



# Solar Panel Kit

Instructions

Revision: 1.2



# **Table of Contents**

Table of Contents	
1.1 Purpose	
1.2 WARNINGS	
1.3 Materials	
1.4 Tools Needed	
2. Installation Instructions	-



## 1. Introduction

### 1.1 Purpose

This document describes the assembly procedures for the OmniSite Solar Panel. This OmniSite OEM solar panel kit is used to power OmniSite cellular RTU's in remote locations where AC power is not available. Installation can be completed in less than 4 hours, providing a complete standalone monitoring solution without the need to install an AC power circuit.



**<u>COVER</u>** the Solar Panel with the Black Trash Bag (Included) while installing in the field. The solar panel will start collecting energy as soon as it's exposed to the sun.



Mount the Bracket facing **SOUTH** at a **45 Degree Angle**.

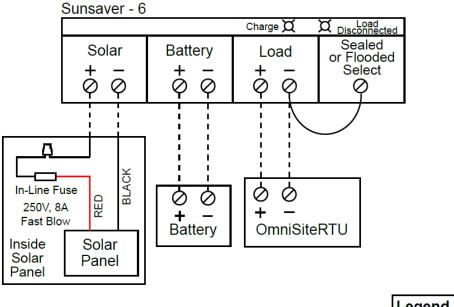
**DO NOT** mount the Solar Panel near any obstructions such as a building or tree. The Solar Panel needs as much sunlight as possible during the day.

<u>WATCH</u> for any items which may fall on the solar panel to obstruct its full potential such as leaves from trees.

**DO NOT** plug in the backup small internal battery that comes with your OmniSite RTU. Use only the large, external battery supplied with the solar panel unit.

DO NOT short the solar panel wires!





Legend
----Denotes Field Wiring

## Follow this Wiring Diagram at all times.

Wire the Solar Panel Kit up in Order from 1-6 shown on the Sun Saver Solar Controller.





#### 1.3 Materials

#### Materials Included:

**OmniSite Solar Panel** 

OmniSite Enclosure w/ Sun Saver Solar Controller and Metal Back Plate

Enclosure Mounting Feet w/ Instructions

12 V 18aH Battery

14 MTW Red Wire for Positive Solar Connection with In-Line Fuse

14 MTW Black Wire for Negative Solar Connection

14 MTW Red Wire for Positive Battery Connection

14 MTW Black Wire for Negative Battery Connection

**Mounting Bracket** 

U-Bolt

Mounting Bracket Hardware Kit w/ Instructions

Black Trash Bag





## 1.4 Tools Needed

7/16" Open End Wrench Phillips Screwdriver 9/16" Open End Wrench Channellocks Wire Stripper & Cutter Cable Ties (Size to Fit)



## 2. Installation Instructions

- 1. Carefully remove the Solar Panel Kit from the boxes in which it was shipped in.
- 2. Cover the Solar Panel with the Black Trash Bag as soon as it can be exposed to any light.



- 3. Read the "Fixed Pole Mount Assembly Instructions" which are included in the Mounting Bracket Hardware Kit.
- 4. Following the instructions, mount the solar panel at a <u>45 DEGREE ANGLE</u> pointing towards the <u>SOUTH</u> for best results.
- 5. After securely mounting the Solar Panel and verifying there will not be any obstructions, you will now mount the Enclosure. The Enclosure Mounting Feet and Instructions have been provided to show you how to properly and securely mount the Enclosure.
- 6. Open the Enclosure, and place the Battery to the right of the cord grip and conduit fitting.





7. Using the Positive and Negative Battery Wires (shown below), attach the Insulated Ring Terminal end to the battery with the bolt and nut on the battery post. Attach the corresponding Insulated Spade Terminal end to the Sun Saver Solar Controller. Be sure to first attach the negative and then the positive.



8. Run the wires from the Solar Panel up through the Cord Grip on the Enclosure.



9. Attach the Solar Panel wires to the Negative and Positive Solar Connection wires with the provided wire nuts attached.

\*Make sure the In-Line Fuse is attached to the Positive (Red) Wire





- 10. Attach the spade end of the **Negative** (Black) Solar Connection Wire to the Sun Saver Solar Controller, and then attach the spade end of the **Positive** (Red) Connection Wire to the Sun Saver Solar Controller once the Negative wire has been attached securely.
- 11. Tighten the cord grip which you ran the Solar Panel wires through by turning clockwise.



The Solar Panel Kit is now fully installed and ready to use. If you have any questions, please don't hesitate to call OmniSite Tech Support at 317-885-6330 ext. 3.