SOLTECH HYPER 25W 45W LED Solar Area Light Instruction Manual

HYPER 25W I 45W
LED SOLAR AREA LIGHT
Instruction Manual

Contents

HYPER 25W 45W LED Solar Area Light

- All-in-one design
- Easy installation and operation
- Remote control included with one-button mode setting

INTRODUCING SOLTECH HYPER: an economical, easily installed, off-grid solar light that reduces the total cost of ownership and delivers big performance. This fully integrated LED solar streetlight is designed for both residential and commercial areas, with 5,000 and 9,000 lumen outputs. HYPER 25W and 45W provide superior quality light over a greater area. It features an integrated solar array, battery, and LED fixture with simple mounting for fast and easy installation. HYPER solar fixture eliminates trenching, cabling, and electricity costs.

- All-in-one design
- Easy installation and operation
- Grade A LifePO₄ Battery Pack, 2000+ full charging cycles
- Remote control included with one-button mode setting
- Lumileds LED chips boast industry-leading efficiency (>200lm/W)
- Built-in smart MPPT-IAP controller maximizes autonomy and performance
- Half-cut solar cells reduce energy loss and ensure high efficiency even in shaded areas
- Adjustable angle for the solar panel allows maximum solar collection
- 3 different mounting options designed for round pole, square pole, and wall pack applications
- Die cast A380 aluminum fixture housing is rust free

APPLICATIONS

Pathways, parking lots, landscaping, parks, schools, trails, or any remote locations that have no access to conventional power.
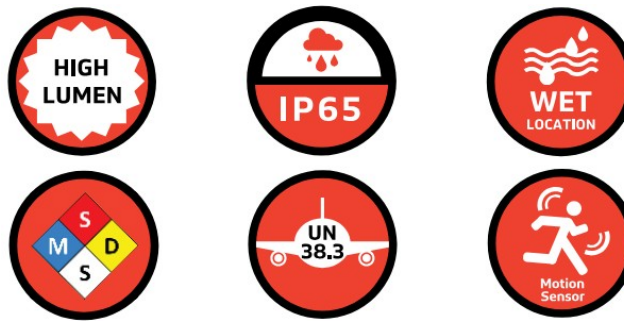
LIGHT FIXTURES

LED Nominal Power	25W I 45W
Lumen	5,000LM I 9,000LM
Color Temperature	3,000K I 4,000K I 5,000K I 5,700K
Optic Type	Type III
Efficiency@5,000K	200LM/W
Material	Die-Cast Aluminum

BATTERY

Operating Temperature	-20°C/-4°F to 122°F
Charging Temperature	0°C/32°F to 122°F
Capacity	27AH 345.6WH I 50AH 640WH
Operating Voltage	12.8V

SOLAR PANEL

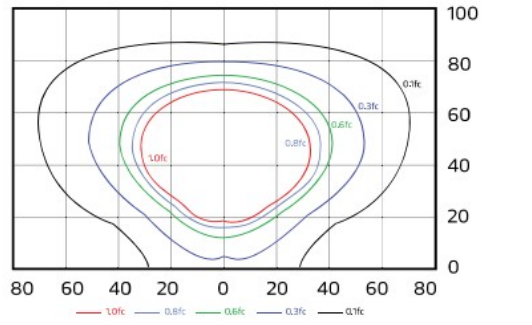| Rating Power	60W I 94W
Size	33.0″ X 16.0″ I 43.0″ X 19.0″
EPA	4.6 I 7.1

MAXIMUM AUTONOMY

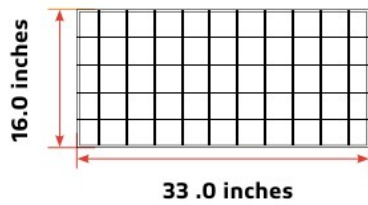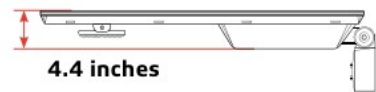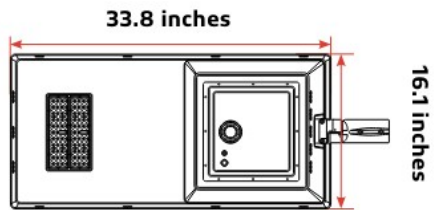| Motion Sensor Mode (Without grid power)	40%–100% 35hrs 20%–80% 65hrs
Time Control Mode (Without grid power)	Night Owl 24hrs Early Bird 21hrs
Constant Mode (Without grid power)	100% 13hrs 70% 18hrs 40% 32hrs

IES/ BEAM

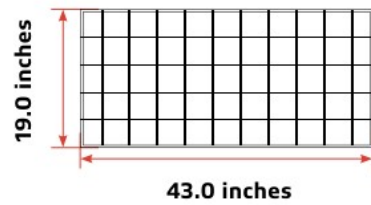**HYPER 25W TYPE III** [MOUNTING HETGHT 20FT]

100
80
60
40
20
0

80 60 40 20 02 04 06 08 0

— 1.0fc — 0.8fc — 0.6fc — 0.3fc — 0.1fc

[UNIT: FT]
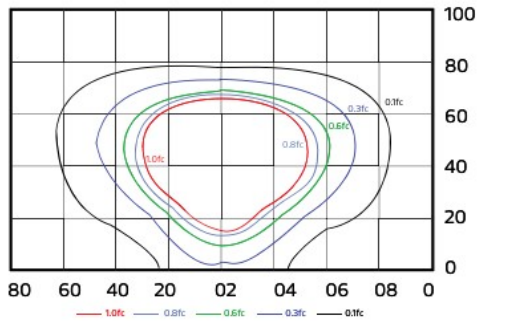
HYPER 45W TYPE III [MOUNTING HETGHT 20FT]

100
80
60
40
20
0

80 60 40 20 0 20 40 60 80

— 1.0fc — 0.8fc — 0.6fc — 0.3fc — 0.1fc

[UNIT: FT]

HYPER 25W

33.8 inches

16.1 inches

4.4 inches

16.0 inches

33 .0 inches

HYPER 45W
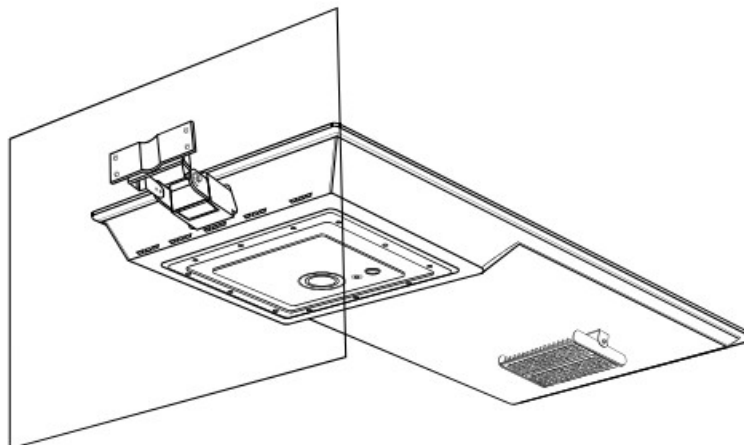
43.5 inches
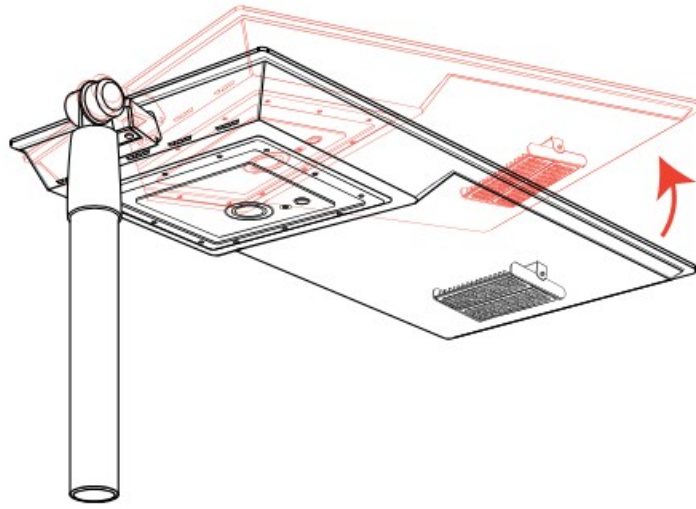
19.5 inches

4.4 inches

19.0 inches

43.0 inches
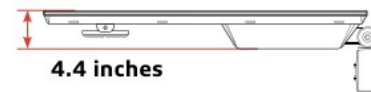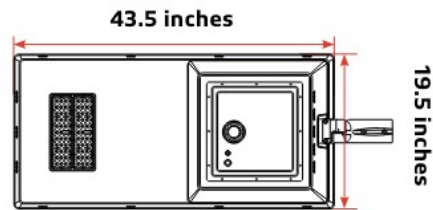
INSTALLATION ACCESSORIES

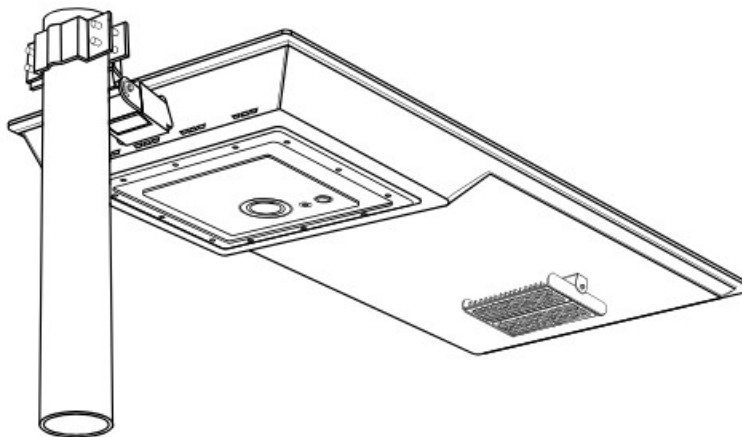## A. TRUNNION—Wall Mount

A-a. STLHYB-WM
B. SLIP FITTER

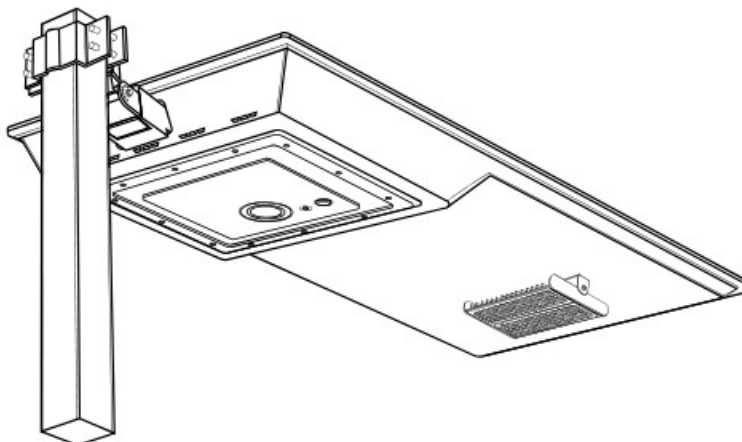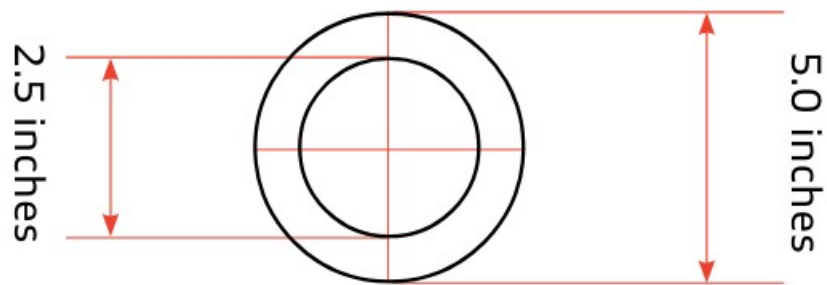B-b. STLHYB-SF

Tenon Diameter 2 3/8"
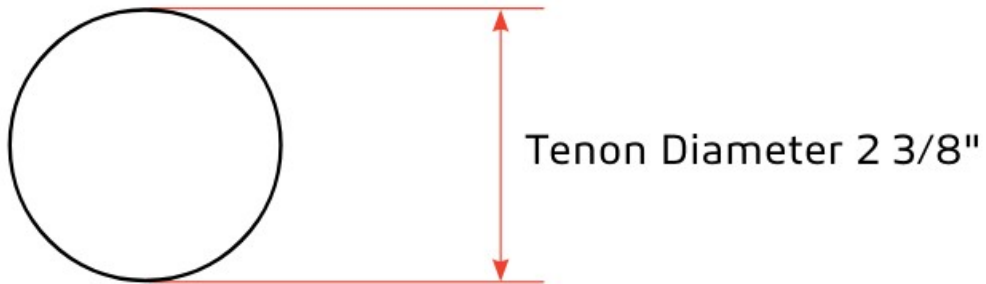
C. TRUNNION—Round

D. TRUNNION—Square

Round Pole Diameter

2.5 inches ... **5.0 inches**

C-c. STLHYB-TR

Square Pole Dimension

2.5 inches ... **5.0 inches**
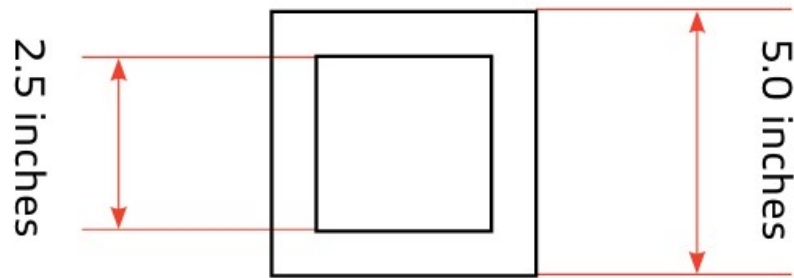
D-d. STLHYB-TR

DETECTION ZONE

MOTION SENSOR

Up to 15m/49'   Up to 15m/49'
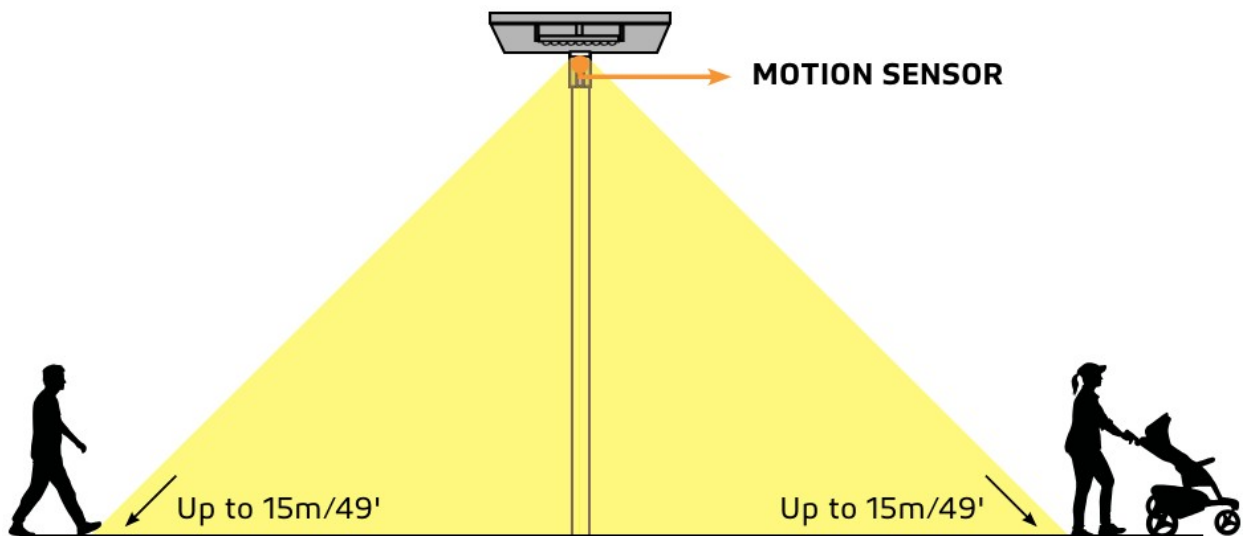
BEST FACING DIRECTION OF SOLAR PANEL
The area will dictate the installation of the fixtures and will sometimes prevent the lights from facing south. But that's okay! Panels facing West & East won't get as much light as Southern facing panels, but will still collect a good amount of sunlight. A North 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.
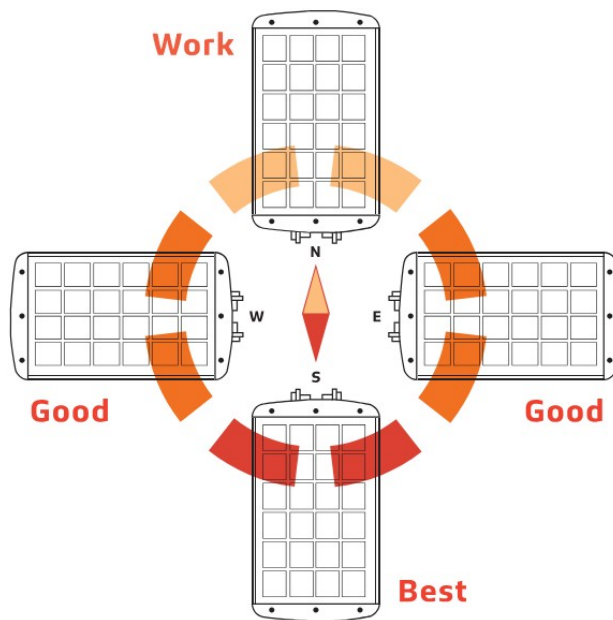
ORDERING INFORMATION

SERIES	WATTAGE	OPTIC TYPE	COLOR TEMPERATURE	MOUNTING OPTIONS	FINISH
STLHYP= HYPER	25=25W 5,000 LUMENS 45=45W 9,000 LUMENS	T3=TYPE III	3=3000K 4=4000K 5=5000K 6=5700K	WM=WALL MOUNT TR=TRUNNION SF=SLIP FITTER	GY=GRAY (RAL 7038) BR=BRONZE (RAL 8019) BK=BLACK (RAL 9004)

	-		-		-		-		-	

WARRANTY

HYPER products are covered by a 5 year limited warranty. SOLTECH urban light warrants to the original purchaser that this product is free from defects in materials and workmanship for the period of 5 years from date of purchase. To obtain warranty service please contact your local distributor or sales rep for further instruction. Distributed exclusively by Project Master in Costa Rica.
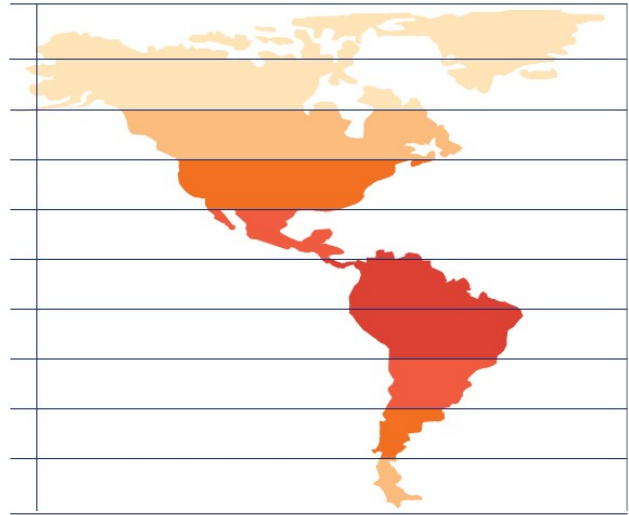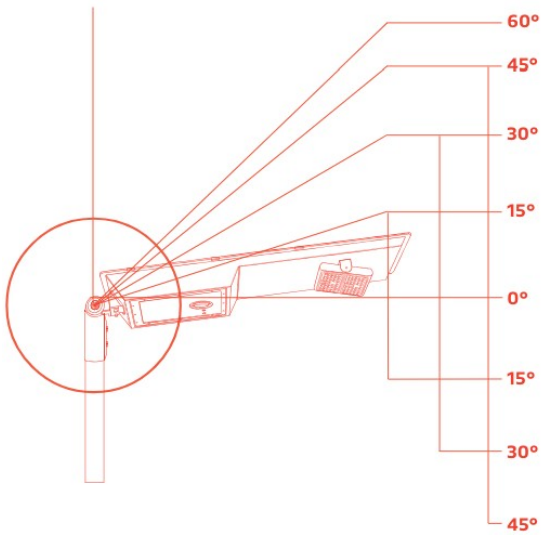
PANEL ANGLE GUIDE

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.
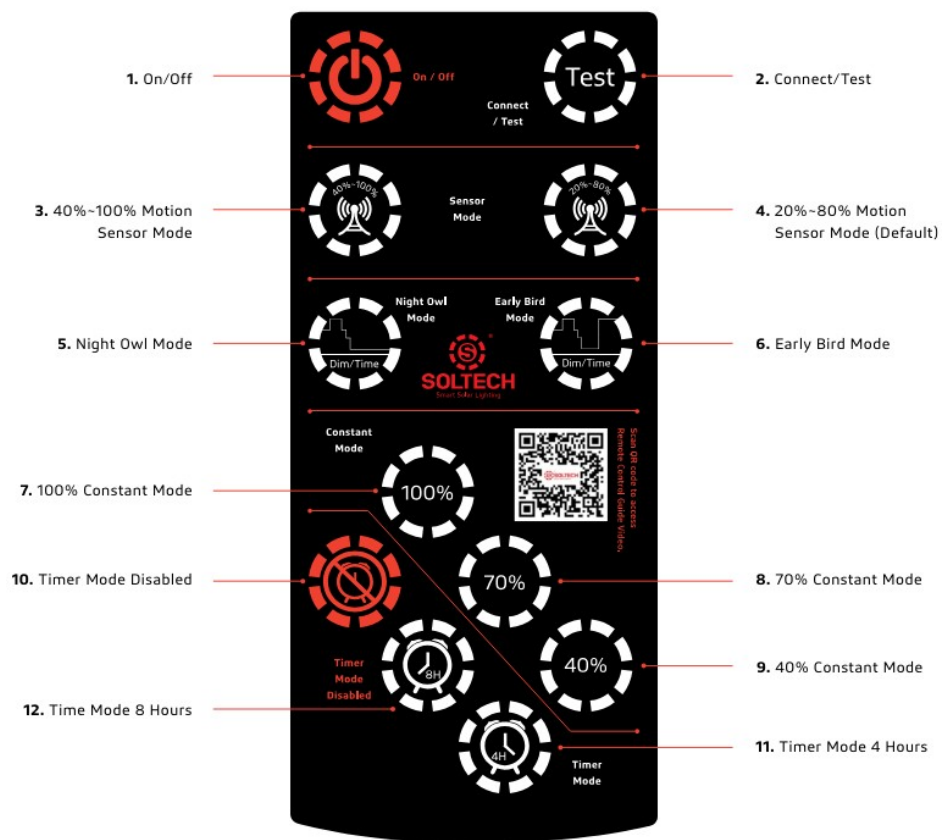
Key

Strong sunlight   Nromal sunlight   Less sunlight

World Wide Panel Angles

REMOTE CONTROLS

1. On/Off
2. Connect/Test
3. 40%~100% Motion Sensor Mode
4. 20%~80% Motion Sensor Mode (Default)
5. Night Owl Mode
6. Early Bird Mode
7. 100% Constant Mode
8. 70% Constant Mode
9. 40% Constant Mode
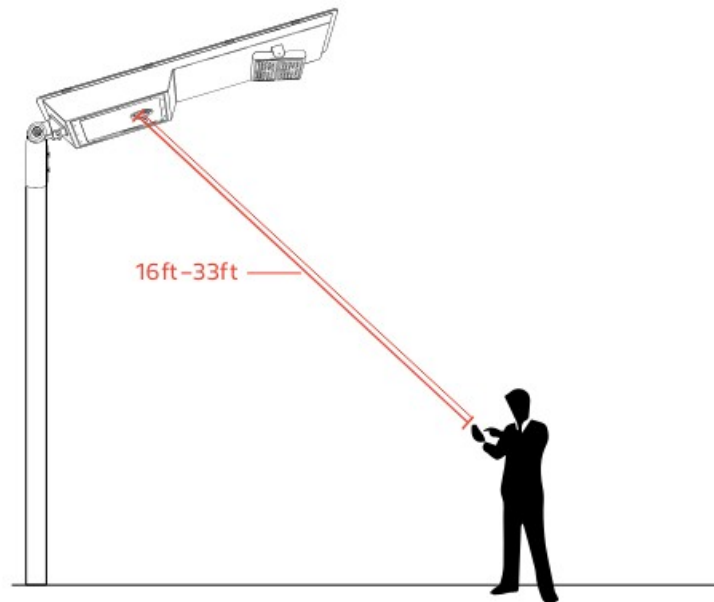10. Timer Mode Disabled
11. Timer Mode 4 Hours
12. Time Mode 8 Hours

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.

16ft–33ft

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.
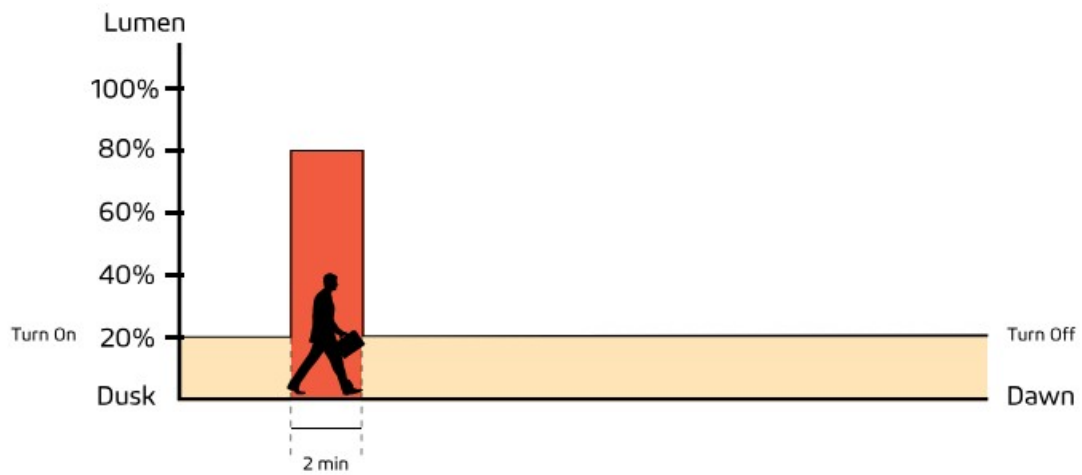
3. 40%~100% Motion Sensor Mode

   Constant 40% brightness (turns on at dusk, turns off at dawn); 100% brightness turns on for 2 minutes when motion is detected.
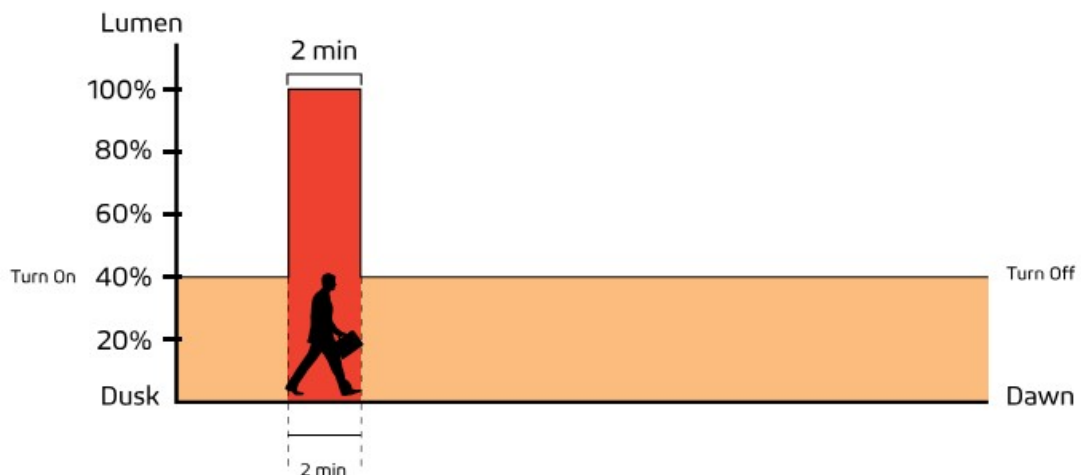
4. 20%~80% Motion Sensor Mode (Default)

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

(IAP) Intelligent Adaptive Program Battery Control Technology

In order to extend the off-grid autonomy of the HYPER under shady trees, heavy rain, and thick clouds, our controllers now integrate anadaptive smart control feature to actively track battery capacity andadjust light output accordingly. Before integrating this feature, selectinga 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 percentageon the remote relative to battery capacity rather than max LED outputThis 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).
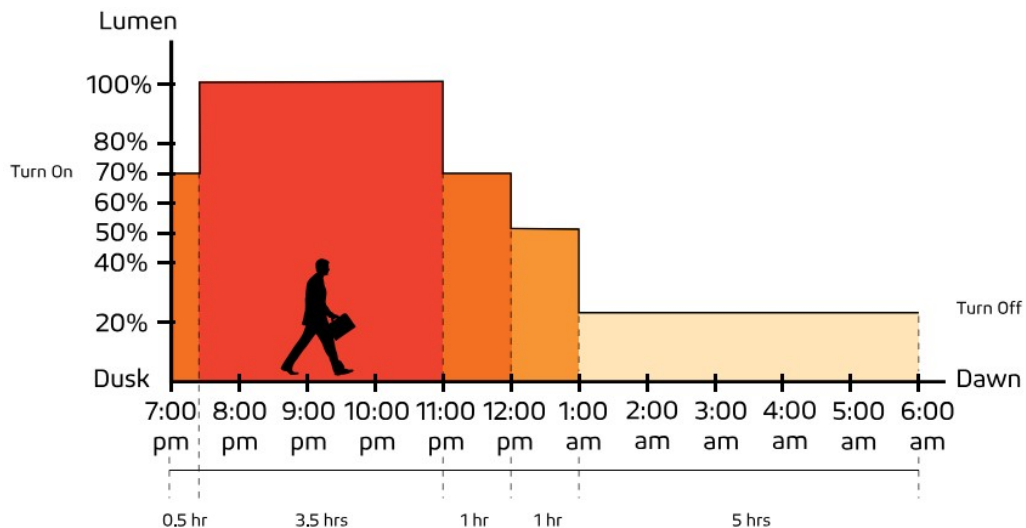
6. Early Bird Mode

   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).
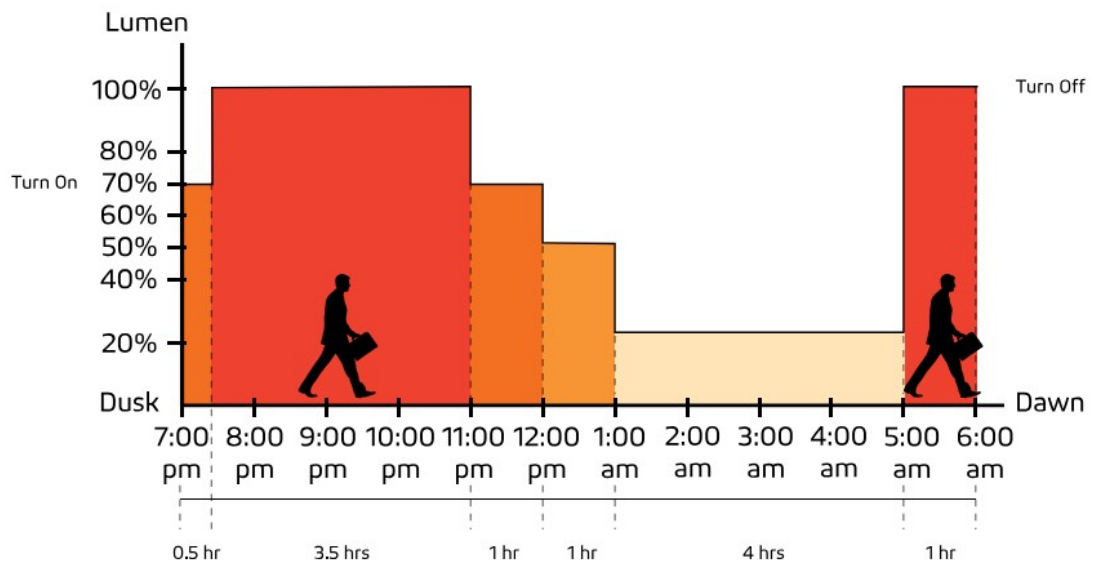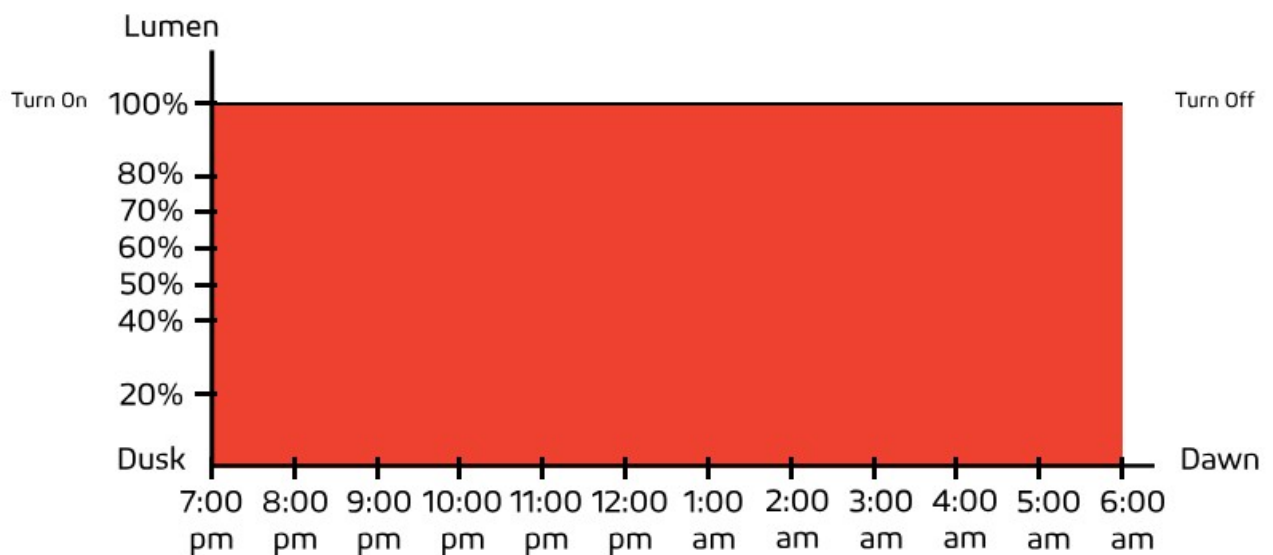
Important

Dusk and dawn time may be diffrent in other locations and seasons.

The sensors of our products will follow the light patterns of where it is installed. The time period shown in the chart above is just an example to help you understand the different lighting modes only.
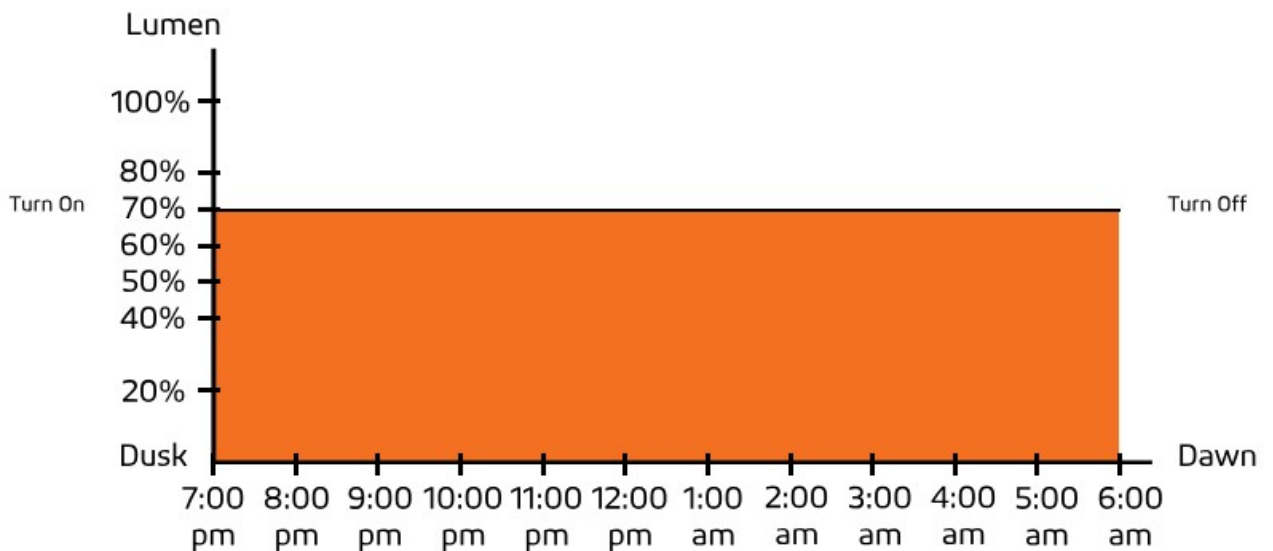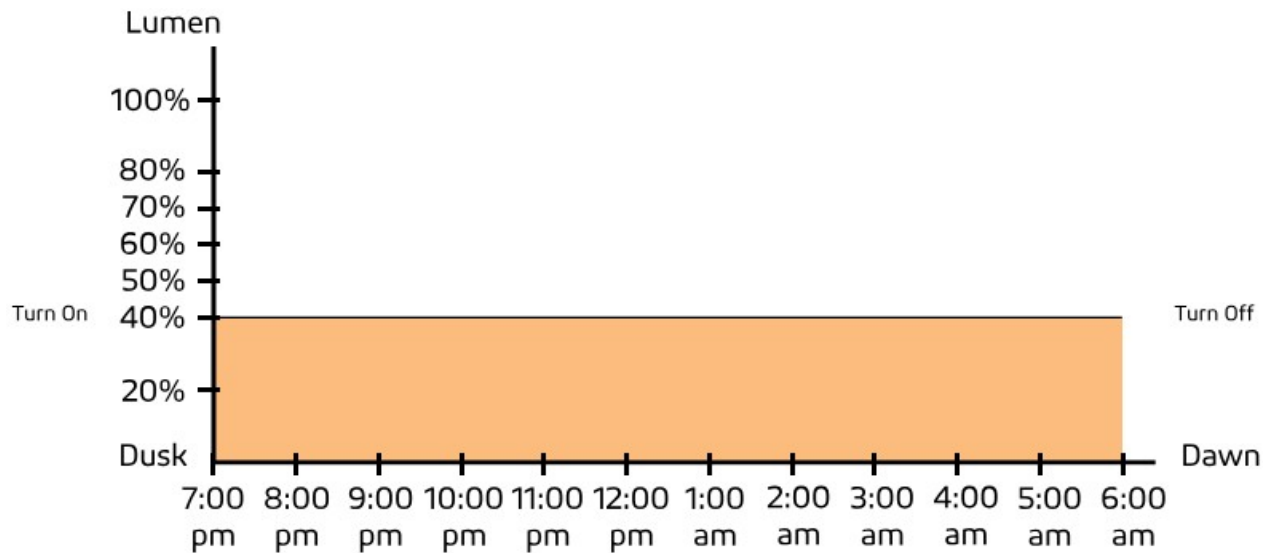
7. 100% Constant Mode

100% brightness from dusk to dawn.

8. 70% Constant Mode

70% brightness from dusk to dawn.
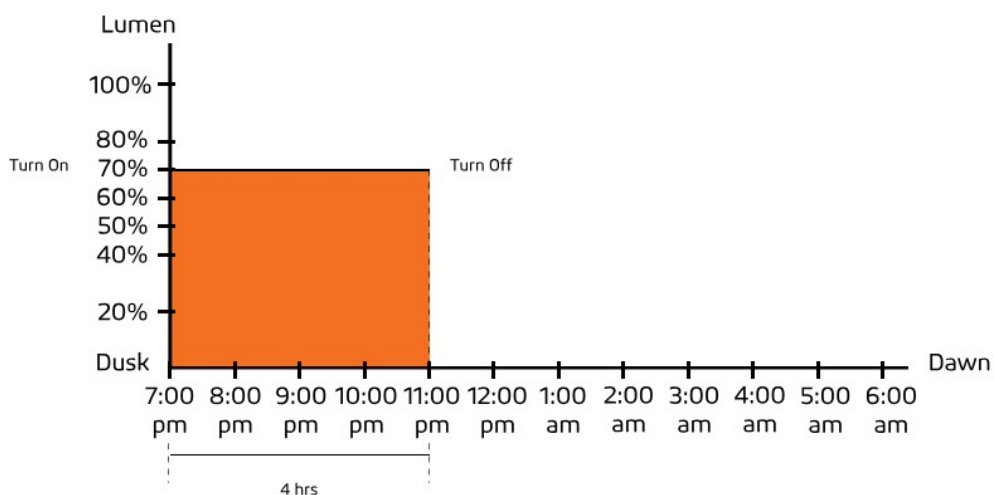
9. 40% Constant Mode

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.
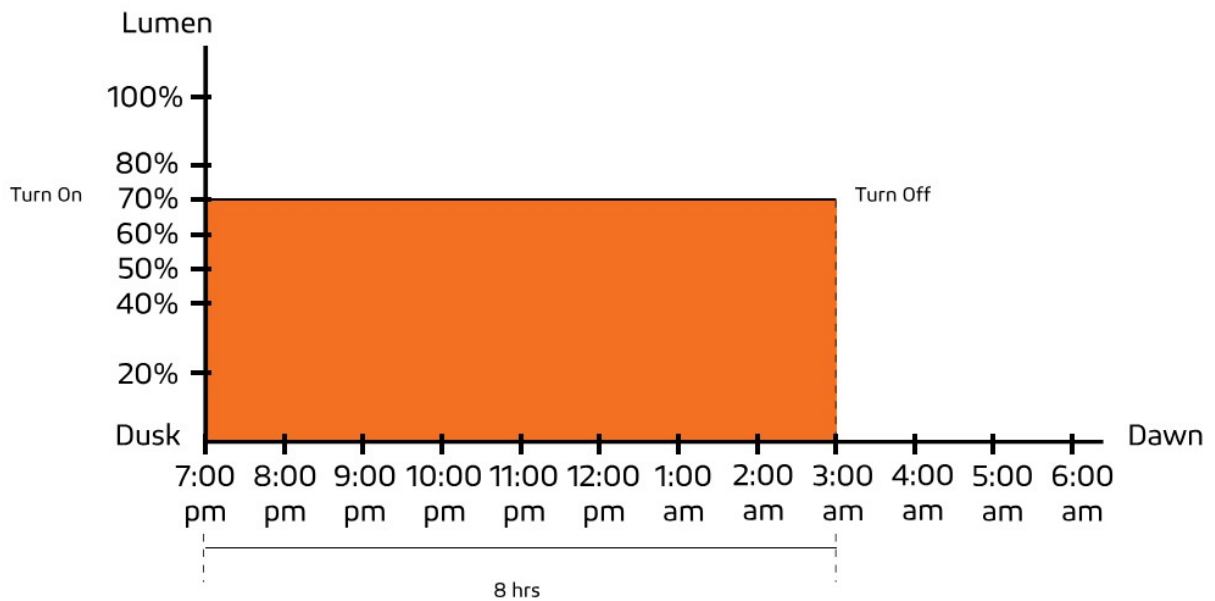

12. Time Mode 8 Hours

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.

Lumen

100%
80%
70% — Turn On ... Turn Off
60%
50%
40%
20%
Dusk .... Dawn

7:00 8:00 9:00 10:00 11:00 12:00 1:00 2:00 3:00 4:00 5:00 6:00
pm pm pm pm pm pm am am am am am am

8 hrs

Important
Dusk 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.
SOLTECH LLC reserves the right to update all product data sheets at any time. Consult SOLTECH marketing specialists for publicationupdates at **hello@soltechlighting.com**

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SOLTECH
Smart Solar Lighting

Documents / Resources

SOLTECH HYPER 25W 45W LED Solar Area Light [pdf] Instruction Manual
HYPER 25W 45W LED Solar Area Light, 25W 45W LED Solar Area Light, LED Solar Area Light, Solar Area Light, Area Light, Light

References

- ⊕ **Commercial Solar LED Lights | SOLTECH Smart Solar Lighting**
- **User Manual**