

# SP32 SOLAR PANEL KIT

## INSTALLATION INSTRUCTIONS

### What's Included

#### Battery enclosure mounting hardware

- (2) Mounting braces
- (2) 5/16-18 x 2" U-bolts
- (8) 5/16" flat washers (4 installed on U-bolts)
- (4) 5/16" split-lock washers (installed on U-bolts)
- (4) 5/16-18" Hex nuts
- (4) 1/4-20 x 7/16" Phillips head screws

#### Solar panel mounting hardware

- (2) 3/8-16 x 1-5/8" Hex cap bolts
- (2) 3/8" flat washer
- (2) 3/8" split-lock washers
- (2) 3/8-16" Hex nuts
- (2) 5/16-18 x 2" U-bolts
- (4) 5/16" Flat washers (installed on U-bolts)
- (4) 5/16" Split-lock washers (installed on U-bolts)
- (4) 5/16-18" Hex nuts (installed on U-bolts)

### Battery Box Mounting

- 1 Set the battery enclosure on its face and align one of the included mounting braces with the top threaded inserts.
  - a. Secure the brace using the included Phillips-head screws, a lock washer, and a flat washer.
  - b. Thoroughly tighten the screws using a Phillips screwdriver.

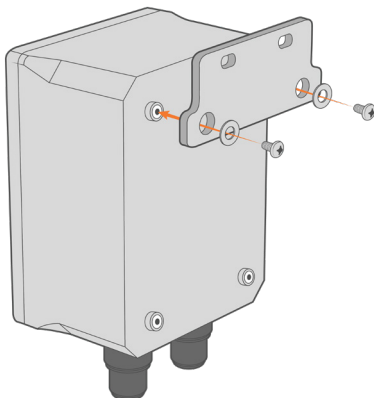


Figure 1: Install brace for battery enclosure.

- 2 Attach the other mounting brace to the 2" NPT deployment pipe or MAST accessory using one of the included U-bolts.
  - a. Place the included flat washer, lock washer, and nut on each U-bolt threads.
  - b. Evenly tighten the brace using a 1/2" socket.

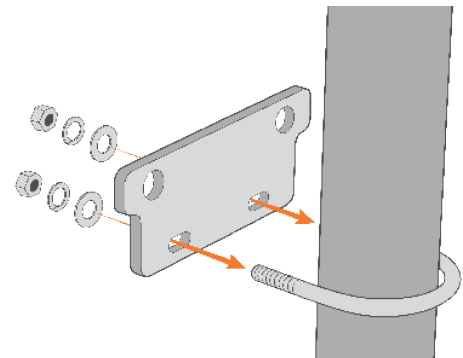


Figure 2: Install second brace on pipe mount.

- 3 Align the bottom threaded inserts of the battery box with the brace mounted on the pipe.
  - a. Secure the lower brace using the remaining phillips-head screws, lock washer, and flat washer.
  - b. Run the remaining U-bolt around the pipe and through the top brace.
    - Secure it with the remaining flat washer, lock washer, and nuts. Evenly tighten the brace using a 1/2" socket.

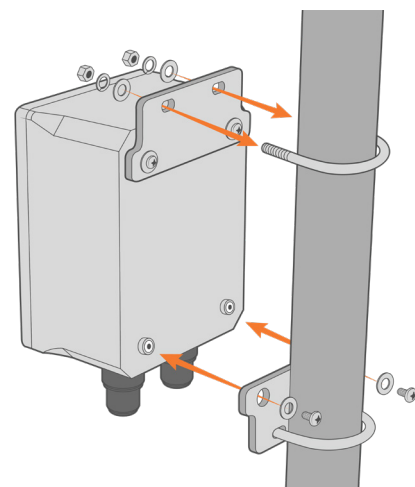


Figure 3: Battery enclosure installed on pipe mount.

## Solar Panel Mounting

- ① Loosen or remove/re-install the panel pipe mount U-bolts to fit around the pipe.
  - a. Evenly tighten both U-bolts on each side using a 1/2" socket.

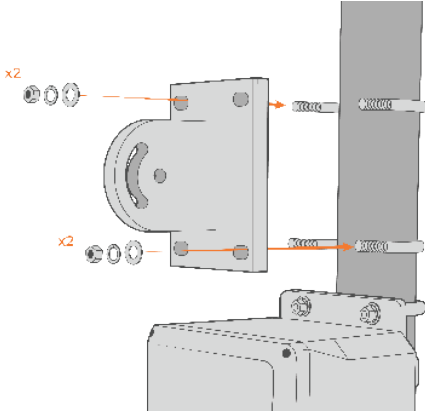


Figure 4: Solar panel mount installed on pipe mount.

- ② Align the center holes of the panel pipe mount and the rear mount of the solar panel.
  - a. Insert (1) 3/8-16 x 1-5/8" hex head cap screw with a flat washer through the center holes.
  - b. Attach a flat washer, lock washer and nut to the other side and tighten with a 9/16" socket.
  - c. Insert the second 1-5/8" hex head cap screw with a flat washer through one of the remaining holes on the mount.
    - The angle of the solar panel can be adjusted by tightening the bolt in the proper position using a 9/16" socket.

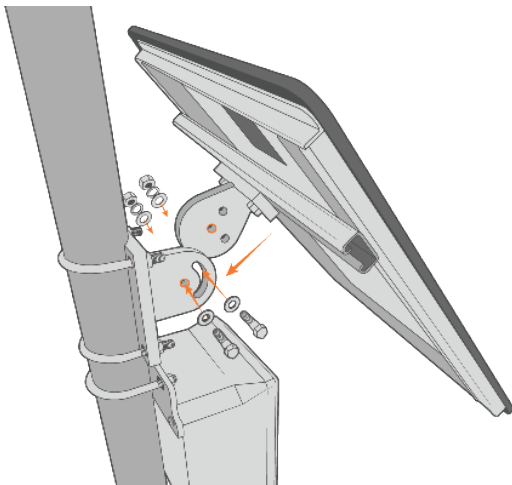


Figure 5: Solar panel secured on pipe mount.

## Data Logger Connection

- ① Once the panel and box are mounted:
  - a. Connect the black cable from the solar panel to the SOLAR IN port on the battery enclosure.
  - b. Connect the included orange UW6-2P cable to the PWR OUT port on the battery enclosure.
    - The free end of the UW6-2P cable connects to the 6-pin port of the X2 data logger to supply system power.
  - c. Note: Both battery box ports, and their respective solar panel and power cables, are keyed to prevent misconnections.

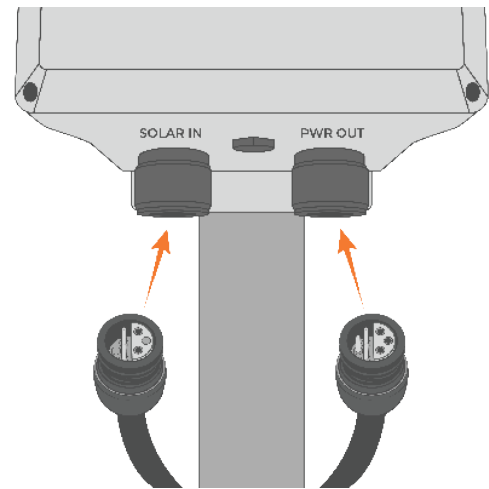


Figure 6: Solar panel and data logger connection to battery enclosure ports.