



PORTA

SOLAR MOLIBE PORTABLE POLE **Installation Manual**

Ideal for Construction, Natural Disasters,
and Other Temporary Lighting Needs.

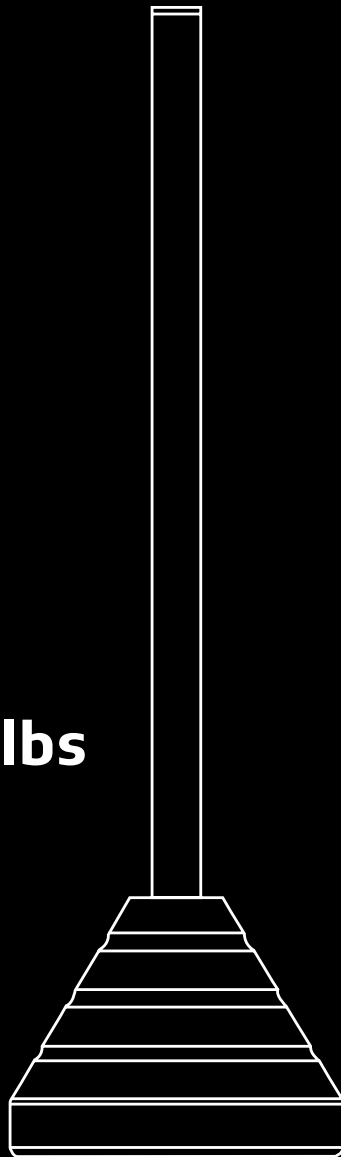


SOLTECH
Smart Solar Lighting

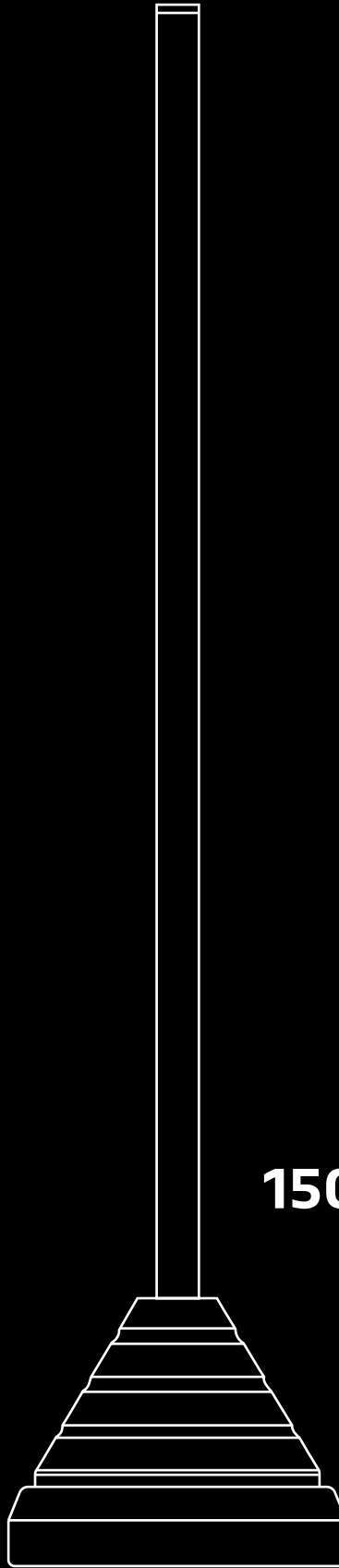
PORTA

SOLAR MOLIBE
PORTABLE POLE

72lbs



150lbs



Contents

01 Introduction	04
02 Specifications	06
03 Installation and Wiring Requirements	010
04 Ordering Information	011
05 Installation	012
06 Panel Angle	016
07 Remote Control Guide	018

01 Introduction

Thank you for purchasing the PORTA solar molibe portable pole.

Introduction

Outdoor solar lighting systems use solar cells which convert sunlight into electricity. Electricity is stored in batteries for use at night. PORTA solar molibe portable pole combined with SOLTECH solar lights are easy to install and virtually maintenance free. Using them avoids trenching, cabling, and electricity costs .

Important

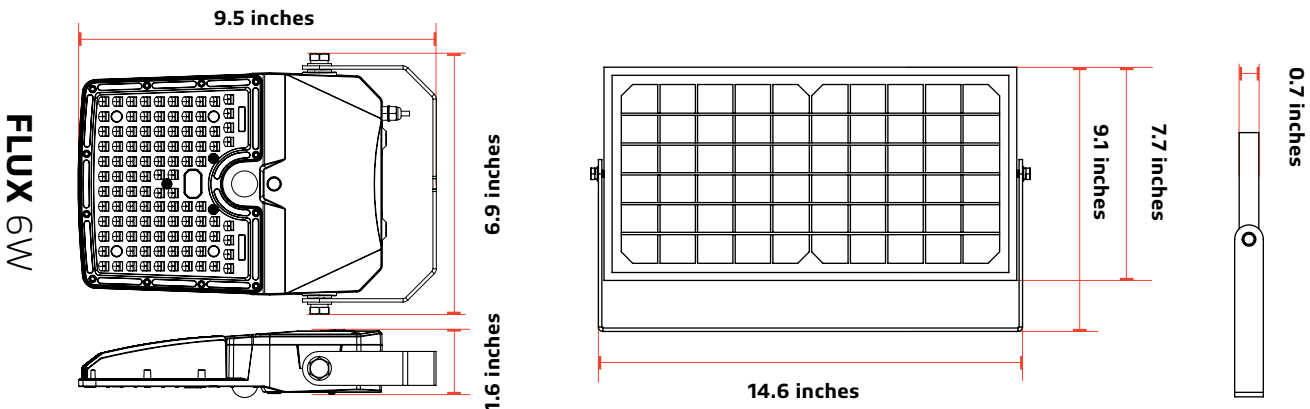
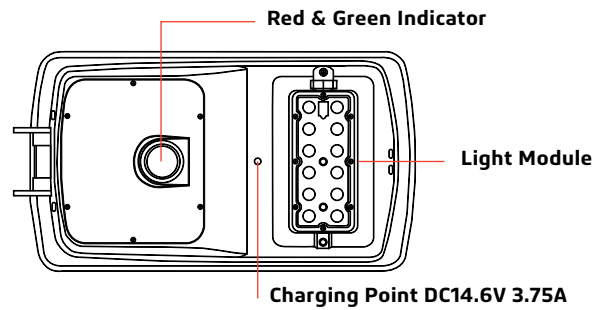
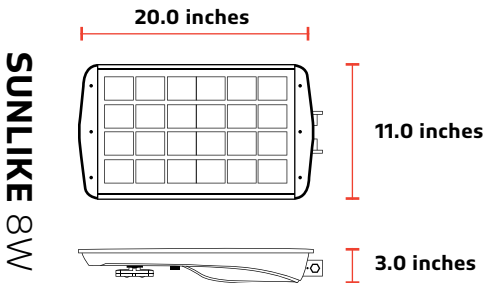
In order to avoid deep discharge of the battery during storage, please fully recharge your battery every 4 months. Please make sure that the light is installed in an area with sufficient sunlight. A strict minimum of 3.5 hours/day of sunshine on average is recommended. Select the right operating mode according to local codes and solar conditions. Keep it away from shadows. Self-cleaning occurs when the light fixture has minimum angle of 15 degrees above horizontal.

Please save these instructions. Read all of the instructions carefully before attempting to carry out any installation or wiring. Do not open or attempt to repair a SOLTECH luminaire on your own, as it may cause serious damage and would void the product warranty. Contact your local distributor for any questions concerning the installation.

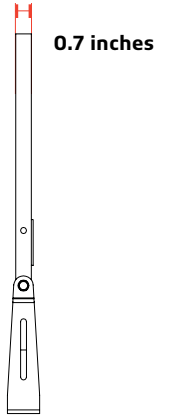
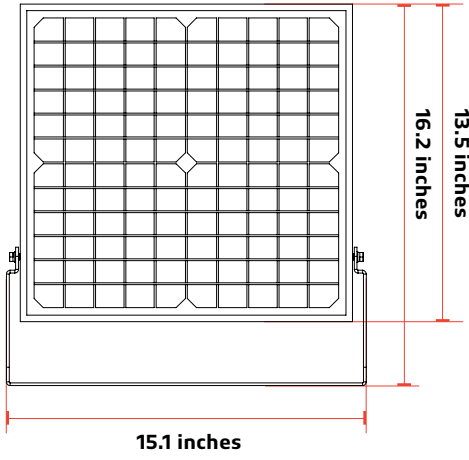
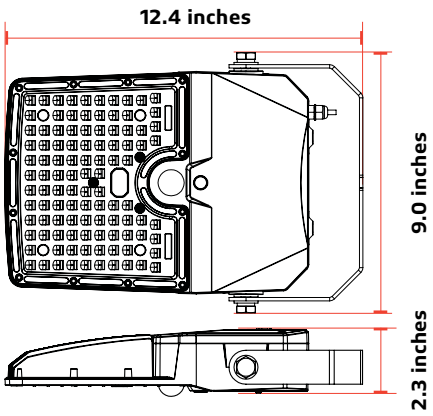
Precautions when working with solar panels

When the solar panel is exposed to sunlight, a voltage appears at the output terminals of the solar panel, turning it into a source of electricity. To avoid a shock hazard, make sure the solar panel is covered with an opaque (dark) covering, such as paper or cloth, during the installation. Do not make contact with the terminals when the panel is exposed to sunlight or any other light source.

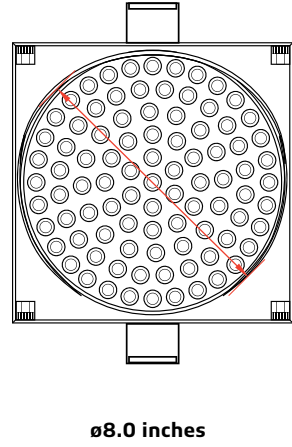
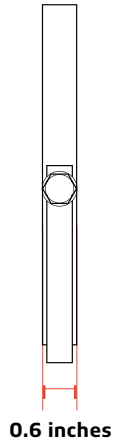
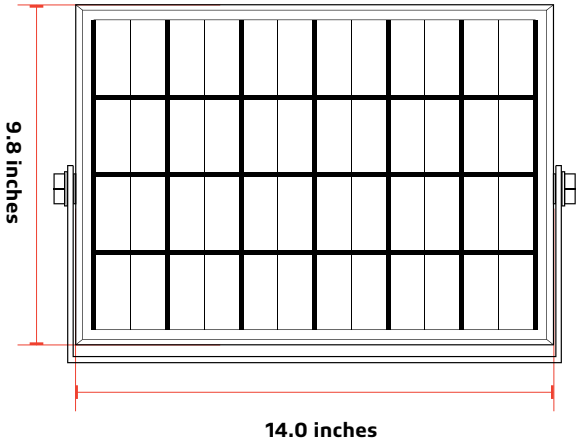
Luminaire Options



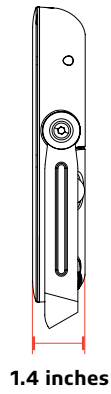
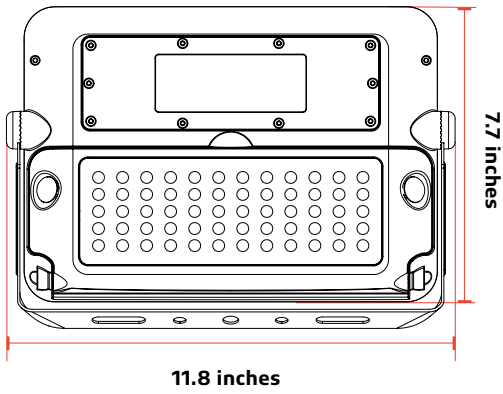
FLUX 20W



**8" Single-Head
BEACON**



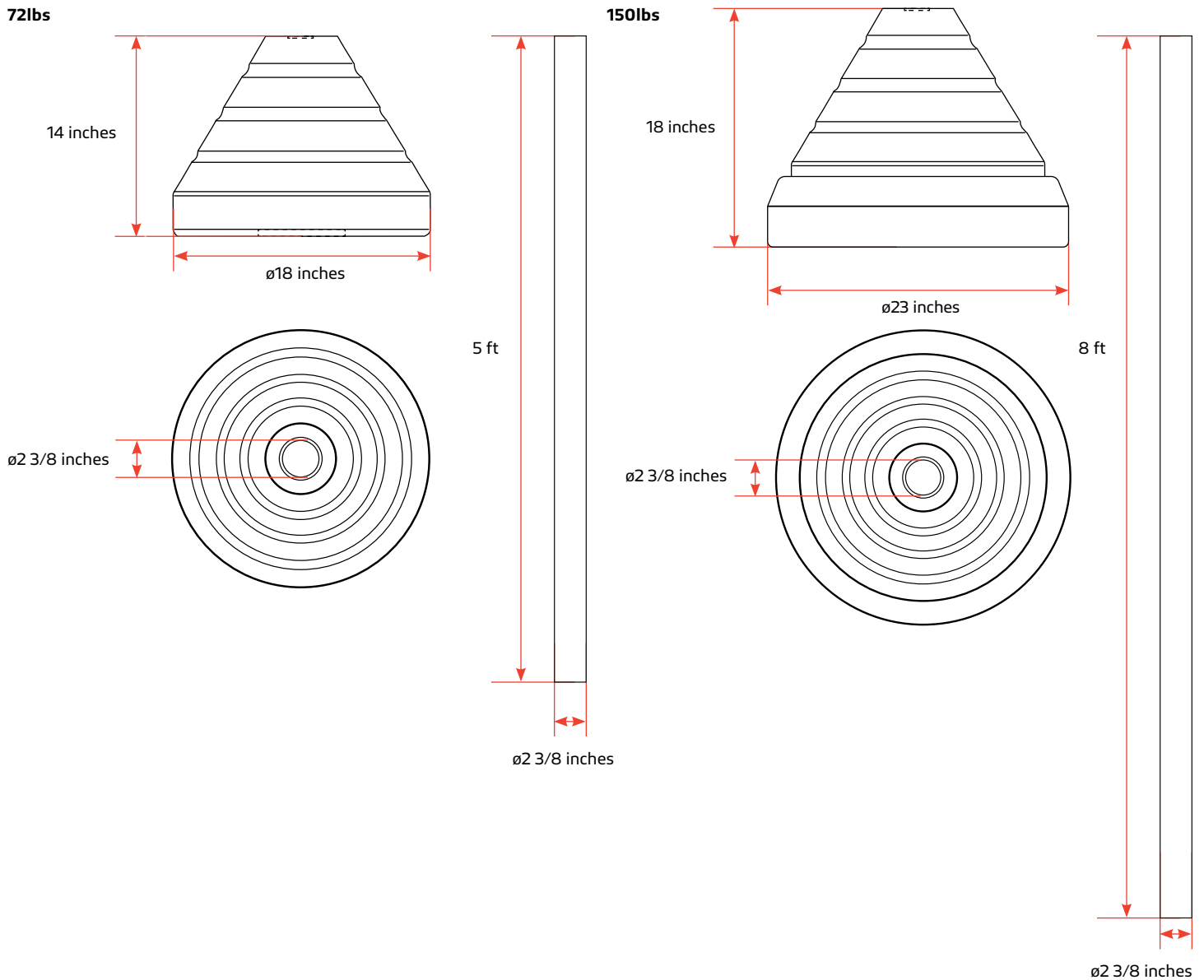
SOLPAD 10W



02 Specifications

Specifications	PORTA	
Pole Height Options	5ft / 8ft (Without Luminaire)	
Base Weight Options	72lbs / 150lbs	
Casting	PVC and Rubber	
Base Dimensions	72lbs: 18 X 18 X 14 In	150lbs: 23 X 23 X 18 In
Pole Profile	Round	
Pole Sections	1	

BASE SIZE



Specification	SUNLIKE 8W	SOLPAD 10W
LED Nominal Power	8W	10W
Solar Panel	18V 17W	Mono-Crystalline 5.5V 6W
LiFePO ₄ Battery	115.2WH 12.8V 9AH	3.7V
Weight	11.7 lbs	/
Lumen Output	1,600@5000K	1,000@4000K
CRI	> 70	> 70
LED Chip	Lumileds 5050 (215lm-CR>70)	/
EPA@45°	1.7	/
Waterproof Rate	IP65	IP65
Casting	Aluminum	PC & Aluminum
Efficiency	200 lm/W@5000K	100 lm/W@4000K
* Charging Time	7hrs	7hrs
Run Time(@Full Power)	10hrs	2-3 Days
Operation Mode	Remote control and One-key Setting	3 Operating Modes
Installation Height	6 to 13 ft	5 to 10 ft
* Operating Temperature	-20°C/-4°F to 122°F	-20.5°C/-5°F to 113°F
* Charging Temperature	0°C/32°F to 149°F	0°C/32°F to 149°F
Maximum Autonomy		
Motion Sensor Mode	40%-100% 35hrs 20%-80% 55hrs	/
Time Control Mode	Night Owl 28hrs Early Bird 25hrs	/
Constant Mode	100% 12hrs 70% 17hrs 40% 30hrs	/

* The temperature can impact the battery's charging and normal operation. If your place's temperature is under 32°F, we advice you to use the SUNLIKE PRO version to achieve better lighting results. * The solar charge time data is base on 77 degree F ambient temperature with the panel pointed directly at the solar radiation. The standard radiation value is 1000W/m².

02 Specifications

Specifications	FLUX 6W	FLUX 20W
LED Nominal Power	6W	20W
Solar Panel	Mono-Crystalline 10V 10W	Mono-Crystalline 10V 20W
LiFePO ₄ Battery	6.4V 3AH	6.4V 12AH
CCT	4,000K	4,000K
Lumen Output@4000K	1,020	3,400
CRI	> 70	> 70
Product Size	Light Head 9.5 X 6.9 X 1.6 Inches Solar Panel 7.7 X 14.6 X 0.7 Inches	Light Head 12.4 X 9.0 X 2.3 Inches Solar Panel 13.5 X 15.1 X 0.7 Inches
Beam Spread	>130°, NEMA type 7 Very Wide	>130°, NEMA type 7 Very Wide
EPA	1.41	2.51
Cable Length	16.5 ft	16.5 ft
IP Rating	IP66	IP66
Casting	PC & Aluminum	PC & Aluminum
Efficiency@4000K	170 lm/W	170 lm/W
* Charging Time	6hrs (1000W/m ²)	6hrs (1000W/m ²)
Run Time (@Full Charged)	5-7 Rainy Days	5-7 Rainy Days
Operation Mode	7 Operating Modes	7 Operating Modes
PIR Sensor Angle / Distance	360° / 16.4 ft	360° / 16.4 ft
* Operating Temperature	-20°C/-4°F to 122°F	-20°C/-4°F to 122°F
* Charging Temperature	0°C/32°F to 149°F	0°C/32°F to 149°F

* The temperature can impact the battery's charging and normal operation. If your place's temperature is under 32°F, we advice you to use the SUNLIKE PRO version to achieve better lighting results.


* The solar charge time data is base on 77 degree F ambient temperature with the panel pointed directly at the solar radiation. The standard radiation value is 1000W/m².

Specifications	BEACON 8" Single-head
LED Nominal Power	3.6W
Solar Panel	Mono-Crystalline 18V 10W
Lithium Ion Battery	12V 8.8Ah
Light Color	Yellow/Red
Illuminance	8,000 mcd (Red) 7,000 mcd (Yellow)
Product Size	Light Head ø8.0 Inches Solar Panel 14.0 X 9.8 X 0.6 Inches
Beam Angle	30°
IP Rating	IP65
Material	UV-Resistant Polycarbonate
* Charging Time	9hrs (1000W/m ²)
Run Time (@Full Charge)	5-7 Days
Working Mode	24/7 12/7
Standard Hardware	Fits 3" to 4" Diameter Poles
Flashing	50 times per minute (customization available on request)
Visible Distance	>2,500 feet
* Operating Temperature	-4 °F to 140 °F
* Charging Temperature	23 °F to 140 °F

* The temperature can impact the battery's charge and daily operation.

* The solar charge data is base on 77 degree F ambient temperature with the panel facing direct solar radiation. The standard radiation value is 1000W/m².

03 Installation and Wiring Requirements

1. Installation and wiring must comply with the State and National Electrical Codes.
2. The SUNLIKE, FLUX, BEACON and SOLPAD models are intended for outdoor use only and should not be installed in an unventilated area, and must be installed in an environment within the operating temperatures defined for the product.
3. The average sunshine in the installation area should be above 3.5 hours/day in order to ensure full function of the light fixture. Avoid areas with shade.
4. Before installation, if applicable, please ensure the light pole and its foundation are stable enough to withstand the lighting fixture(s).
5. Before installation, please ensure that the battery is fully charged. Install during sunny days if possible.
6. Before installation, press the  ON/OFF key on the remote control (if it has) and check whether it shows a red light on the indicator. Cover the solar panel and check if the light module turns on normally within 1 minute.

After Installation

The light fixture will automatically turn on at night and turn off during daylight.

Important

Always orient the solar panel facing the equator (e.g. facing south if in northern hemisphere).

Always have a tilt angle of at least 15° to avoid dust accumulation (0°=horizontal plane).

04 Ordering Information

Base	Pole	Fixture
<p>STLPORBA72=PORTA 72lbs Rubber Base</p> <p>STLPORBA150=PORTA 150lbs Rubber Base</p>	<p>STLPORPL5=PORTA 5ft PVC Pole</p> <p>STLPORPL8=PORTA 8ft PVC Pole</p>	<p>STLSFL104WMBK=SOLPAD 10W</p> <p>STLFLX63PMBZ=FLUX 6W</p> <p>STLFLX204PMBZ=FLUX 20W</p> <p>STLSTC08T35SFGY=SUNLIKE 8W</p> <p>STLBCNS8DYL24S=BEACON 8" Single-head Yellow</p>

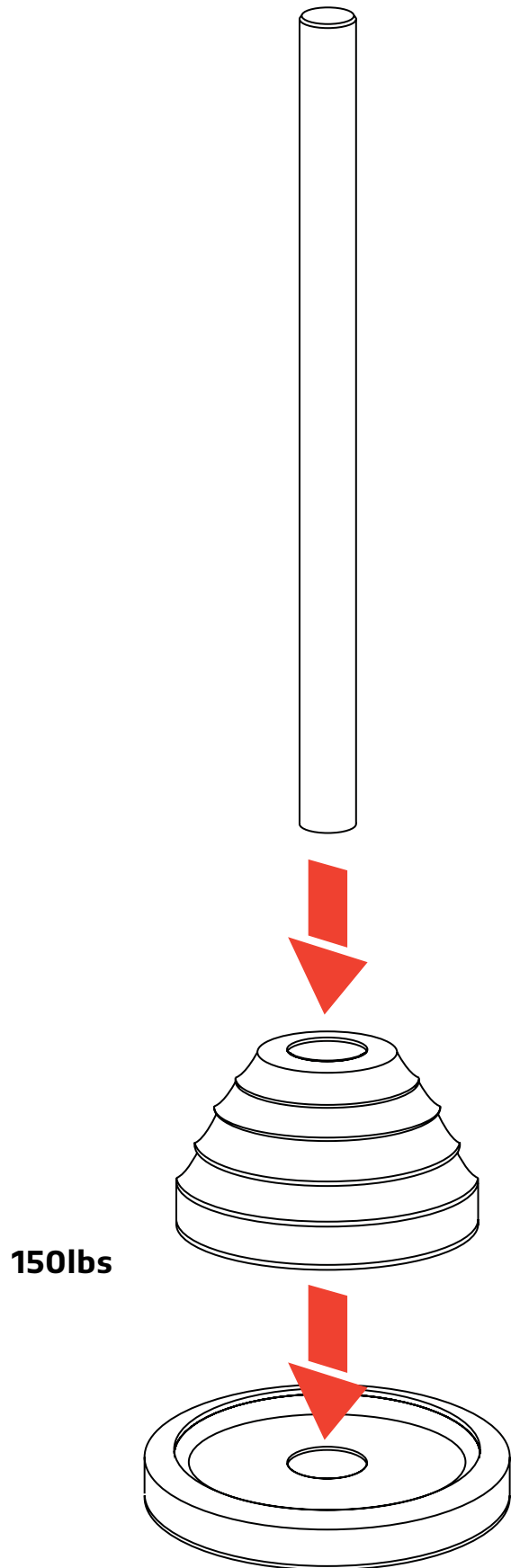
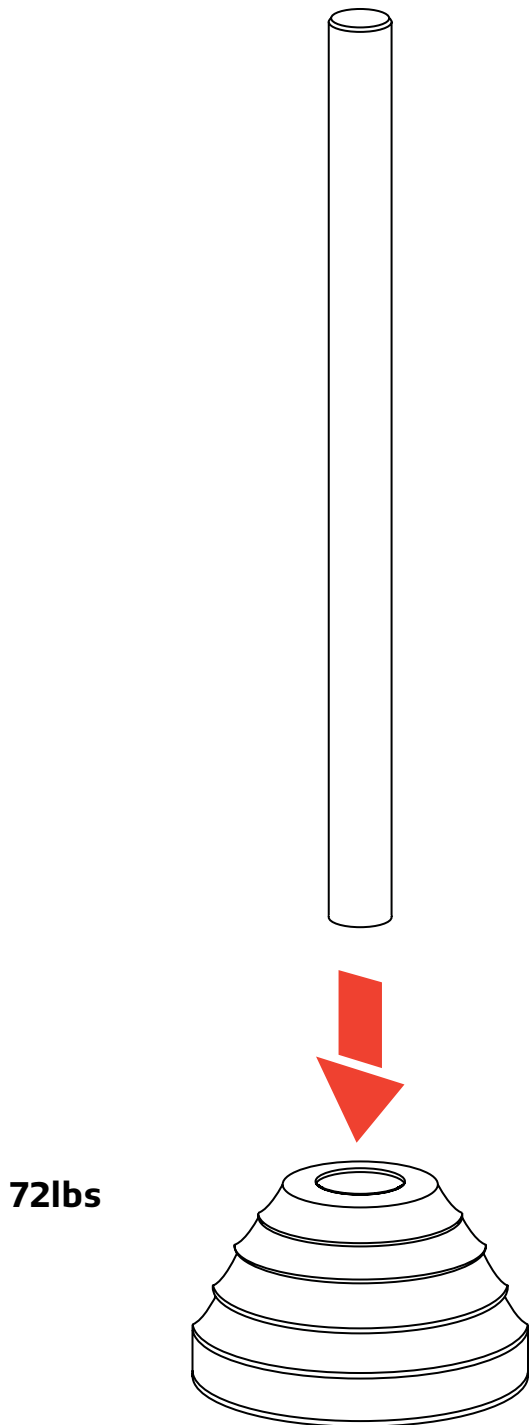
For example: STLPORBA72STLPORPL5STLSFL104WMBK

This means the customer wants a Solar Mobile Portable Pole PORTA with 72lbs Rubber Base, 5ft Pole Height and SOLPAD 10W Fixture.

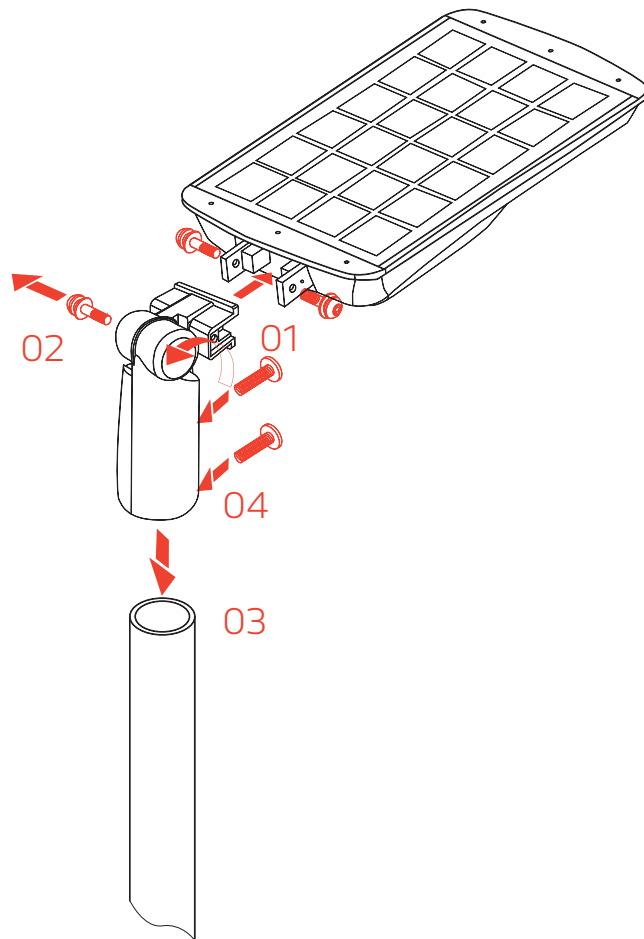
DO NOT send the sample number directly to our salesperson. Use the information in the chart above to create a model number with the correct series, wattage, temperature, mounting option, and finish for the product that you want.

05 Installation

PORTA POLE INSTALLATION

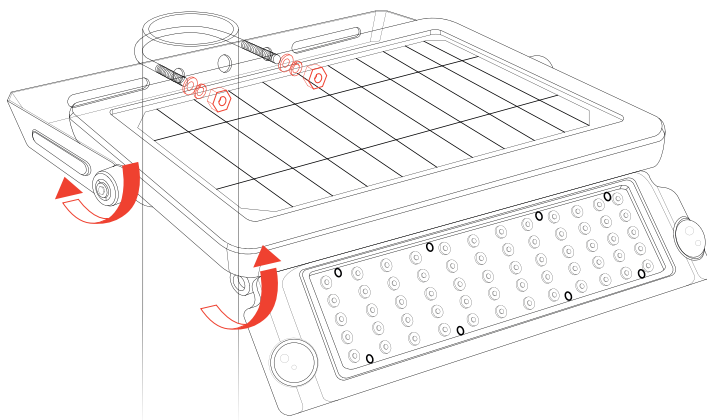


SUNLIKE 8W INSTALLATION



1. Connect SUNLIKE fixture with slip fitter.
2. Adjust the panel angle.
3. Mount slip fitter on the top of the PORTA pole.
4. Tighten up two screws to screw the SUNLIKE fixture.

SOLPAD 10W INSTALLATION

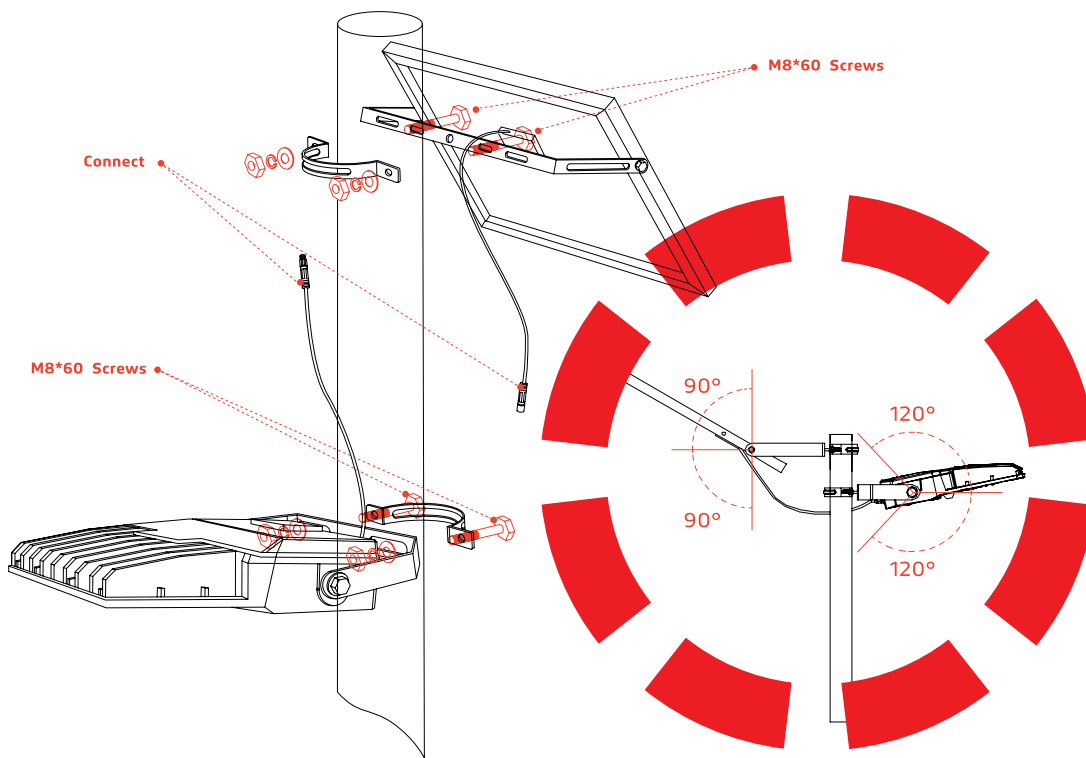


Works With Round & Square Poles

1. Round Pole Mount
Diameter of 1.6–2.4 inches
2. Square Pole Mount
Side length of 1.2–1.6 inches

05 Installation

FLUX 6W / 20W INSTALLATION



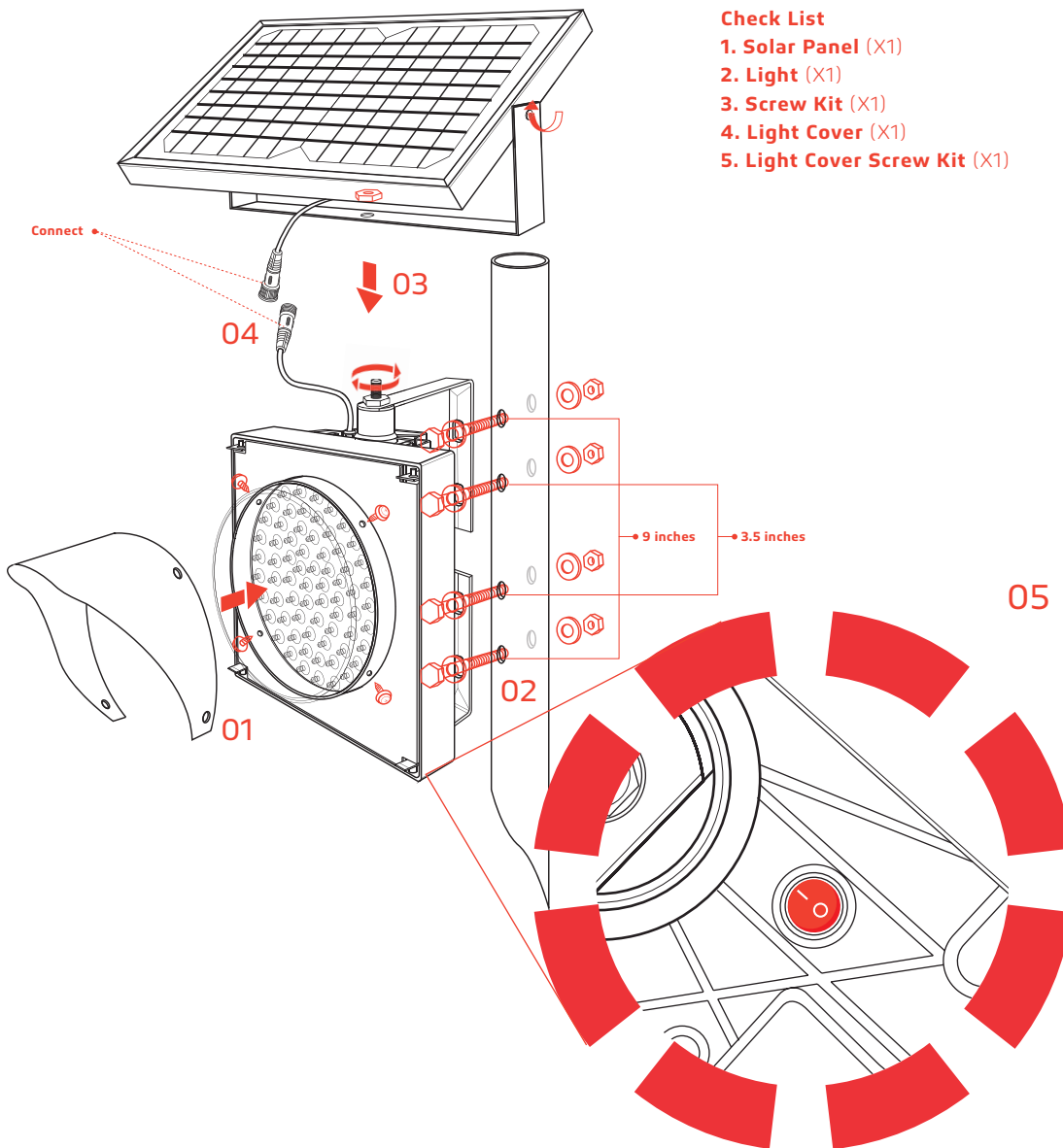
First, mount the solar panel to the pole:

1. Use the screw kit to secure the pole mount base and the solar panel bracket to the pole.
2. Then attach the solar panel to the bracket.

Then, mount the fixture:

3. Attach the bracket to the fixture.
4. Use the screw kit to secure the fixture bracket to the pole mount base on the pole.
5. Connect the light and solar panel cables.

BEACON INSTALLATION

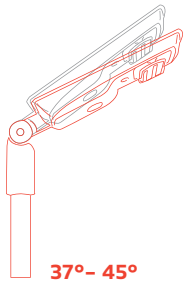


Check List

- 1. Solar Panel (X1)
- 2. Light (X1)
- 3. Screw Kit (X1)
- 4. Light Cover (X1)
- 5. Light Cover Screw Kit (X1)

1. Roll up the light cover. Use the light cover screw kit to secure the cover on the light.
2. Install the light by screwing the light bracket to the pole with the screw kit.
3. Install the solar panel bracket to the light bracket, tighten to secure.
4. Connect the solar panel cable to the light cable.
5. Press the On/Off button at the bottom of the light to turn the light on.

05 Press the On/Off button at the bottom of the light to turn the light on.



37°- 45°

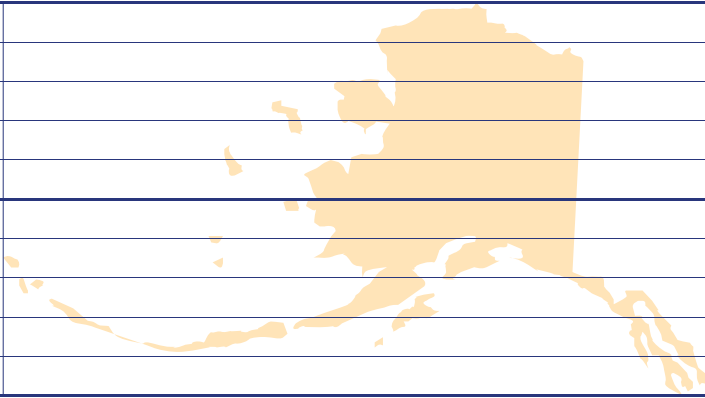
70° N

69° N
68° N
67° N
66° N

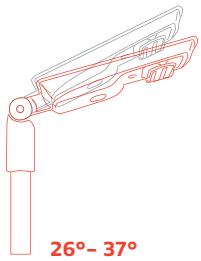
65° N

64° N
63° N
62° N
61° N

60° N



Alaska



26°- 37°

49° N

48° N
47° N
46° N

45° N

44° N
43° N
42° N

41° N

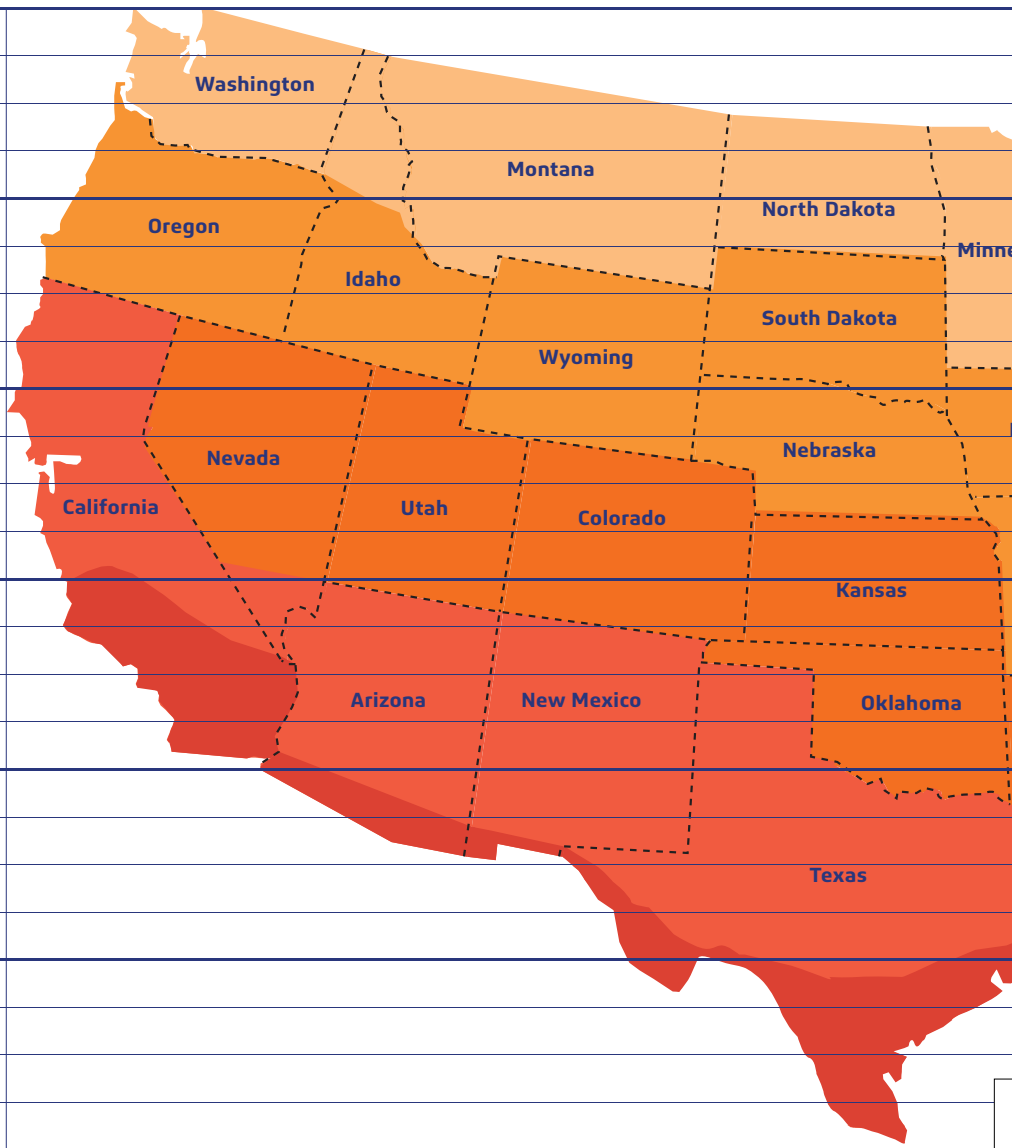
40° N
39° N
38° N

37° N

36° N
35° N
34° N

33° N

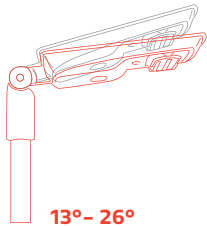
32° N
31° N
30° N



29° N

28° N
27° N
26° N

25° N



13°- 26°

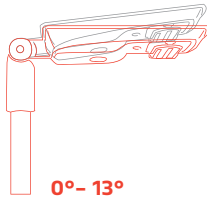
21° N

20° N

19° N



Hawaii



0°- 13°

06 Panel Angle

The Solar charge in a battery pack won't last forever. The off-grid system relies on stored solar energy for autonomy. Angling your solar panels properly can boost the power intake of your solar lighting system. You want to angle your solar panels at a tilt based on the area's latitude.

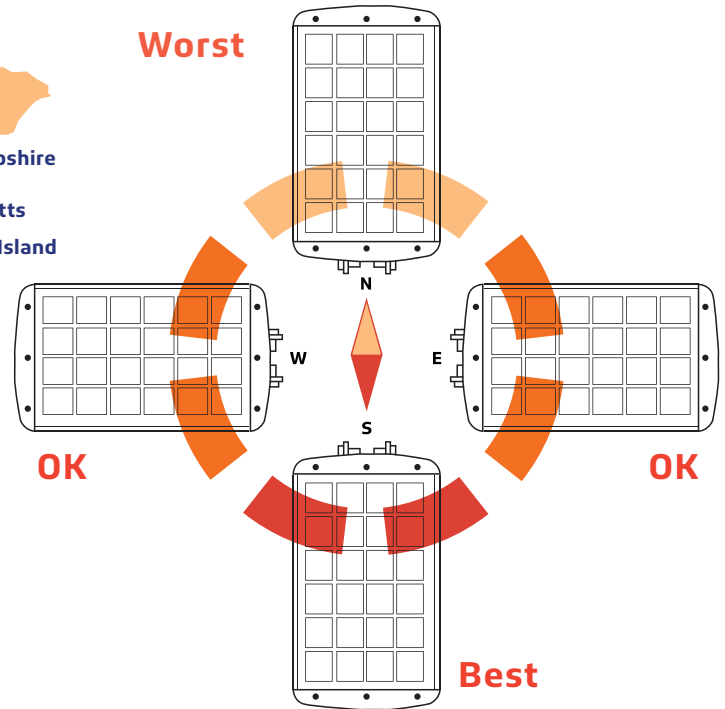
Tip

You can increase the tilt 15° in the winter or decrease 15° in the summer. In this way you can get the maximum sunlight to recharge the battery bank.

Key



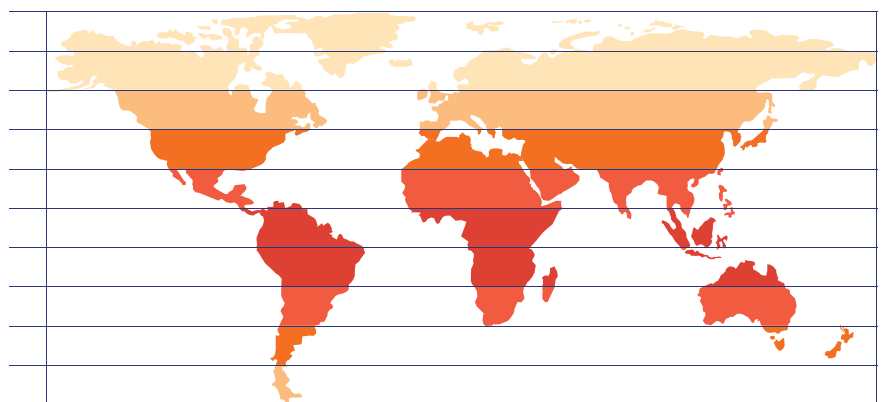
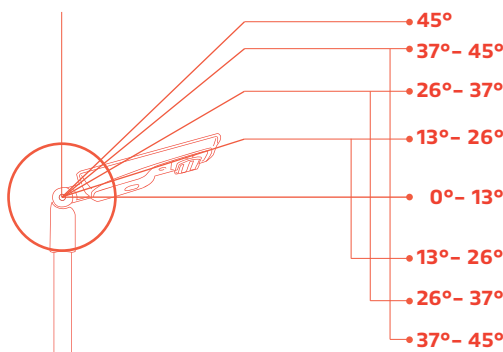
Best Facing Direction of Solar Panel



The area will dictate the installation of the fixtures and will sometimes prevent the lights from facing south. But that's okay! Panels facing West & East won't get as much light as Southern facing panels, but will still collect a good amount of sunlight. A North facing panel also works, but it will take longer to charge than any other direction. This would mean that the solar charge will be less optimal if installations are facing North.

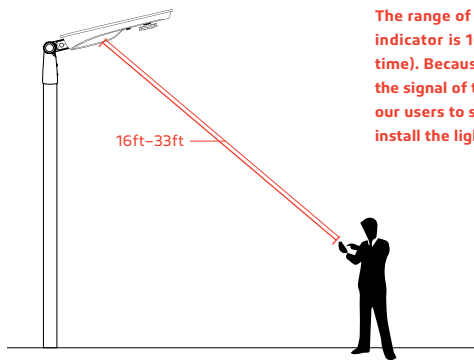


World Wide Panel Angles



07 Remote Control Guide

This guide is for **SUNLIKE** Fixture only.



The range of the remote control to the indicator is 16ft (Day time) to 33ft (Night time). Because the sunlight will impact the signal of the remote control, we suggest our users to setup the mode before they install the light.

1. On/Off

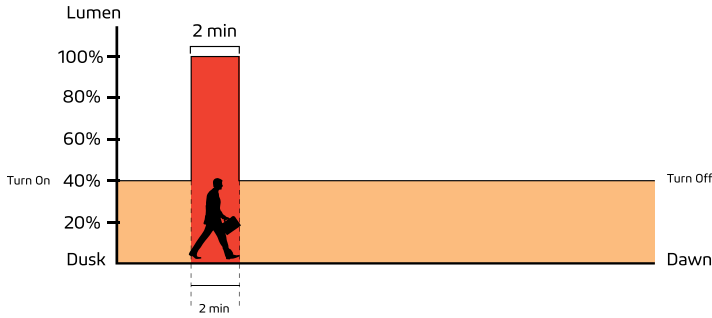
When off is selected, the light will stop working. The solar panel will not charge the battery and the battery will not supply electricity to the light.

2. Connect/Test

Remote control device can be connected with any lighting fixture, one at a time. To connect, press the button once. It also functions as a test button. To test, press the "Test" button once, the red light will indicate the fixture is charging, green light indicates that the fixture is operating. Testing lasts for 10 seconds, and then it goes back to the mode previously in use.

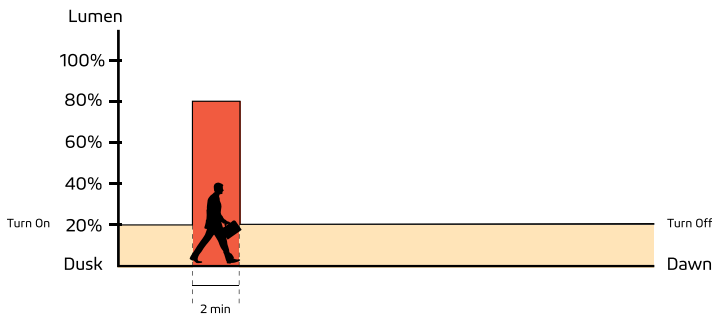
3. 40%-100% Motion Sensor Mode

Constant 40% brightness (turns on at dusk, turns off at dawn); 100% brightness turns on for 2 minutes when motion is detected.



4. 20%-80% Motion Sensor Mode (Default)

Constant 20% brightness (turns on at dusk, turns off at dawn); 80% brightness turns on for 2 minutes when motion is detected.

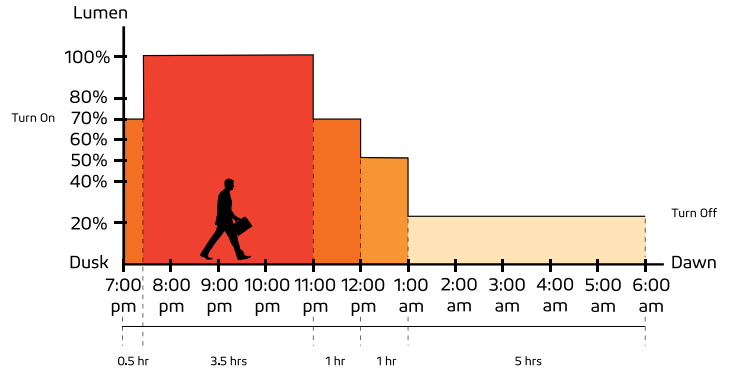


(IAP) Intelligent Adaptive Program Battery Control Technology

In order to extend the off-grid autonomy of the SOLTECH solar products under shady trees, heavy rain, and thick clouds, our controllers now integrate an adaptive smart control feature to actively track battery capacity and adjust light output accordingly. Before integrating this feature, selecting a light output percentage on the remote would yield an accurate percentage of max LED brightness. Now with (IAP), the controller actively monitors the battery and regulates the electrical current to the LEDs. The controller makes light output of the selected percentage on the remote relative to battery capacity rather than max LED output. This smart-control feature can increase our off-grid performance by up to 40%.

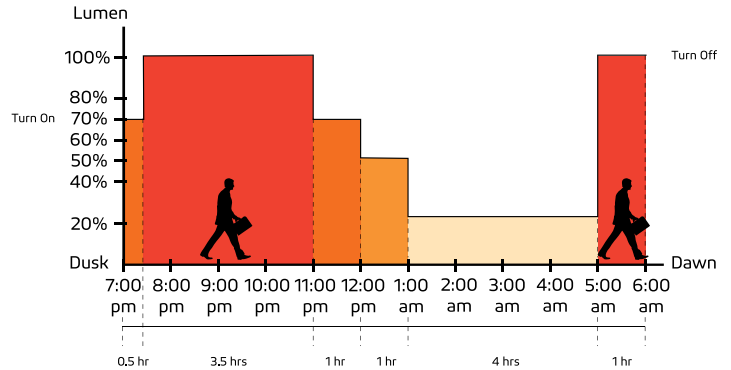
5. Night Owl Mode

Changes as natural light decreases/increases (turns on at dusk); 70% brightness for 0.5 hour, 100% brightness for 3.5 hours, 70% brightness for 1 hour, 50% brightness for 1 hour, 20% brightness for 5 hours (turns off at Dawn).



6. Early Bird Mode

Changes as natural light decreases/increases with increased brightness near dawn for early risers (turns on at dusk); 70% brightness for 0.5 hour, 100% brightness for 3.5 hours, 70% brightness for 1 hour, 50% brightness for 1 hour, 20% brightness for 4 hours, 100% brightness for 1 hour (turns off at Dawn).



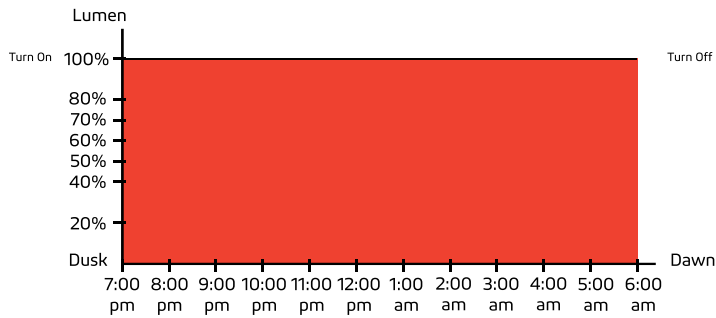
Important

Dust and dawn time can vary for different locations and seasons. The sensors in our products will monitor the light levels where it is installed. The time period shown in the chart above is just an example to help you understand the different lighting modes.

07 Remote Control Guide

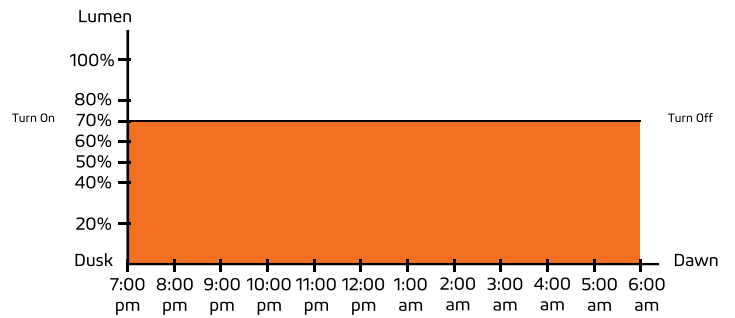
7. 100% Constant Mode

100% brightness from dusk to dawn.



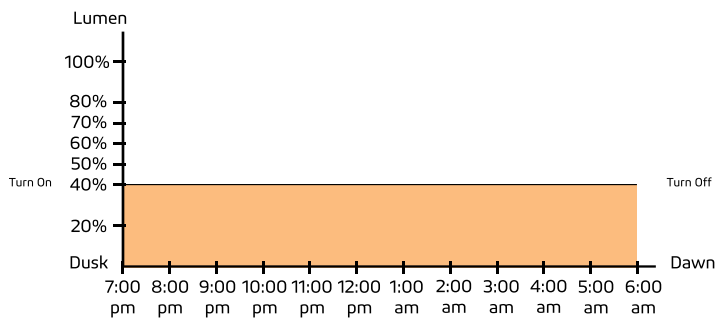
8. 70% Constant Mode

70% brightness from dusk to dawn.



9. 40% Constant Mode

40% brightness from dusk to dawn.

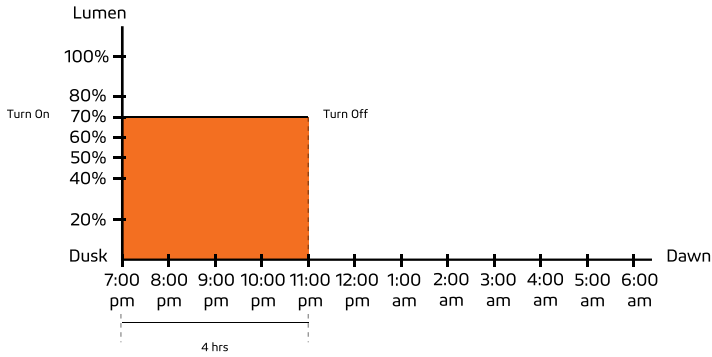


10. Timer Mode Disabled

Press this button to turn off Timer Mode; settings revert back to before Timer Mode was last activated.

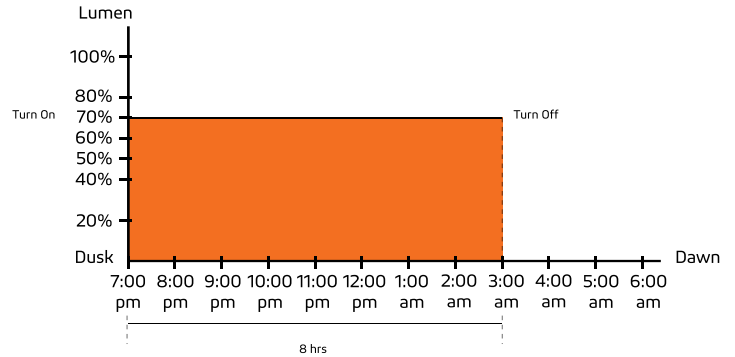
11. Timer Mode 4 Hours

This is an additional mode which can work with any other modes. For example: press this button at any time after you turn on 70% Constant Mode. If the light turns on at 7pm at dusk, it will turn off at 11pm. It will repeat the same schedule hereafter until it is canceled by pressing Timer Mode Disabled.



12. Time Mode 8 Hours

This is an additional mode which can work with any other modes. For example: press this button at any time after you turn on 70% Constant Mode. If the light turns on at 7pm at dusk, it will turn off at 3am. It will repeat the same schedule hereafter until it is canceled by pressing Timer Mode Disabled.



Important

Dust and dawn time can vary for different locations and seasons. The sensors in our products will monitor the light levels where it is installed. The time period shown in the chart above is just an example to help you understand the different lighting modes.

PORTA Solar Mobile Pole products are covered by a 3 year limited warranty. SOLTECH warrants to the original purchaser that this product is free from defects in materials and workmanship for the period of 3 years from date of purchase. To obtain warranty service please contact your local distributor or sales rep for further instruction.



1460 Park Avenue.
Emeryville, CA 94608 USA

www.soltechlighting.com

SOLTECH LLC reserves the right to update all product data sheets at any time. Consult SOLTECH marketing specialists for publication updates at hello@soltechlighting.com

*Copyright©2021-2022 SOLTECH LLC,
All Rights Reserved.*

**SOLTECH Provides
Advanced LED
Technology Powered
With Eco-friendly,
Clean, Solar Energy.**