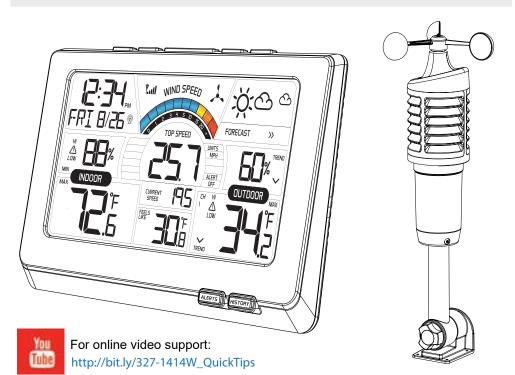


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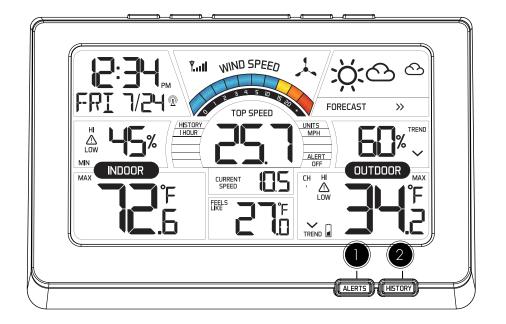
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Front View

ront Buttons

Alerts

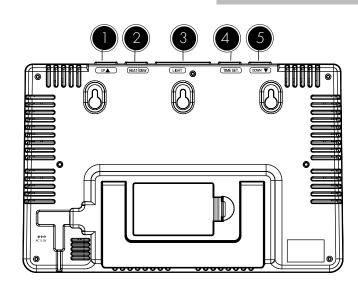
② History

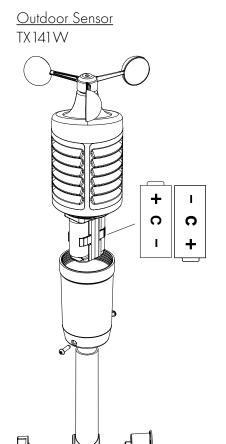


Back View

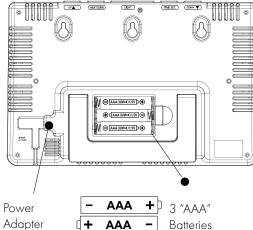
Top Buttons

- ① Up
- 2 Heat/Dew
- 3 Light
 (HI/LOW-OFF)
- 4 Time Set
- (5) Down





Back View



Power the Weather Station:

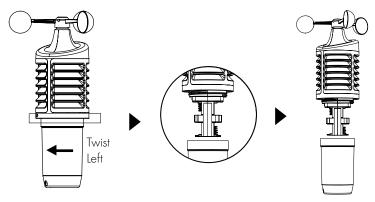
1. Insert AC adapter into the outlet and into the weather station

AAA

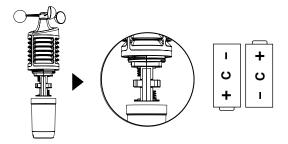
- 2. Insert three AAA batteries into the weather station (optional).
- 3. After 15 minutes, mount the sensor outside (position Wind Sensor).

Initial Setup and Assembly - TX141W Sensor

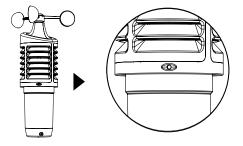
1. Twist battery cover left to remove from sensor.



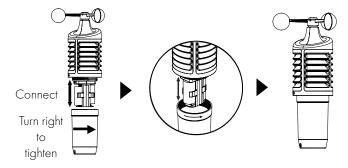
2. Install two "C" batteries according to polarity.



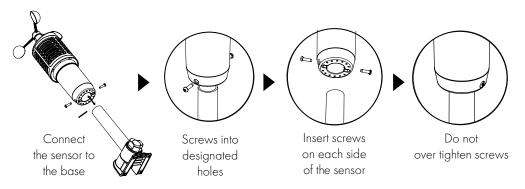
3. The red LED light will flash when transmitting



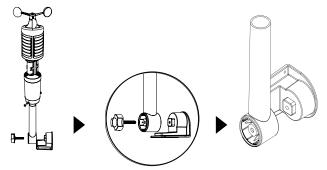
4. Replace the battery cover



5. Insert pole into bottom of sensor and secure with two screws.

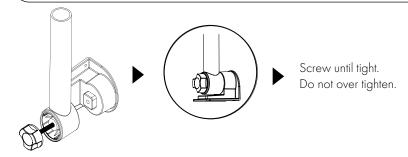


6. Align the square opening on the pole over the square of the mounting bracket.



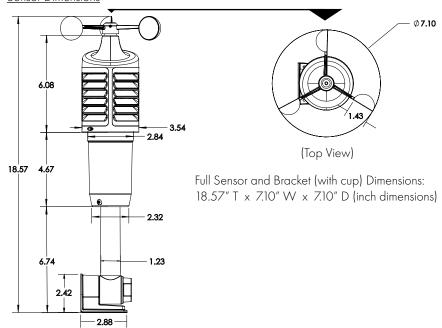
7. Turn the knob to tighten the bracket to the pole

Note: You can attach to a different pole (1.2 inches, 3.1 cm diameter) into the sensor, instead of using the mounting bracket.



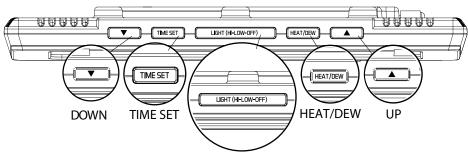
Sensor Dimensions

Model: CA87092



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Button Functions



LIGHT HI-LOW-OFF

Top Buttons



(Down)

- Press to view channels
- Hold to search for sensors
- Will disarm alert



TIME SET

- Press to search for WWVB Atomic time signal
- Hold to enter setting mode



LIGHT (HI-LOW-OFF):

- Press to adjust backlight
- Press to exit setting mode

Front Buttons



ALERTS

- Hold ALERTS button to enter alerts settings
- ▲ or ▼to adjust value
- Press ALERTS to confirm

ALERT ACTIVATION

- Press ALERTS button to toggle between alerts
- Press

 to arm alerts
- Press ▼to disarm alerts
- Press ALERTS to confirm

HEAT/DEW

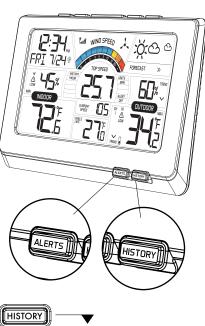
HEAT/DEW

• Press to view Heat Index/Dew Point



(UP)

- Press to view MAX/MIN values
- Hold to reset MAX/MIN values
- Will arm alert





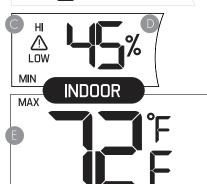
HISTORY

• Press to view top wind speed history

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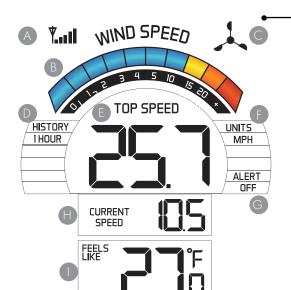
LCD layout





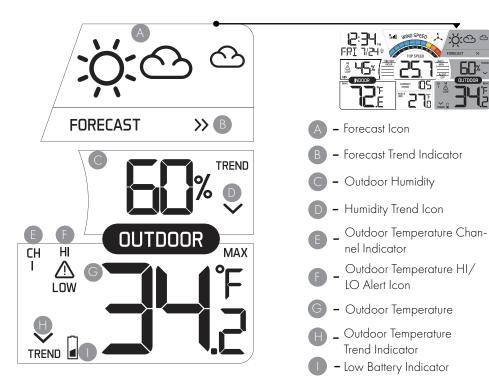


- Atomic Time/Date
- Atomic Signal Icon
- Indoor Humidity Alert Icon HI and LOW
- Indoor Humidity
- Indoor Temperature





- Sensor Reception Icon
- Color Wind Speed Graph (based on current speed)
- Wind Cup Icon (spins with wind speed)
- Wind Speed History
- Top Speed Reading (past 60 minutes)
- Wind Speed Unit (MPH or KMH)
- Wind Speed Alert
- Current Speed (30 second average)
- Feels Like, Heat Index and Dew Point



Backlight Adjustments

Use AC power for constant backlight:

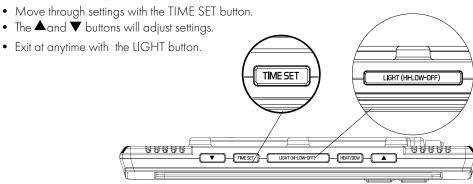
• Press the LIGHT button on the top of the weather station to adjust the backlight (HI-LOW-OFF) when using AC power.

When using battery power only:

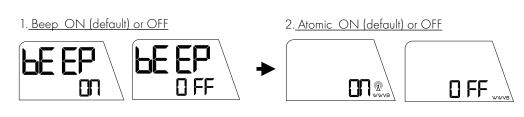
• Press the LIGHT button for a 10 second backlight (It will not stay on).

Settings:

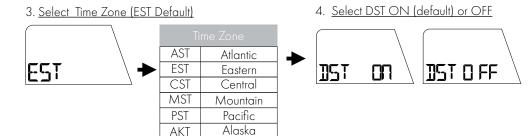
• Hold the TIME SET button to enter settings menu.



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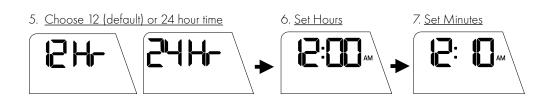


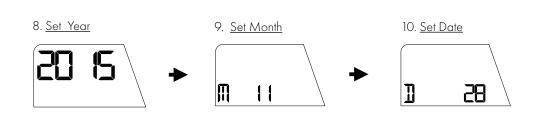
Note: When Atomic OFF is selected, steps 3 & 4 will not show and you will automatically move to step 5.

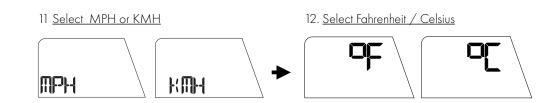


Hawaiian

HAT







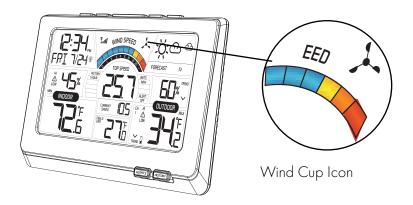
Color Wind Speed Graph

The wind speed graph with color sections is based on current wind speed. One segment will flash indicating current wind speed.

Color	
Blue	0 - 14
Yellow	15 - 19
Orange	20 - 24
Red	over 25



The wind cup icon will spin at varying speeds according to the current speed.



Top Wind Speed Number



- Highest instantaneous wind speed recorded in the past 60 minutes.
- Updates when a higher wind speed has occurred.
- Last number will remain if there is no wind for 60 minutes

Wind History

Press and release the HISTORY button to view the past top wind speeds with time and date of occurrence. The 1 hour top speed is the default reading shown on the display.

- 24-hour: Past 24 hour period, from last record.
- Week: Past 7-day period, from last record.
- Month: Defined by Calendar Month i.e. January 1 - January 31.
- Year: Defined by Calendar Year i.e. January 1 - December 31.



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Current Wind Speed



The current wind speed which represents a 30 second average of wind speed samples taken. This should correspond to the wind graph above.

Wind, Temperature & Humidity Alerts

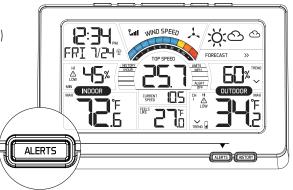
Setting alert value and arming individual alerts are separate functions.

Set alert value:

- 1. Hold the ALERTS button for 3 seconds to enter alert set mode.
- 2. The high wind speed alert value will blink in set mode.
- 3. Press the \triangle or ∇ buttons to adjust the values.
- 4. Press the ALERTS button to confirm and move to the next alert.

The alert setting order:

- High Wind Speed (channel 1 only)
- Outdoor Humidity HI
- Outdoor Humidity LOW
- Outdoor Temperature HI
- Outdoor Temperature LOW
- Indoor Humidity HI
- Indoor Humidity LOW
- Indoor Temperature HI
- Indoor Temperature LOW



Note: When using multiple temperature/humidity sensors, press the ▼ button to select the channel (1, 2, or 3) before setting alerts for a sensor.

Wind Speed High Alert



Outdoor HI Humidity



Outdoor LOW Humidity



Outdoor HI Temperature











Indoor LOW Humidity



Indoor HI Temperature



Indoor LOW Temperature





Arm/Disarm Alerts:

- 1 Press and release the ALERTS button to select an alert HI and IO will flash.
- 2. Press the **\(\Delta\)** button to arm the alert.
- 3. Press the Volution to disarm the alert.
- 4. The HI or LO alert icon appears when armed.

Active Alert: Beeps once per minute with flashing alert icon.

Feels Like Temperature, Heat Index, Dew Point Temperature

Press the HEAT/DEW button repeatedly to togale between Feels Like, Heat Index and Dew Point Temperatures.







Feels Like

Heat Index

Dew Point

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Feels Like Temperature: is the perceived outdoor temperature. If Outdoor Temperature is below 50F/10C, will measure the effect of wind. The result is a wind chill effect and this will be reflected as the "Feels Like" temperature outside.

Example: Outdoor temperature is 35.2F/1.7C and wind is 5.0 mph/8.0 kMh; Feels Like temperature will be 30.8F/0.6C.

Heat Index: If outdoor temperature is above 70F/21.1C, the heat index will be used to register the "Feels Like" temperature. The Heat index takes into consideration the effect of humidity.

Example: Outdoor temperature is 82.4F/28C and humidity 60%RH; Heat Index will be 85.0F/29.4C.

Note: If outdoor temperature is between 51F/10.6C and 69F/20.6C, the unit will use the outdoor temperature as for Feels Like and Heat Index.

Example: Outdoor temperature is 60.4F/15.7C Both Feels Like and Heat Index will be the same 60.4F/15.7C

<u>Dew Point:</u> A measure of atmospheric moisture. The temperature where water vapor condenses into liquid water as frost or dew. Dew Point is calculated at any temperature and will be the same or lower than outdoor temperature.

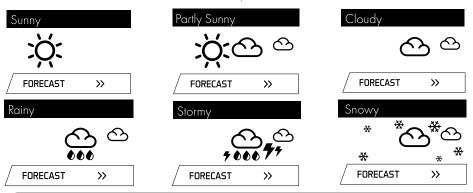
Example: Outdoor temperature is 58.2F/14.9C and humidity 60%RH; Dew Point will be 45.0F/7.2C

Forecast Information

Intelligent Weather Forecast:

This station learns: Please allow 7-10 days for barometric calibration. This will ensure an accurate personal forecast for your location.

Six animated forecast icons use changing atmospheric pressure to predict weather conditions for the next 12 hours with 70-75% accuracy.



Note: Snowy icon will appear in place of rainy and stormy icons when the outdoor temperature is below 32°F.

Forecast Tendency Indicators (Up, Right and Down Arrows)

Rising	Steady	Falling
Pressure	Pressure	Pressure
Weather is expected to improve	Weather is expected to stay the same	Weather is expected to worsen

Atomic Time Signal



- The wind station will automatically search at UTC 7:00, 8:00, 9:00, 10:00, 11:00. If no WWVB reception, the station will search for the WWVB time signal every 2 hours until the WWVB time is received. After reception, this station will only search for the atomic signal after midnight.
- To perform a manual search for the atomic time signal, first make sure the Atomic feature is set to ON within the settings menu.
- Then press and release the TIME SET button to manually start or stop a WWVB atomic time signal search.
- The Atomic Time Icon will flash while searching and remain solid on screen when connected.
- The atomic signal is engineered for use in the USA. The signal strength in Canada is not very strong. We recommend that you set the time and date of this unit manually if the atomic signal does not register after 24 hours.
- For information about WWVB, visit: http://bit.ly/AtomicTime

24 hour MAX/MIN Temperature/Humidity records

The station automatically resets MAX and MIN values daily at midnight (12:00 AM).

- Press the ▲ button once to view MAX indoor/outdoor temperatures.
- Then, hold the \blacktriangle button to manually reset MAX temperatures to current values.
- Press the \triangle button again to view the MIN indoor/outdoor temperatures.
- Then, hold the▲ button to manually reset MIN temperatures to current values.

Setup Add On Temperature/Humidity Sensors (sold separately)

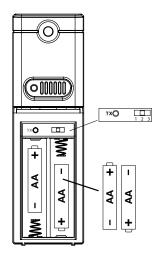
The wind station will accommodate up to two additional thermo-hygro sensors (TX141TH-BCHv3) on channels 2 and 3.

Note: The TX 141 W sensor must be on channel 1.

Press the V button to view sensors on other channels.

Setup additional sensors to the wind station:

- Remove the battery cover from all the sensors (leave battery covers off until all sensors are received by the wind station).
- 2. Set the first additional sensor to Channel 2 and insert 2 AA batteries.
- 3. Set the second additional sensor to Channel 3 and insert 2 AA batteries.
- 4. Hold the ▼ button on the wind station for 5 seconds to search for sensors.
- 5. Press the TX button on each sensor.
- When connection is established, the temperature & humidity for each of the selected channels will appear.
- 7. Install the battery covers on each sensor.
- 8. Keep sensors and the wind station 5-10 feet apart for 15 minutes to establish a solid connection.
- 9. After 15 minutes, place the remote sensors in appropriate shaded locations.
- 10. Press and release the ▼ button to view channels 1, 2 or 3 on the wind station when multiple sensors are used.



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Note: If only one sensor is connected, the other channels will show dashes for temperature and humidity.

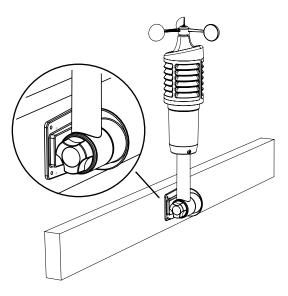
<u>Channel Indicator</u>

CH 123

 Press the ▼ button to toggle between remote sensor channels when multiple sensors are used.

Position Wind Sensor

- For the most accurate wind speed readings, mount the TX 141 W sensor as the highest object for 50 feet in all directions.
- Cups should be on the top of the sensor. Mount vertically.
- The maximum wireless transmission range to the wind station is over 330 feet (100 meters) in open air, not including walls or trees.
- 1. Insert mounting pole into sensor.
- 2. Tighten screws
- 3. Insert bottom of pole into mounting bracket
- 4. Tighten knob to secure
- 5. Use screws through the bottom of the mounting bracket to attach.
- 6. The sensor can be mounted from the bottom or side. (the picture is of the sensor mounted from the side)



Alternatively:

- 1. Insert your own mounting pole into the sensor.
- 2. Tighten screws
- 3. Mounting bracket would not be used.

Note: Do not attempt to insert a pole into the hollow back of the mounting bracket.

Position Optional Add On Sensors

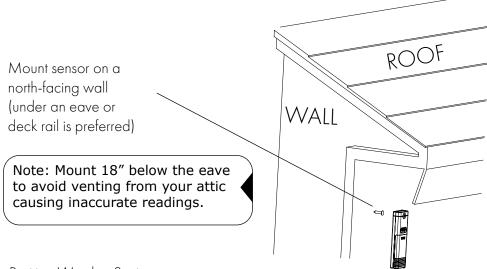
- Mount the outdoor sensor on a north-facing wall or in any well shaded area.
 Under an eave or deck rail is preferred.
- The maximum wireless transmission range to the weather station is over 330 feet (100 meters) in open air, not including walls or floors.
- Be sure the outdoor sensor is mounted vertically

Option 1:

- Install one mounting screw into a wall leaving some extended.
- Place the transmitter onto the screw.
- Gently pull the transmitter down to lock the screw into place.

Option 2:

- Insert the mounting screw through the front of the transmitter and into the wall.
- Tighten the screw to snug (do not over tighten).



Position Weather Station

- Pull out the stand and place on a flat surface.
- Use the three hanging holes on the back to mount on the wall.
- 1. Choose a location 6 feet or more away from electronics such as cordless phones, gaming systems, televisions, microwaves, routers, etc.
- 2. Place within range of the outdoor sensors (330 ft, 100 meters open air).
- 3. Obstacles such as walls, windows, stucco, concrete, and large metal objects can reduce the range.
- 4. For best WWVB reception, orientate the weather station with the front or back of the station facing Ft. Collins, Colorado (facing south if you live in Canada).

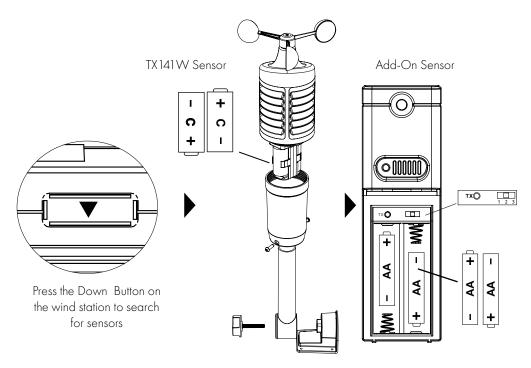
Restart

- Remove batteries from the sensor and batteries and AC adapter from the weather station.
- 2. Press any button 20 times.
- 3. After 15 minutes insert batteries into the sensor, then insert batteries (optional in the weather station) and plug AC adapter into the weather station.
- 4. Wait 15 minutes to establish a strong connection. Place sensor outside.

Change Batteries

TX 141 W Sensor mounted:

- 1. Grab the vented portion of the sensor and turn counter clockwise.
- 2. Remove old batteries and install fresh "C" batteries.
- 3. Carefully align and turn clockwise to tighten.
- 4. Hold the ▼ button on the weather station for 5 seconds to search for the sensor.



Add on Sensor(s):

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- 1. Slide battery cover down and lift off sensor.
- 2. Remove old batteries and install fresh "AA" batteries.
- 3. Hold the $\ensuremath{\blacktriangledown}$ button on the weather station for 5 seconds to search for the sensor.

Care and Maintenance

- Do not mix old and new batteries
- Do not mix Alkaline, Standard, Lithium or Rechargeable Batteries
- Always purchase the correct size and grade of battery most suitable for the intended use.
- Replace all batteries of a set at the same time.
- Clean the battery contacts and also those of the device prior to battery installation.
- Ensure the batteries are installed correctly with regard to polarity (+ and -).
- Remove batteries from equipment which is not to be used for an extended period of time.
- Remove expired batteries promptly.
- Do not expose to extreme temperature, vibration or shock.
- Clean with a soft damp cloth. Do not use solvents or scouring agents.
- The product is not a toy. Keep it out of reach of children.
- The product is not to be used for medical purpose or for public information. It is intended for home use only.
- The specs of this product may change without prior notice.
- Improper use or unauthorized opening of housing voids warranty.
- If the product is not working properly, change the batteries and/or check the AC adapter connection.

Warranty and Support Information

Springfield provides a 1-year limited warranty (from date of purchase) on this product relating to manufacturing defects in materials & workmanship.

Before returning a product, please contact our friendly customer support with questions or visit our online help (FAQS):

Phone: 1-844-687-4040

Online Product Support: www.lacrossetechnology.com/CA87092

Product Registration: www.lacrossetechnology.com/support/register

View full warranty details online at:

www.lacrossetechnology.com/warranty_info.pdf

Warranty Address:

Springfield Instruments Inc.

104 Barr Street

Ville St.-Laurent, Quebec H4T 1Y4

Email: info@springfieldinstruments.com



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Specifications	
Indoor	 Temperature Range: 32°F to 122°F (0°C to 50°C) Humidity Range: 10% - 99% (RH) Interval: about every 30 seconds
Outdoor	 Temperature Range: -40°F to 140°F (-40°C to 60°C) Humidity Range 10% - 99% (RH) Wind Speed Range: 0 - 99 mph (0-159 kMh) Distance: Over 330ft. (100 meters) RF 433MHz (open air)
Power	 Wind Station Primary AC Power: 5-volt AC power adapter* AC6 Adapter NO.: GPU280500150WA00 5VAC 150mA Optional/Battery Backup: 3-AAA, IEC, LR3 batteries (not included) Wind/TH Sensor: 2-C, IEC, LR14 batteries (not included)
Battery Life	 Wind Station Battery Backup: Battery life is over 12 months when using the AC adapter for primary power Wind/TH Sensor: Battery life is over 24 months when using reputable battery brands
Dimensions	 Wind Station: 5.48" H x 8.34" L x 1.03" W (139.19 x 211.84 x 26.12 mm) TX 141 W Sensor: 18.57" H x 7.10" W x 7.10" D (471.68 x 180.34 x 180.34 mm)

^{*}The plug on the power adapter is intended to serve as the disconnect device, the socket-outlet shall be installed near the equipment and shall be easily accessible.

Canada Statement

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

- (1) This device may not cause interference.
- (2) This device must accept any interference, including interference that may cause undesired operation of the device.