

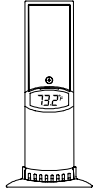


Tomorrow's Weather Today™

TX28U -Wireless 915 MHz Thermo-Hygro Sensor

The TX-28U Thermo-Hygro Sensor measures the outdoor temperature and humidity and transfers the data to the weather station.

Outdoor Thermo-hygro Sensor



- Remote transmission of outdoor temperature and humidity to weather station by 915 MHz
- Displays alternately the measured temperature and humidity readings on LCD
- Water-resistant proof casing
- Wall mounting case
- Mounting at a sheltered place. Avoid direct rain and sunshine

INVENTORY OF CONTENTS

1. One TX28U Thermo-Hygro Sensor
2. Mounting hardware
3. Instruction manual and warranty card.

ADDITIONAL EQUIPMENT (not included)

- Two fresh AA, IEC LR6, 1.5V Alkaline batteries.

Important Notes on Set-up and Operation

- The Thermo-Hygro Sensor should be placed in a dry, shaded area. Avoid direct sun, as this will cause incorrect readings.
- Fog and mist will not harm your Thermo-Hygro Sensor, but direct rain must be avoided.
- The Thermo-Hygro Sensor has a range of 330 feet (100 m). Keep in mind that the 330 feet is in open air with no obstructions and that radio waves DO NOT curve around objects. Actual transmission range will vary depending on what is in the path of the signal. Each obstruction (roof, walls, floors, ceilings, thick trees, etc.) will effectively cut signal range in half.

Example: A wireless weather station with a 330 feet (100 m) range is mounted on an interior wall, so that the signal has to pass through one interior wall, one exterior wall, and across the 10 feet (3 m) width of the room between the 2 walls. The first wall will reduce the range to 165 feet (50 m), and the second wall will reduce the range to 87 feet (26.5 m). Factoring in the 10 foot room, this leaves a maximum of 77 feet (23.5 m) of remaining signal range.

This allowance is typically enough for a frame wall with non-metallic siding; however certain materials can reduce range even further. Metal siding, stucco, and some types of glass can reduce signal range by as much as ¼ or more, compared to the ½ reduction typical of most obstructions. It is possible to receive a signal through these materials, however maximum range will be much less due to their tendency to absorb or reflect a much larger portion of the sensor's signal.

- The Thermo-Hygro Sensor transmits a signal about every 4 seconds. After the batteries have been installed, the weather station will search for the signal for the duration of few minutes. If there is no temperature reading in the OUTDOOR LCD after 5 minutes, user shall make sure the units are within range of each other, or repeat the battery installation procedure.
- If a button is pressed before weather station receives the signal from the Thermo-Hygro Sensor, you will need to follow the battery installation procedure again.

SETTING UP:

When one sensor is to be used

1. First, insert the batteries to the Sensor (see "Install and replace batteries in the Thermo-Hygro Sensor" below).
2. Within 2 minutes of powering up the Sensor, insert the batteries to the weather station. Once the batteries are in place, all segments of the LCD will light up briefly. Following the indoor temperature and the time as 12:00 will be displayed. If they are not shown in LCD after 60 seconds, remove the batteries and wait for at least 60 seconds before reinserting them. Once the indoor data is displayed user may proceed to the next step.
3. After the batteries are inserted, the weather station will start receiving data signal from the Sensor. The outdoor temperature and humidity should then be displayed on the weather station. If this does not happen after 2 minutes, the batteries will need to be removed from both units and reset from step 1.

4. In order to ensure sufficient 915 MHz transmission however, this should under good conditions be a distance no more than 330 feet (100 meters) between the final position of the weather station and the Sensor (see notes on "Positioning" and "915 MHz Reception").

When more than one sensor is to be used

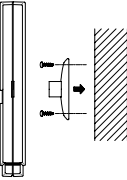
1. User shall remove all the batteries from the weather station and Sensors and wait 60 seconds if setting has been done with one Sensor before.
2. Insert the batteries to the first sensor.
3. Within 2 minutes of powering up the first Sensor, insert the batteries to the weather station. Once the batteries are in place, all segments of the LCD will light up briefly. Following the indoor temperature and the time as 12:00 will be displayed. If they are not shown in LCD after 60 seconds, remove the batteries and wait for at least 60 seconds before reinserting them.
4. The outdoor temperature and humidity from the first Sensor (channel 1) should then be displayed on the weather station. Also, the signal reception icon will be displayed. If this does not happen after 2 minutes, the batteries will need to be removed from both units and reset from step 1.
5. Insert the batteries to the second sensor as soon as the outdoor temperature and humidity readings from the first Sensor are displayed on the weather station.

Note: User shall insert the batteries into the second Sensor within 45 seconds of reception of the first Sensor.

6. The outdoor temperature and humidity from the second Sensor and the "channel 2" icon should then be displayed on the weather station. If this does not happen after 2 minute, the batteries will need to be removed from all the units and reset from step 1.
7. Insert the batteries to the third Sensor as soon as the "channel 2" icon and outdoor data are displayed on the weather station. Then within 2 minutes, the channel 3 outdoor data from the third Sensor will be displayed and the channel icon will shift back to "1" once the third Sensor is successfully received. If this is not happen, user shall restart the setting up from step 1.

Note: User shall insert the batteries into the third Sensor within 45 seconds of reception of the second Sensor.

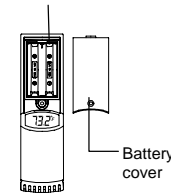
8. In order to ensure sufficient 915 MHz transmission however, this should under good conditions be a distance no more than 100 meters between the final position of the weather station and the Sensor (see notes on "Positioning" and "915 MHz Reception").



INSTALL AND REPLACE BATTERIES IN THE OUTDOOR THERMO-HYGR0 SENSOR

The outdoor Thermo-Hygro Sensor uses 2 x AA IEC LR6, 1.5V Alkaline batteries. To install and replace the batteries, please follow the steps below:

- | | |
|---------------------|--|
| Battery compartment | <ol style="list-style-type: none"> 1. Remove the battery cover with a small screwdriver. 2. Insert the batteries, observing the correct polarity (see battery compartment marking). 3. Replace the battery cover on the unit. |
|---------------------|--|



Note:

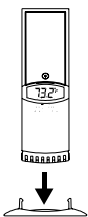
- In the event of changing batteries in any of the units, all units need to be reset by following the setting up procedures. This is because a random security code is assigned by the Sensor at start-up and this code must be received and stored by the weather station when setting up.
- Detailed Set up procedures refer to the Instruction Manual of the WS-9020U.

915MHZ SIGNAL RECEPTION

If the outdoor data is not received within three minutes after setting up, the display will show for example, "- - °F" on the outdoor temperature section of the receiver, please check the following points:

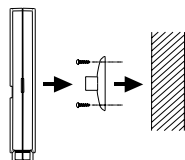
1. Distance sensors at least 2 meters away from any interfering sources such as computer monitors or TV sets.
2. Avoid placing the Thermo-Hygro Sensor onto or in the immediate proximity of metal window frames.
3. Using other electrical products such as headphones or speakers operating on the 915MHz frequency may prevent reception of the transmitted data. Interference can also be caused by neighbors using similar electrical devices.

POSITIONING THE THERMO-HYGR0 SENSOR



The Sensor is supplied with a holder that may be attached to a wall with the two screws supplied. The Sensor can also be position on a flat surface by securing the stand to the bottom to the Sensor.

To wall mount:



1. Secure the bracket onto a desired wall using the screws and plastic anchors.
2. Clip the remote Thermo-Hygro Sensor onto the bracket.

Note:

Before permanently fixing the Sensor wall base, place all units in the desired locations to check that the outdoor temperature and humidity readings are receivable. In event that the signal is not received, relocate the Sensors or move them slightly as this may help the signal reception.

CARE AND MAINTENANCE

- Extreme temperatures, vibration and shock should be avoided as these may cause damage to the units and give inaccurate forecasts and readings.
- When cleaning the display and casings, use a soft damp cloth only. Do not use solvents or scouring agents as they may mark the LCD and casings.
- Do not submerge the units in water. Furthermore, fix all parts in place where the unit is adequately protected against moisture and rain.
- Immediately remove all low powered batteries to avoid leakage and damage. Replace only with new batteries of the recommended type.
- Do make any repair attempts to the units. Return it to their original point of purchase for repair by a qualified engineer. Opening and tampering with the units may invalidate their guarantee.
- Do not expose the units to extreme and sudden temperature changes, this may lead to rapid changes in forecasts and readings and thereby reduce their accuracy.

SPECIFICATIONS

Detailed Specification refers to Instruction manual of WS-9020U.

Temperature measuring range:

Outdoor : -39.8°F to +139.8°F with 0.2°F resolution/ -39.9°C to +59.9°C with 0.1°C resolution
("OF.L" displayed if outside this range)

Relative humidity measuring range:

Outdoor : 1% to 99% with 1% resolution
("1%" displayed when value ≤ 1%; "99%" is displayed if value ≥ 99%)

Outdoor data reception : about every 4.5 seconds

Transmission range : up to 330 feet (100 meters) in open space

Power supply : 2 x AA, IEC LR6, 1.5V

Battery life cycle : approximately 12 months (Alkaline batteries recommended)

Dimensions (L x W x H) : 1.69" x 0.91" x 6.29" (43 x 23 x 160 mm)

WARRANTY INFORMATION

La Crosse Technology, Ltd provides a 1-year limited warranty on this product against manufacturing defects in materials and workmanship.

This limited warranty begins on the original date of purchase, is valid only on products purchased and used in North America and only to the original purchaser of this product. To receive warranty service, the purchaser must contact La Crosse Technology, Ltd for problem determination and service procedures. Warranty service can only be performed by a La Crosse Technology, Ltd authorized service center. The original dated bill of sale must be presented upon request as proof of purchase to La Crosse Technology, Ltd or La Crosse Technology, Ltd's authorized service center.

La Crosse Technology, Ltd will repair or replace this product, at our option and at no charge as stipulated herein, with new or reconditioned parts or products if found to be defective during the limited warranty period specified above. All replaced parts and

products become the property of La Crosse Technology, Ltd and must be returned to La Crosse Technology, Ltd. Replacement parts and products assume the remaining original warranty, or ninety (90) days, whichever is longer. La Crosse Technology, Ltd will pay all expenses for labor and materials for all repairs covered by this warranty. If necessary repairs are not covered by this warranty, or if a product is examined which is not in need or repair, you will be charged for the repairs or examination. The owner must pay any shipping charges incurred in getting your La Crosse Technology, Ltd product to a La Crosse Technology, Ltd authorized service center. La Crosse Technology, Ltd will pay ground return shipping charges to the owner of the product to a USA address only.

Your La Crosse Technology, Ltd warranty covers all defects in material and workmanship with the following specified exceptions: (1) damage caused by accident, unreasonable use or neglect (including the lack of reasonable and necessary maintenance); (2) damage occurring during shipment (claims must be presented to the carrier); (3) damage to, or deterioration of, any accessory or decorative surface; (4) damage resulting from failure to follow instructions contained in your owner's manual; (5) damage resulting from the performance of repairs or alterations by someone other than an authorized La Crosse Technology, Ltd authorized service center; (6) units used for other than home use (7) applications and uses that this product was not intended or (8) the products inability to receive a signal due to any source of interference.. This warranty covers only actual defects within the product itself, and does not cover the cost of installation or removal from a fixed installation, normal set-up or adjustments, claims based on misrepresentation by the seller or performance variations resulting from installation-related circumstances.

LA CROSSE TECHNOLOGY, LTD WILL NOT ASSUME LIABILITY FOR INCIDENTAL, CONSEQUENTIAL, PUNITIVE, OR OTHER SIMILAR DAMAGES ASSOCIATED WITH THE OPERATION OR MALFUNCTION OF THIS PRODUCT. THIS PRODUCT IS NOT TO BE USED FOR MEDICAL PURPOSES OR FOR PUBLIC INFORMATION. THIS PRODUCT IS NOT A TOY. KEEP OUT OF CHILDREN'S REACH.

This warranty gives you specific legal rights. You may also have other rights specific to your State. Some States do not allow the exclusion of consequential or incidental damages therefore the above exclusion of limitation may not apply to you.

For warranty work, technical support, or information contact:

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