

# LUFFT WS-SERIES SENSOR BUOY MOUNT

## INSTALLATION INSTRUCTIONS FOR CB-450 AND SMALLER BUOY MODELS



**Figure 1:** NexSens CB-WS-M Weather Sensor Buoy Mount.

### Overview

The NexSens CB-WS-M Lufft WS-Series Weather Sensor Buoy Mount provides a means of securely installing a Lufft WS-Series weather station to a CB-Series data buoy. The mounts are designed to easily accommodate the pre-installed U-bolts on Lufft weather stations.

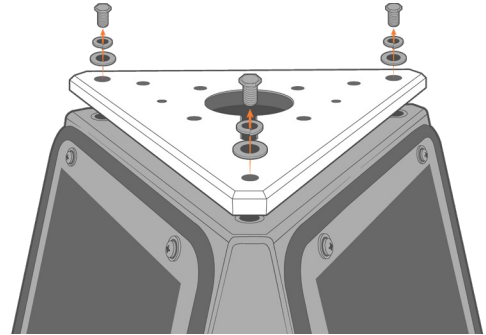
### What's Included

#### CB-WS-M Parts

- (1) Weather station mount
- (1) 1/2" Oversized flat washer
- (1) 1/2" Split lock washer
- (1) 1/2-13 x 2" Hex cap bolt
- (1) Installation guide

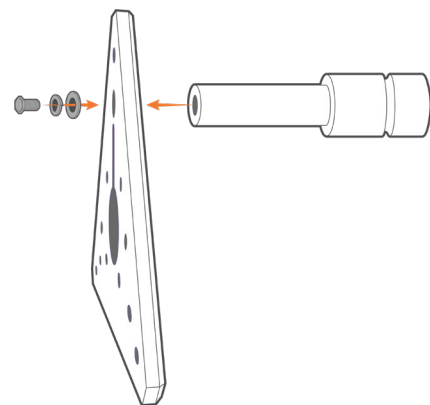
### CB-WS-M Installation on Buoy Solar Tower

- 1 Use a 9/16" socket to remove the white top plate from the buoy's solar tower.



**Figure 2:** Solar tower top plate removal.

- 2 Use a 3/4" socket to remove the 2" bolt, lock washer, and oversized washer from the base of the mount.
  - a. Insert the 2" bolt, lockwasher, and oversized washer through a vacant mounting hole on the top plate.
  - b. Thread the mount onto the bolt on the opposite side of the plate and tighten using the 3/4" socket.



**Figure 3:** Mast attachment to solar tower plate.

- 3 Re-install the tower plate on top of the buoy.  
a. Tighten the bolts evenly.

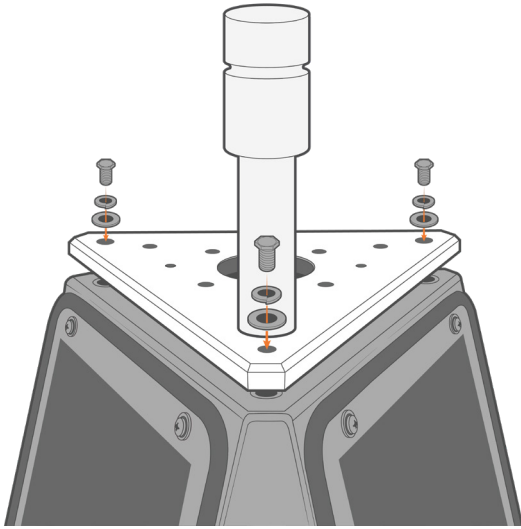


Figure 4: Reinstall the top plate.

- 4 Seat the Lufft sensor on top of the mount.  
a. Align its U-bolt with the recessed groove on the mount.  
b. Tighten the U-bolt evenly using a 13mm or 1/2" socket.

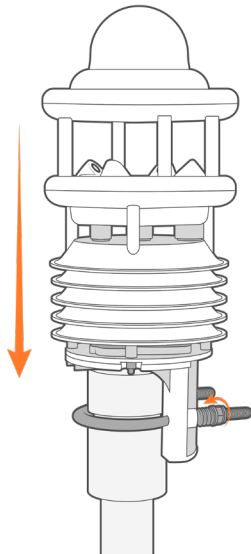


Figure 5: Secure the weather station to the mount.

- 5 Route the plug through the center hole on the plate and move the cable within the open groove extending from the center hole.  
a. It is recommended to zip tie the cable to the mount and provide cable armor around the portion of the cable in contact with the open groove.

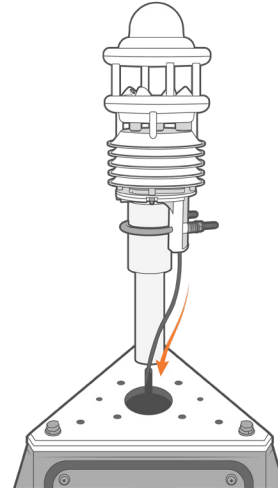


Figure 6: Route the Lufft cable to the X2-CB logger.

# LUFFT WS-SERIES SENSOR BUOY MOUNT

## INSTALLATION INSTRUCTIONS FOR CB-650 AND LARGER BUOY MODELS



**Figure 1:** NexSens CB-WS-M Weather Sensor Buoy Mount.

### Overview

The NexSens CB-WS-M Lufft WS-Series Weather Sensor Buoy Mount provides a means of securely installing a Lufft WS-Series weather station to a CB-Series data buoy. The mounts are designed to easily accommodate the pre-installed U-bolts on Lufft weather stations.

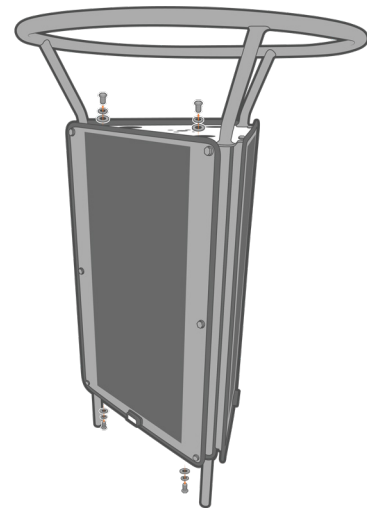
### What's Included

#### CB-WS-M Parts

- (1) Weather station mount
- (1) 1/2" Oversized flat washer
- (1) 1/2" Split lock washer
- (1) 1/2-13 x 2" Hex cap bolt
- (1) Installation guide

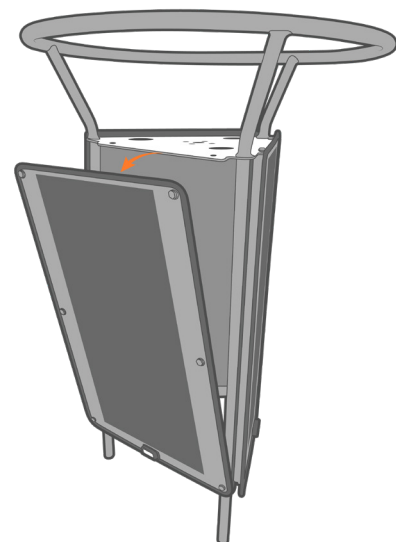
### CB-WS-M Installation on Buoy Solar Tower

- 1 Use a 7/16" hex driver or socket to remove the top and bottom bolts from one solar panel frame.
  - a. Ensure to hold the panel in place to avoid tipping it entirely.



**Figure 2:** Remove the bolts holding one solar panel frame.

- 2 Lean the panel back slightly at the top.
  - a. Do not tip the panel completely horizontal.



**Figure 3:** Lean back the solar panel.

- 3 Use a 3/4" socket to remove the 2" bolt, lock washer, and oversized washer from the base of the sensor mount.
- Insert the 2" bolt, lockwasher, and oversized washer through a vacant mounting hole underneath the top of the solar tower.
  - Thread the mount onto the bolt on the opposite side of the plate and tighten using the 3/4" socket.

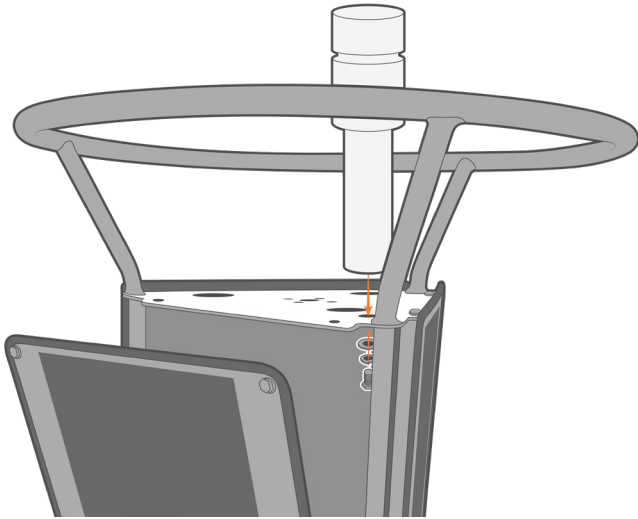


Figure 4: Mast attachment to solar tower.

- 4 Once the mount is attached, reconnect the bolts holding the solar panel frame.

- 5 Seat the Lufft sensor on top of the mount.
- Align its U-bolt with the recessed groove on the mount.
  - Tighten the U-bolt evenly using a 13mm or 1/2" socket.

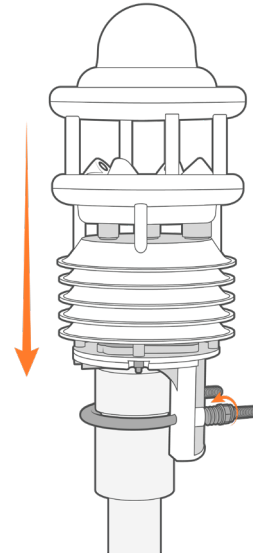


Figure 5: Secure the weather station to the mount.

- 6 Route the plug through the nearest hole on the solar tower.
- It is recommended to zip tie the cable to the mount and provide cable armor around the portion of the cable in contact with the open hole.

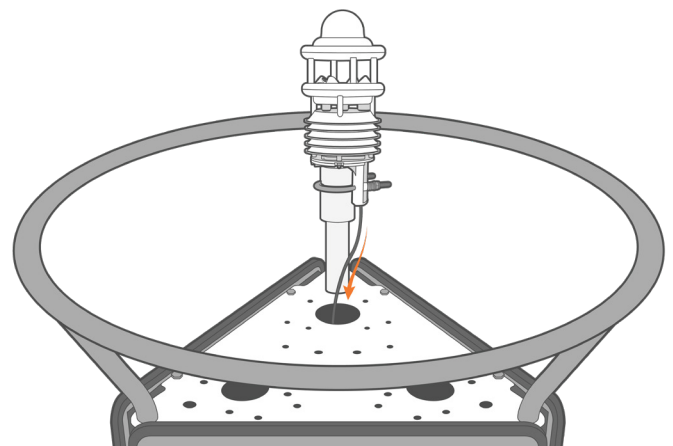


Figure 6: Route the Lufft cable to the X2-CB logger.