



Operation Manual

EP-SOL-POE-0136 SOLAR POE STATION

Manual V1.03

36Ah LiFePO₄ BATTERY

120W MONOCRYSTALLINE SOLAR PANEL

2 PORTS POE+ or 1 PORT POE+ and 1 PORT POE



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W A R N I N G :

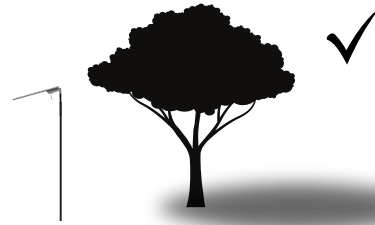
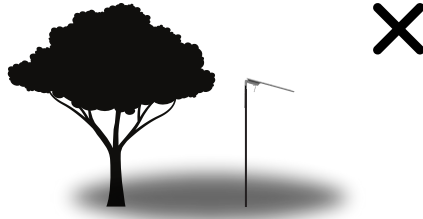
TO REDUCE COMPLICATIONS DURING
INSTALLATION, PLEASE READ AND
UNDERSTAND THE OPERATION MANUAL
BEFORE INSTALLING THE PRODUCT

Installation Best Practices



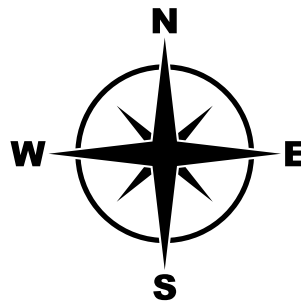
IMPORTANT

Be sure to pick an installation site that is not affected by shade during the day. This will affect the charge performance of your device.



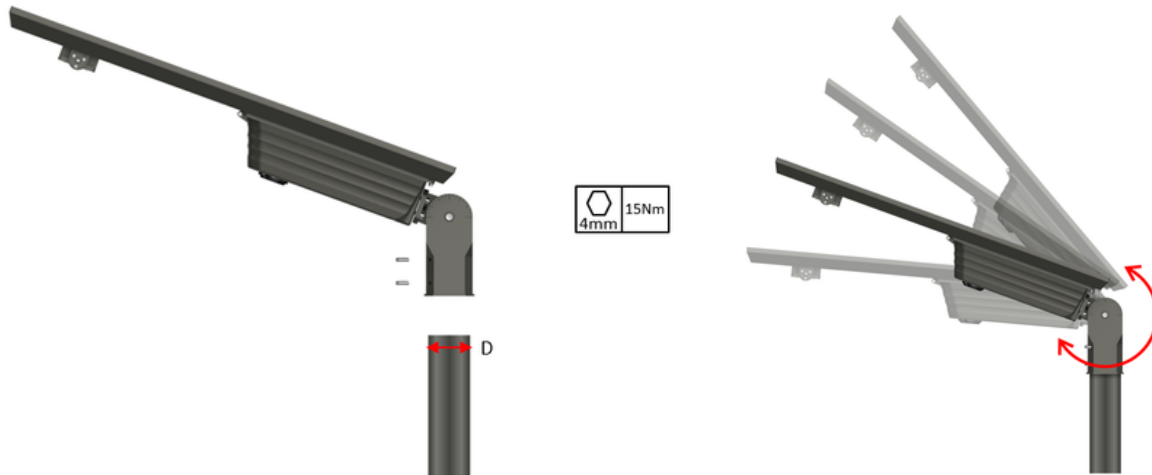
IMPORTANT

In the Northern Hemisphere, face the solar panel south so that it receives the maximum amount of available light during the day

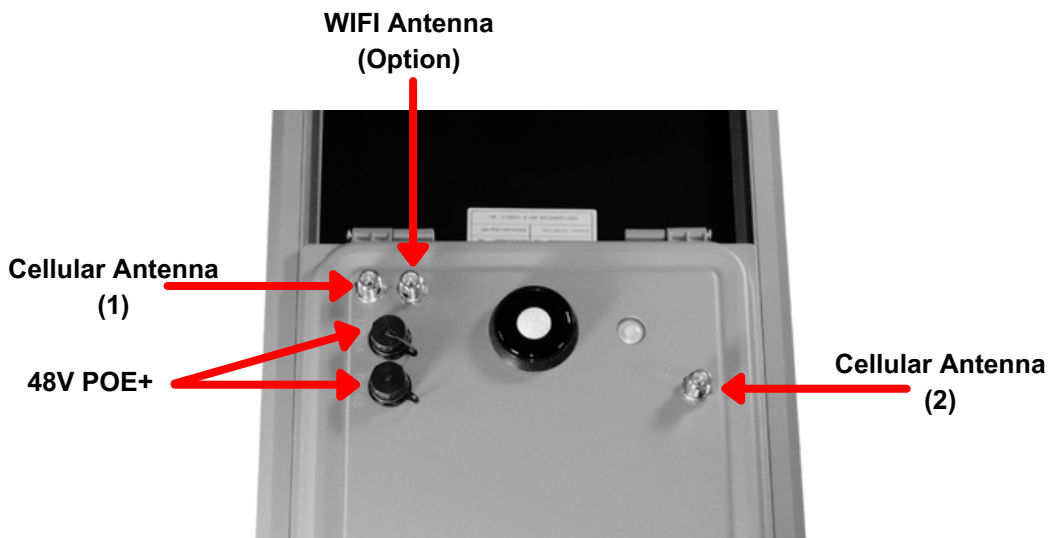


Installation Diagram:

1. Install the solar station onto the light pole by tightening the bolts with 15Nm torque.
2. Adjust the mounting angle of the solar station when necessary and make sure the station is fixed in place. Adjust the angle by loosening the center bracket bolt. Set the angle of the device to approximately 30 degrees for optimum charge performance. To secure, tighten the center bolt to 15Nm.



3. Plug in devices to their respective 48V POE Ports using the included weatherproof connectors.



4. Fix Cellular Antenna's and WIFI antenna if applicable to the N-Type fixtures labeled above.

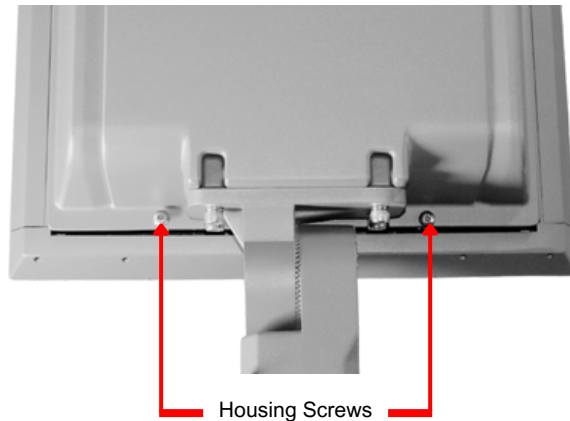
Battery Activation

Your Solar POE Station is equipped with a Lithium Iron Phosphate Battery. To prevent accidental activation of the device during shipment, the battery harness is shipped disconnected. Please refer to the below guide for the battery activation procedure.

5. Once the Solar Station is installed on the pole, loosen the two housing screws (shown in the picture) with a T-25 torx style bit.

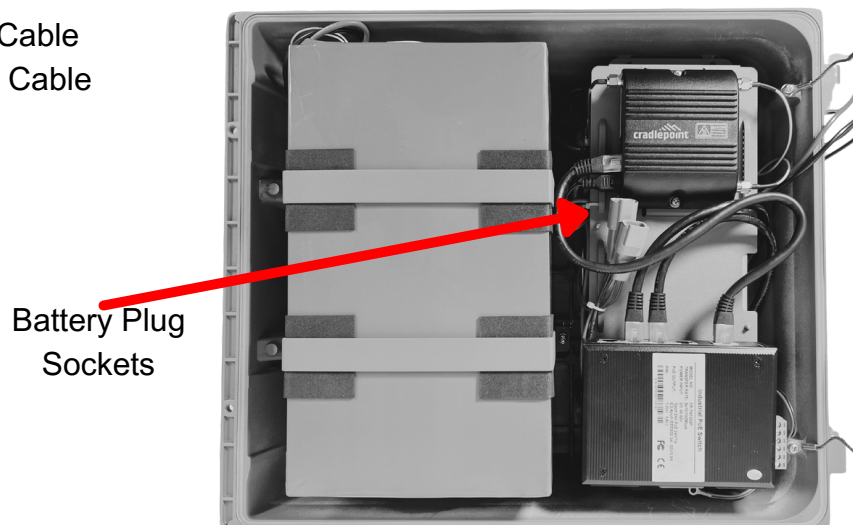


Support the solar panel frame to prevent possible damage to the solar panel from swinging too quickly.



6. Locate the two plug sockets fixed to the center of the equipment bracket. Notice the two pin clips on the inside of the plug:

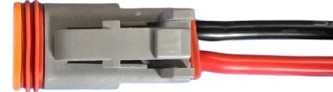
Green Clip - Battery Power Cable
Orange Clip - Battery Control Cable



Battery Activation

7. Locate the battery plugs attached to the battery wiring harness. First Plug the Battery Power Plug into the Battery Power Socket, then the Battery Control Plug into the Battery Control Socket

Battery Power Plug

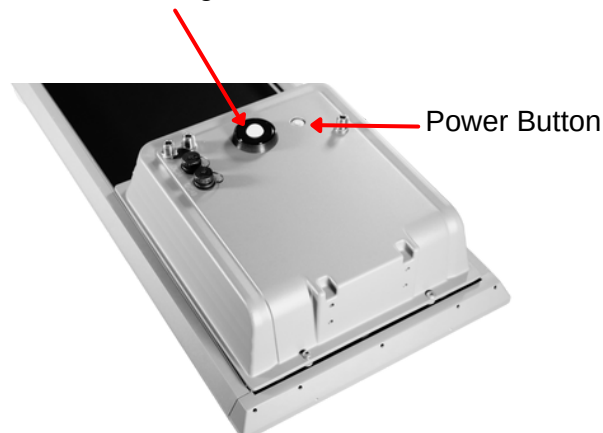


Battery Control Plug



8. After plugging in the two battery cables, test that this device is operational by pressing the power button on the underside of the housing (pictured in diagram). The POE Switch and Cradlepoint should light up when powered on.

Indicator Light



9. Once the device is tested, close up the housing by reinserting the two housing screws and tightening them with a T-25 torx style bit.

Cautions:

Handle your solar panel with care during installation as it is delicate and should avoid scratches or collisions. Any surface scratches, dust, or obstructions can decrease the solar panel's power generation efficiency.

When installing the solar station, ensure that solar panel faces south in the northern hemisphere for optimal performance. Additionally, orient the solar stations angle between 30-45 degrees.

For idle periods, it's crucial to charge the device every 3 months. If you plan to transport or store it for an extended duration, make sure to check, charge, and keep a record. Neglecting this could impact the battery life. To charge, simply switch on the device and position the solar panel under direct sunlight.

Maintenance involving internal components must be carried out by authorized personnel. Unauthorized individuals should not tamper with internal components, as this could void the warranty. For any battery-related or device maintenance concerns, contact your distributor. Only authorized personnel should service the battery.

The product contains lithium batteries, which are considered flammable and explosive. During transportation, adhere to air transportation regulations. Handle the product gently and avoid forceful impacts. Store it separately from other items to prevent damage.

In real-world scenarios, if the number of consecutive rainy days exceeds the design specification, the battery power might be fully discharged. Rainy days have very low charging efficiency, resulting in shorter working times. This is normal. The device will resume normal operation when the weather improves.

Please note that product specifications are subject to change without prior notice. The manufacturer retains the right for the final interpretation of this specification.

Care and Maintenance

Troubleshooting Guide

Indicator Light	Indicator Status	Indicator Light Description	System Status
Red	On	Normal	Idle/Discharge
	Slow Flash	Charging	Charging
	Fast Flash	Fault	Short Circuit/Open Circuit/Over Discharge/PV Over/ BV Over/ EBMS/ Over Temp

Regular Cleaning: Keep your solar panels clean to maximize their light absorption. Use a soft cloth and clear water for cleaning. Avoid using strong chemicals or solvent cleaners like ammonia and benzene, as they can damage the panels.

Battery Maintenance: The battery is prone to self-discharge. To maintain its effectiveness, it's recommended not to store it for more than 3 months without checking and charging. For instance, after extended transportation or storage periods, make sure to check, charge, and keep a record. Neglecting this could impact the battery's capacity and overall lifespan.

Optimal Installation: During installation, position the solar panel to face the sun directly for efficient energy absorption. Ensure that no tall structures or trees obstruct sunlight. If the area is prone to dust accumulation, promptly clean the panels.

Secure Installation: Properly tighten all screws according to the recommended standards to prevent any loosening or shaking.

By following these instructions, you can maintain the efficiency and longevity of your solar panels and associated components.