

## **SOLTECH CEGONIA Elegant Solar LED Light Installation** Guide

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# SOLTECH

### **SOLTECH CEGONIA Elegant Solar LED Light**



Thank you for purchasing CEGONIA Urban Lighting Products.

### Introduction

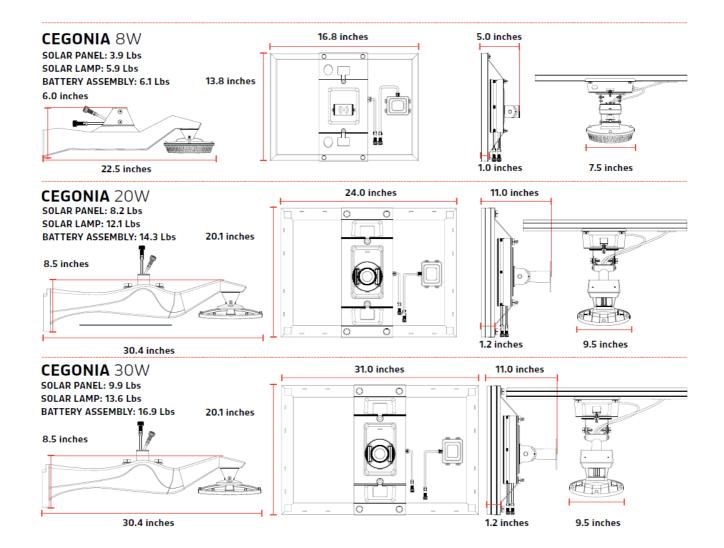
CEGONIA combines stylish design with high efficiency. You can adjust both the tilt angle and the azimuth to make sure the panel is in the optimal position to capture the sun's energy. It is a perfect fit for courtyards, parks, schools, communities, and paths.

### **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 irradiance. A strict minimum of 3.5 hours/day of sunshine on average is recommended. Select the right operating mode according to the local legislation needs and the local sunshine conditions. Keep it away from shadows. Self-cleaning is available when the light fixture has a minimum angle of 15 degrees. 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 the product 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. The range of the light module on the lighting fixture is 20–26 feet (6–8 meters). The ideal installation spacing is >16 feet(5 meters). When installing two or more lighting fixtures on one pole, select desired operating mode before installation. Interference can cause delay or malfunction when using the remote control to change operating modes after 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) later 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.



### **Specification**

Specifications	CEGONIA 8W		CEGONIA 20W		CEGONIA 30W		
LED Nominal Power	8W		20W		30W		
Solar Panel	20W 18V		48W 18V		64W 18V		
LiFePO4 Battery	115WH 12.8V 9AH		256WH 12.8V 20AH		384WH 12.8V 30AH		
Weight	15.9Lbs		34.6Lbs		40.4Lbs		
Lumen Output@5000K	1600		4000		6000		
CRI	> 70	(> 80 Optional)	> 70	(> 80 Optional)	> 70	(> 80 Optional)	
LED Chip	Lumileds >70)	,		Lumileds 5050 (215lm-CR >70)		Lumileds 5050 (215lm-CR >70)	
EPA	2.37 ft2		6.12 ft2		6.12 ft2		
Waterproof Rate	IP65		IP65		IP65		
Casting	Aluminum		Aluminum		Aluminum		
Efficiency@5000K	200lm/W		200lm/W		200lm/W		
* Charging Time	6hrs		6hrs		6hrs		
Operation Mode	Remote control and		Remote control and		Remote control and		
	One-key Setting		One-key Setting		One-key Setting		
Installation Height	6–13 ft		9–16 ft		9–20 ft		
* Operating Temperat ure	-4 to 122°F		-4 to 122°F		-4 to 122°F		
* Charging Temperature	32 °F to 149 °F		32 °F to 149 °F		32 °F to 149 °F		

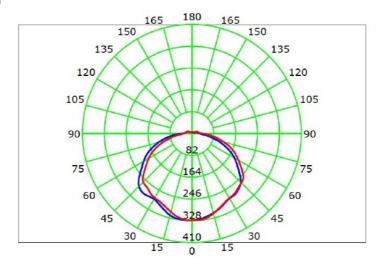
### Maximum Autonomy@Full Power

Motion Sensor Mode	<b>40%–100%</b> 35hrs <b>20%–80%</b> 55hrs	<b>40%–100%</b> 35hrs <b>20%–80%</b> 55hrs	<b>40%–100%</b> 35hrs <b>20%–80%</b> 55hrs	
Time Control Mode	Night Owl 28hrs Early Bird 25hrs	Night Owl 28hrs Early Bird 25hrs	Night Owl 28hrs Early Bird 25hrs	
Constant Mode	100% 12hrs 70% 17hrs 40% 30hrs	100% 11hrs 70% 15.5hrs 40% 27hrs	<b>100</b> % 11hrs <b>70</b> % 15.5hrs <b>40</b> % 27hrs	

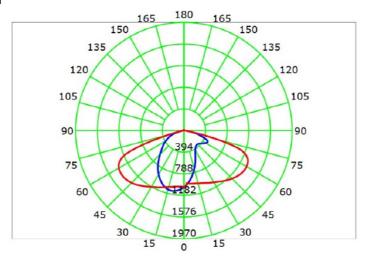
- The temperature can impact the battery's charging and normal operation. If your place's temperature is under 32°F, we advise you to use the SUNLIKE PRO version to achieve better lighting results.
- The solar charge time data is based on 77 degrees F ambient temperature with the panel pointed directly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

### **Luminous Distribution**

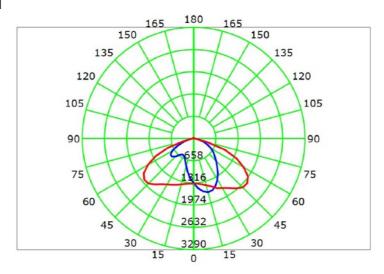
### **CEGONIA 8W Type III**



### **CEGONIA 20W Type III**



### **CEGONIA 30W Type III**



### **Battery Notes**

- 1. The LiFePO4 -battery-powered CEGONIA lights are visibly brighter than other outdoor solar lights, and their performance overall is more reliable.
- 2. To charge the battery fully may take up 6 to 12 hours.
- 3. Output will be reduced to 40% when the battery is below 40% of its capacity.
- 4. Battery will stop charging when the ambient temperature is below 32°F or above 149°F.

#### Battery Status is indicated by the red/green indicator on the lighting fixture as follows:

- Red indicator (Charging)
  - Slow red light flashing = Charging
  - Red light continuously on = fully charged
  - Quick red flashing = charge fault
- · Green indicator (not charging)
  - Greenlight continuously on = more than 40% of the battery capacity remaining
  - Slow green light flashing = battery capacity below 10%
  - Quick green light flashing = battery below 0% mode—Protect battery does not over-discharging

#### **Storage**

To avoid over-discharge of the battery during storage, please recharge the lighting fixture every 4 months. Use the dedicated charger to charge, reset the switch when done.

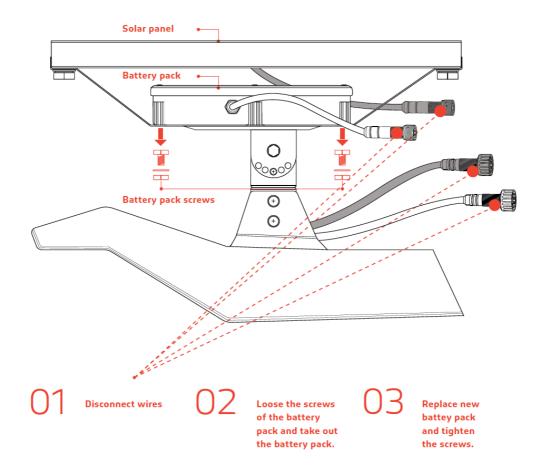
### **Battery Replacement**

- 1. Disconnect the wire connectors.
- 2. Loose the screws of the battery pack and take out the battery pack.
- 3. Replace a new one.
- 4. Tighten the screws of the battery pack.
- 5. Connect the wire connectors

(Be sure you match the color when you connect them).

### (IAP) Intelligent Adaptive Program Battery Control Technology

In order to extend the off-grid autonomy of the CEGONIA 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 percent-age 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 the 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%.



### **Installation and Wiring Compliance**

- 1. Installation and wiring must comply with the State and National Electrical Codes.
- 2. The CEGONIA 8W, 20W and 30W models are intended for outdoor use only and should not be installed in an unventilated area, and shall be installed in an environment within the operational 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 lighting fixture. Avoid areas with shades.
- 4. Before installation, if applicable, please ensure the light pole and its foundation are solid 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, please press the ON/OFF key in the remote control and check whether it shows a red light on the indicator. Please cover the panel and check if the light module turns on normally within 1 minute.

#### **After Installation**

The lighting 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).

### **Ordering Information Chart**

Series	Wattage	Color Temperature	Mounting Options	Finish
STLSTEBAA= CEGONIA BAA	<b>8</b> =8W 1600 Lumens <b>20</b> =20W 4000 Lumens <b>30</b> =30W 6000 Lumens	3=3000K 4=4000K 5=5000K 6=5700K	WM=Wall Mount TRR=Trunnion Round TRS=Trunnion Square	<b>WH</b> =White <b>BR</b> =BRONZE

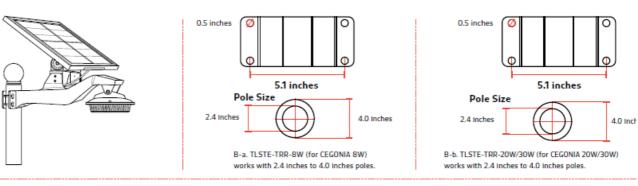
### For example: STLSTEBAA303WMWH

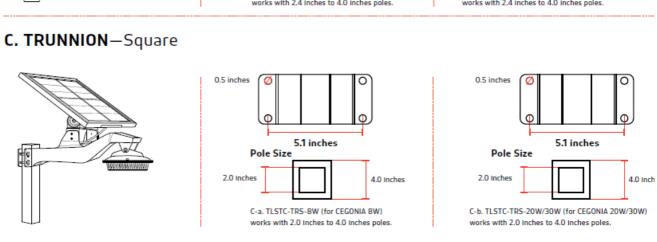
This means the customer wants a CEGONIA 30 watt, 3000K CCT, wall mount installation, with a white finish. DO NOT send the sample number directly to our sales. Use the information in the chart above to create a model number with the correct series, wattage, temperature, mounting option, and finish for the product that you want.

### **Mounting Accessories**

### A. TRUNNION-Wall Mount 6.8 inches 4.0 inches 0.5 inches 0.5 inches 0.2 Inches 5.1 inches A-a. TLSTE-WM-08 (for CEGONIA 8W) A-b. TLSTE-WM-20/30 (for CEGONIA 20W/30W)

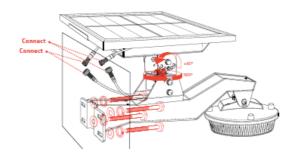
### B. TRUNNION-Round

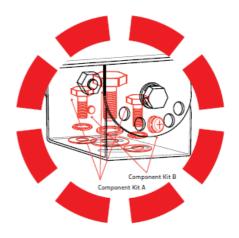


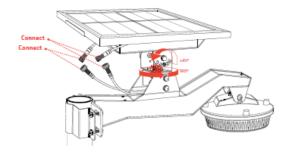


### Installation

### **CEGONIA 8W**

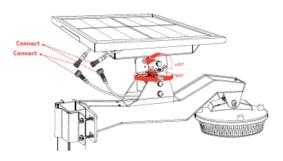




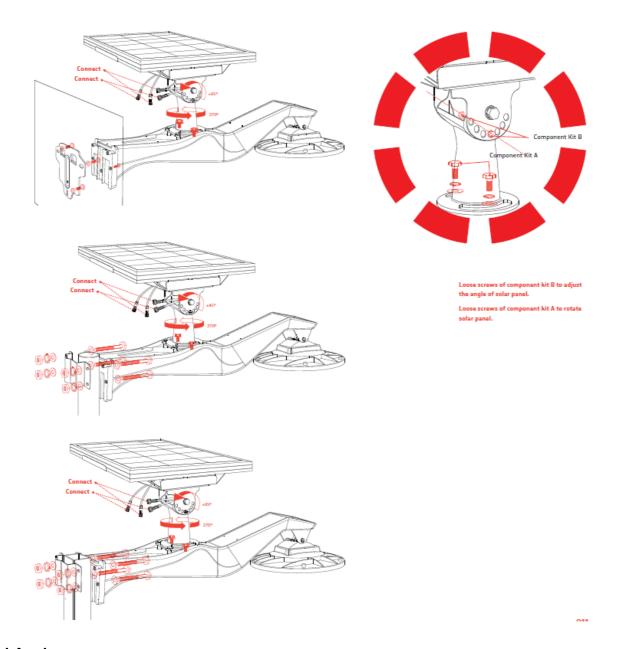


Loose screws of component kit B to adjust the angle of solar panel.

Loose screws of component kit A to rotate

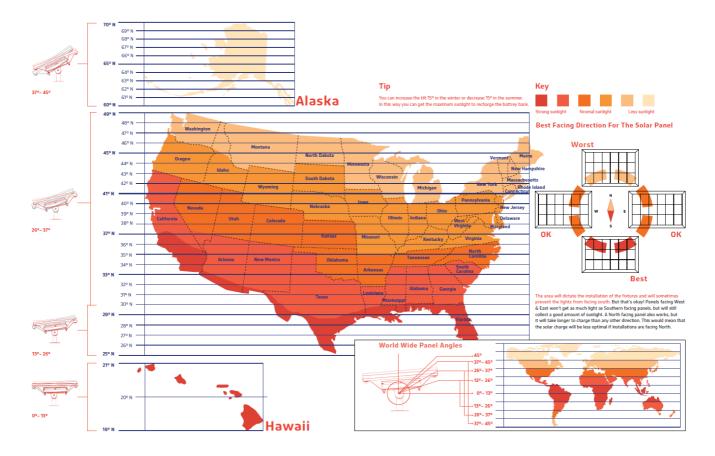


### **CEGONIA 20W 30W**

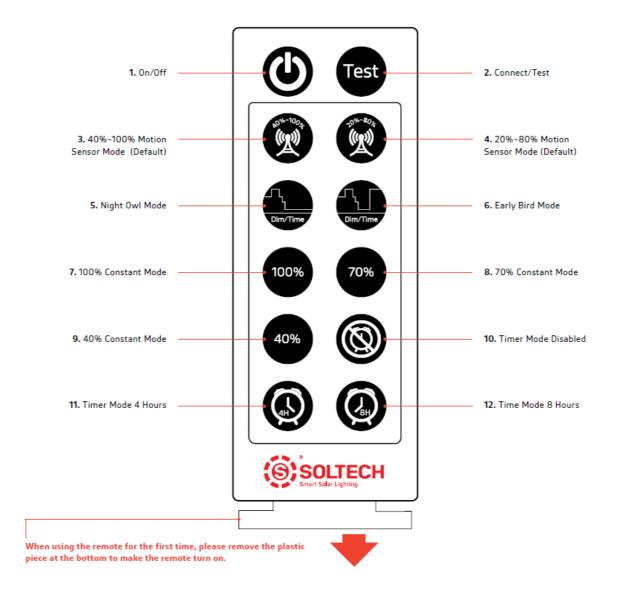


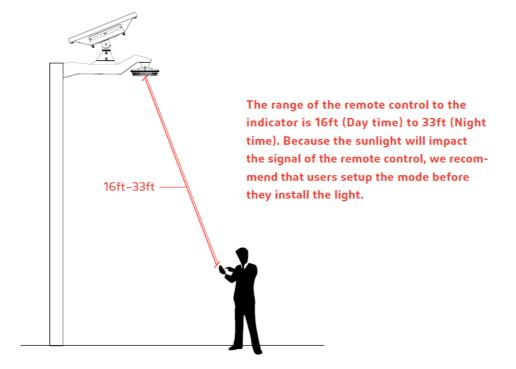
### **Panel Angle**

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



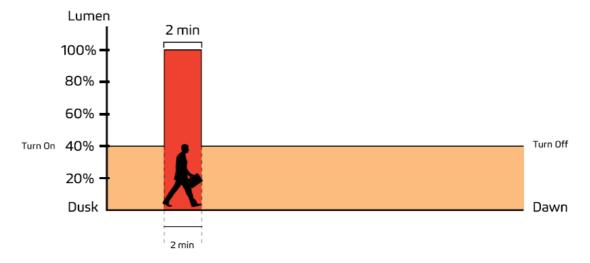
### **Remote Control Guide**





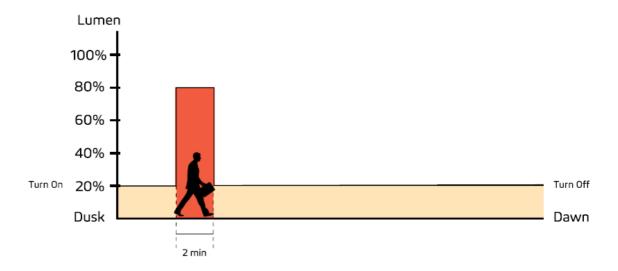
### 40%~100% Motion Sensor Mode

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



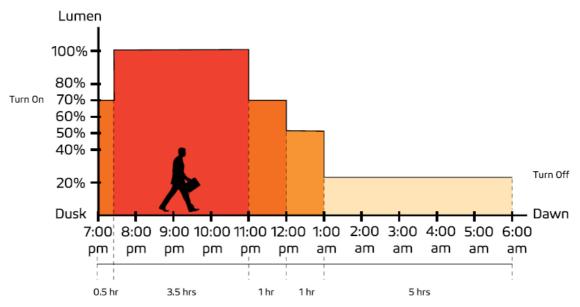
### 20%~80% Motion Sensor Mode (Default)

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



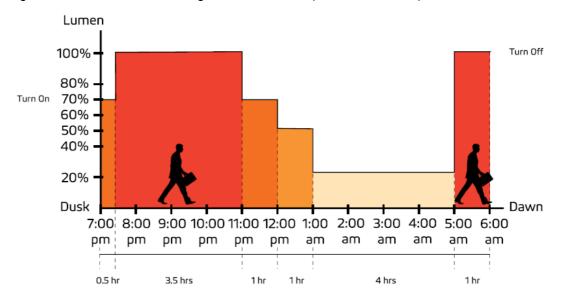
### **Night Owl Mode**

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).



### **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).



### (IAP) Intelligent Adaptive Program Battery Control Technology

In order to extend the off-grid autonomy of the CEGONIA under shady trees, heavy rain, and thick clouds, our controllers now integrate an adaptive smart control feature to actively track battery capac-ity and adjust light output accordingly. Prior to including this feature, selecting a light output percentage on the remote determined the constant percentage of max LED brightness. Now with (IAP), the controller actively monitors the battery and regulates the electrical current to the LEDs. The controller now applies the selected percentage output on the remote to the battery capacity, rather than the max LED output. This smart-control feature can increase our off-grid performance by up to 40%.

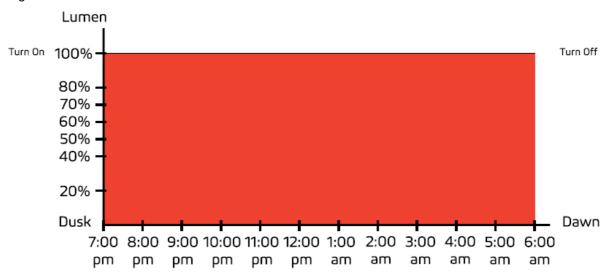
### **Important**

Dust 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.

### **Remote Control Guide**

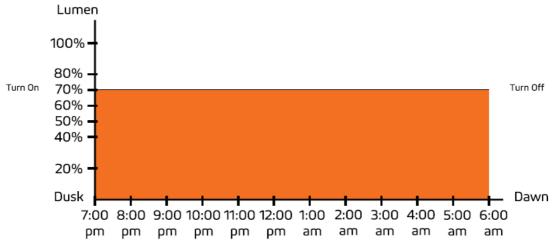
#### 100% Constant Mode

100% brightness from dusk to dawn.



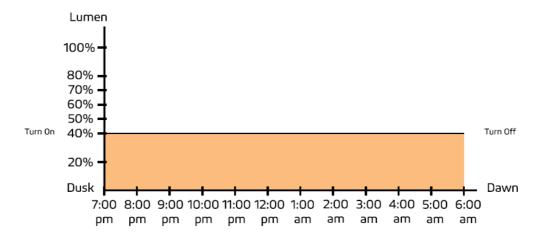
### 70% Constant Mode

70% brightness from dusk to dawn.



### 40% Constant Mode

40% brightness from dusk to dawn.

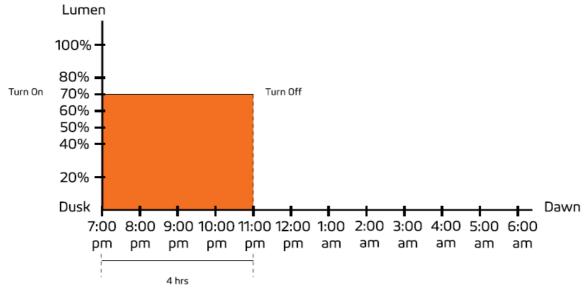


#### **Timer Mode Disabled**

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

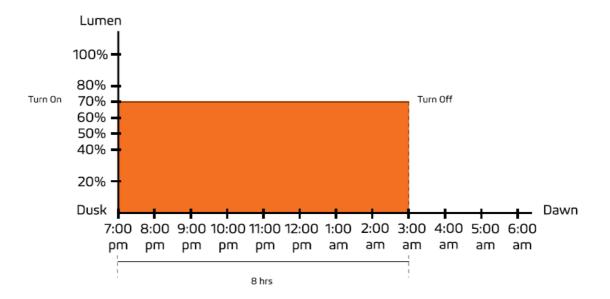
#### **Timer Mode 4 Hours**

This is an additional mode that can work with any other mode. 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.



#### **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% Con-stant 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.

CEGONIA products are covered by a 5 year limited warranty. CEGONIA 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.

#### **Documents / Resources**



Manuals+,