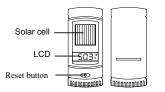


# TX61U-IT Wireless 915 MHz Solar Temperature Transmitter

The TX61U-IT Solar Temperature Transmitter measures the outdoor temperature and transfers the data to the Temperature Station.



# **INVENTORY OF CONTENTS**

- 1. One TX61U-IT Solar Temperature Transmitter.
- Mounting hardware.
  Instruction manual.

# IMPORTANT NOTES ON SETUP AND OPERATION

- Important Notes on set-up and operation the Solar Temperature Transmitter should be placed in a dry area.
- The Solar Temperature Transmitter consumes solar power and internal rechargeable batteries.
- Fog and mist will not harm your but direct rain must be avoided.
- The Solar Temperature Transmitter 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/ Temperature 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  $\frac{3}{4}$  or more, compared to the  $\frac{1}{2}$  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 Solar Temperature Transmitter measures and transmits signal about every 8 seconds when its battery voltage is higher than 2.4V.
- After the batteries of Temperature Station have been installed, the Temperature Station will search for the signal of Solar Temperature Transmitter for duration of few minutes. If the connection process is failed, user shall make sure the units are within range of each other, or restart the transmitter starts up procedure again.

#### **IDLE MODE**

This mode aims to reduce power consumption of the transmitter. Under this mode, the transmitter turns off LCD, stops the transmission of signal, checks the better under the transmission of signal, checks the

- battery voltage and detects the solar cell condition. The IDLE mode happens:
  if the battery voltage is lower than 2.4V, "LO" will be displayed on the LCD for a short while (around 2 seconds) before the transmitter enters into IDLE mode.
- <u>Note:</u> The transmitter will check and charge up the internal rechargeable battery automatically, when it detects the battery voltage rises up to 2.5V, the LCD turns on and the transmission of signal starts again.

# STOP MODE

It is the most energy saving mode. Under this mode, the transmitter turns off LCD, no transmission of signal and no checking battery voltage. The transmitter shows "StP" on the LCD for a short while (around 2 seconds) before it enters this mode. The STOP mode happens:

- if the user covers the solar cell for 10 seconds and presses the reset button.
- if the transmitter is placed in the dark environment for 24 hours.
- <u>Note:</u> To wake up the Solar Temperature Transmitter, user has to press the reset button on the transmitter to wake it up again. If the battery voltage is higher than 2.4V, the LCD turns on and the transmission of signal starts again. However, if the battery voltage is lower than 2.4V, "LO" will be displayed and the transmitter enters into IDLE mode. User should place

the transmitter under a bright environment in order to charge up the rechargeable batteries inside the transmitter.

### **SETTING UP**

- To start the operation, first, press the reset button on the Solar Temperature Transmitter. Normally, all segments of the LCD will light up briefly. The code number and the security code (for example, "20") will be displayed sequentially. Next, the battery voltage will be shown on the LCD, it should be higher than 2.4V in order to maintain the normal operation. The instant temperature can be read on the transmitter, and the transmitter starts the transmission of signal.
- 2. Within 2 minutes of the start up of transmitter, insert the batteries to the Temperature Station. Once the batteries of the Temperature Station are in place, all segments of the Temperature Station's LCD will light up briefly. The indoor data will be first displayed on the Temperature Station, and then the outdoor data. Following the indoor temperature and the time as 12:00 will be displayed on the Temperature Station. If they are not shown in the LCD of Temperature Station after 30 seconds, user should reinstall the batteries of the Temperature Station again. Once the indoor data is displayed user may proceed to the next step for receiving outdoor data.
- 3. After the Temperature station is powered up, it will start receiving outdoor data signal from the Solar Temperature Transmitter. During the process, the signal reception and re-synchronization process will try the following frequencies: 903MHz, 915MHz and 927MHz. If this does not happen after 5 minutes, the batteries of the Temperature Station should be removed and reset the Solar Temperature Transmitter from step 1.
- 4. In order to ensure better reception and transmission, this should under good conditions be a distance no more than 330 feet (100 meters) between the final position of the Temperature Station and the Solar Temperature Transmitter.

### MOUNTING

# THE TEMPERATURE TRANSMITTER

The Solar Temperature Transmitter can be mounted onto a wall with the use of screws

### MOUNTING WITH SCREWS

- 1. Remove the mounting bracket from the Solar Temperature Transmitter.
- Place the mounting bracket over the desired location.
  Through the two screw holes of the bracket, mark the mounting surface with a pencil.
- mounting surface with a pencil.Screw mounting bracket onto the mounting surface.
- Ensure that the screws are tight against the bracket. 5. Insert the Solar Temperature Transmitter into the
- bracket.

### Table standing or others

With the mounting bracket installed at the bottom or the top of the transmitter, user can place it on any flat surface.

<u>Note:</u> Before permanently fixing the remote temperature sensor wall base, place all units in the desired locations to check that the outdoor temperature readings are receivable. In event that the signal is not received, relocate the remote temperature sensor or move them slightly as this may help the signal reception.

# **MAINTENANCE AND CARE**

Extreme temperatures, vibration, and shock should be avoided to prevent damage to the units.

- Clean displays and units with a soft, damp cloth. Do not use solvents or scouring agents; they may mark the displays and casings.
- · Do not submerge in water.
- Immediately remove all low powered batteries to avoid leakage and damage.
- Opening the casings invalidates the warranty. Do not try to repair the unit. Contact La Crosse Technology for repairs.

### SPECIFICATIONS

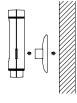
<u>Note:</u> Detailed set-up procedures of the Temperature Station and the Solar Temperature Transmitter refer to the main operation manual of Temperature Station.

Data measuring range:	
Outdoor temperature:	-39.8 °F to 139.8°F with 0.2°F resolution
	"OFL" displayed if outside this range
Transmission range:	330 feet (100 m) in open space
Operating voltage:	2.4V or higher than 2.4V
Dimensions (H x W x D):	100 x 25.3 x 43 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's authorized service center.



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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 no 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:

La Crosse Technology, Ltd 190 Main Street La Crescent, MN 55947 Phone: 507.895.7095 Fax: 507.895.2820

e-mail: <u>support@lacrossetechnology.com</u> (warranty work)

sales@lacrossetechnology.com (information on other products) web: www.lacrossetechnology.com

### FCC DISCLAIMER

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions:

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

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- -- Reorient or relocate the receiving antenna.
- -- Increase the separation between the equipment and receiver.
- -- Connect the equipment into an outlet on a circuit different
- from that to which the receiver is connected.

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