

# HIGHLIGHT SP-OPTC Specifications



## Why us?

### **Innovative Technology**

High-efficiency solar and advanced LEDs deliver superior performance, long life, and maximum ROI.

### **Photometric**

We conduct photometric measurements on all our products to ensure optimal performance and compliance with industry standards

### **Versatile Lightning**

We designs and install solar-powered lightning systems tailored for all kind of locations such as streets, parks, pathways, homes, etc.

### **Global Reach**

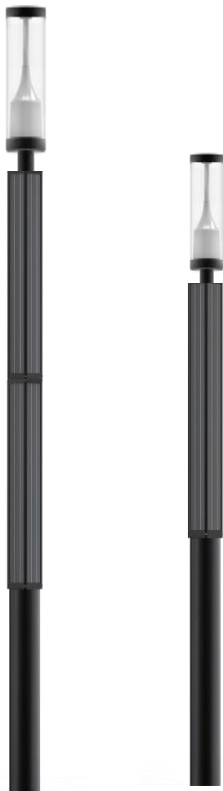
Worldwide success proves our adaptability and regulatory expertise.

### **Sustainable Savings**

These solutions enhance safety, promote sustainability and providing significant energy and cost saving.

### **Warranty**

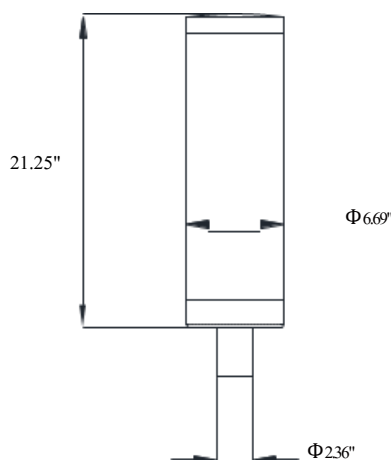
SolarPath is dedicated to delivering architectural and commercial-grade solar lighting that can be customized to meet specific client requests, both in technical specifications and aesthetic design, ensuring a perfect fit for a diverse range of needs.



The SolarPath HIGHLIGHT SP-OPTC™ is the premier LED solar illumination technology in its class today. Ultra-bright/High Intensity LED lighting means a total lighting solution for any need. The solar panel is wrapped and can be installed on a new or an existing pole. It is new technology. This product has both a solar engine and a LED light. The battery and controller are inside pole which allow this product to be used for, roads, parking lot, pathway, etc. The lighting fixture can be used up to 80W and can be controlled via remote control.

## Technical specification

|                                |                                                                         |                                         |
|--------------------------------|-------------------------------------------------------------------------|-----------------------------------------|
| <b>Solar Module Parameters</b> | Type                                                                    | High-efficiency Monocrystalline Silicon |
|                                | Power                                                                   | Up to **560W / 1200W                    |
| <b>Solar Charge Controller</b> | MPPT (Maximum Power Point Tracking), infrared solar charging controller |                                         |
| <b>Battery</b>                 | LifePO                                                                  | Up to 90AH                              |
| <b>LED Light Parameters</b>    | Light Source Power                                                      | Up to 80W (Up to 13,000 lm)             |
|                                | CCT (Correlated color temperature)                                      | 3,000K-6,000K/ Amber                    |
|                                | CRI (Color rendering index)                                             | <u>≥81</u>                              |
| <b>Control Modes</b>           | Manual ON/OFF / Automatically ON/OFF / Time Control                     |                                         |
| <b>CCT</b>                     | Depend on installation area, can be programed with remote control       |                                         |
| <b>IP Rating</b>               | IP67                                                                    |                                         |
| <b>Product Size</b>            | Light Body                                                              | Depend On LED power                     |
|                                | Solar Panel                                                             | Depend On Solar Panel wattage           |
| <b>Net Weight</b>              | Light Body                                                              | Depend On LED power                     |
|                                | Solar Panel                                                             | Depend On Solar Panel wattage           |



## Vertical Solar Module



### Main Specification

|                    |                                        |                       |
|--------------------|----------------------------------------|-----------------------|
| Model              | VSP-140                                | VSP-200               |
| Specification      | 140W 18V/36V MONO                      | 200W 18V/36V MONO     |
| Dimension          | 8.97''*7.87''*61.41''                  | 8.97''*7.87''*81.10'' |
| Pole diameter      | 2.95''~5.51''                          | ●                     |
| Cell efficiency    | 22.5%                                  | ●                     |
| Structure material | UPVC + aluminum alloy / aluminum alloy |                       |
| Lifetime           | >20 years lifetime                     |                       |
| Warranty           | 5 years                                |                       |



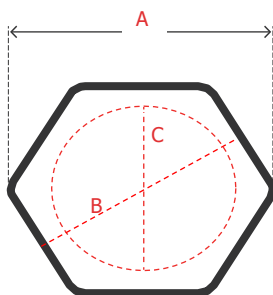
## GeoFlex/ Polygonal Photovoltaic Module

The GeoFlex Series features a foldable polygonal solar panel design, adaptable to shapes like hexagons or octagons for customizable power output. Its foldable structure reduces packaging volume by over 50%, lowering international shipping costs. With a modular design, it easily expands for higher power needs, while 360-degree charging ensures maximum sunlight capture.

The vertical cylindrical panels provide superior wind resistance and a sleek, urban-friendly design that prevents snow accumulation and enhances durability. Ideal for solar streetlights, surveillance systems, and traffic signals, the GeoFlex Series combines functionality, efficiency, and seamless urban integration.

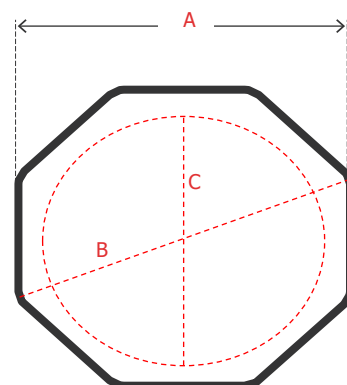


Hexagon



**OCTAGON**

8 Sides  
A = 10.62" B = 11.41" C = 7.48"

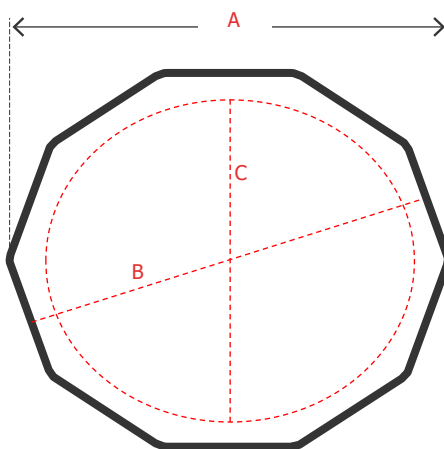


**HEXAGON**

6 Sides  
A = 8.85" B = 7.71" C = 4.72"

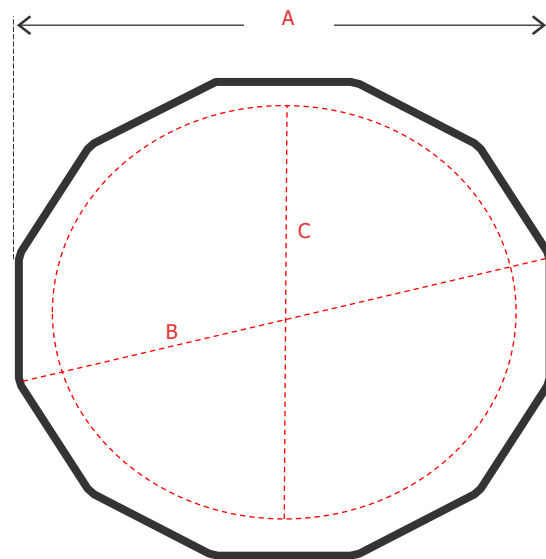


Octagon



**DECAGON**

10 Sides  
A = 14.17" B = 13.38" C = 10.23"

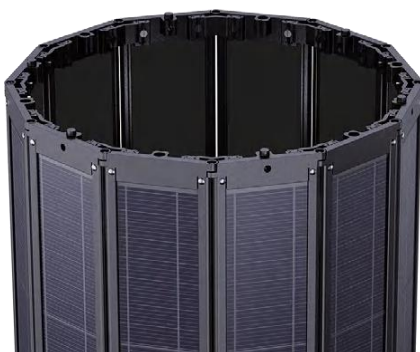


**DODECAGON**

12 Sides  
A = 16.14" B = 16.73" C = 12.99"



Decagon



Dodecagon

## Vertical Solar Tube

**80W I 100W I 140W**

Designed in U.S.A and assembled in P.R.C, SolarWrap vertical solar cylinder represents an innovative solution tailored for pole-mounted Applications. Distinguished from conventional solar panels, poles equipped with the SolarWrap cylinder exhibit exceptional aesthetic appeal, seamlessly integrating into serene environments while retaining the appearance of traditional poles, albeit enhanced with beauty. Its versatility extends to various Applications including solar light poles, solar camera poles, and solar traffic signs.



### Main Specification

| Model              | VST-80                                   | VST-100       | VST-140       |
|--------------------|------------------------------------------|---------------|---------------|
| Specification      | 80W 6V MONO                              | 100W 6V MONO  | 140W 9V MONO  |
| Dimension          | D6.29"*40.94"                            | D6.29"*40.94" | D9.44"*40.94" |
| Pole diameter      | 2.36"~3.54"                              | 2.75"~4.72"   | 3.14"~6.69"   |
| Cell efficiency    | 22.5%                                    | ●             | ●             |
| Structure material | Tempered glass + aluminium alloy profile |               | ●             |
| Lifetime           | >20 years lifetime                       | ●             | ●             |
| Warranty           | 5 years                                  | ●             | ●             |



## Lithium Battery Cylinder

### Built into Poles I Outside of Poles

Introducing the S&R Series Lithium Battery Pack – the ultimate power solution tailored for outdoor lighting and versatile Applications. Designed to fit seamlessly within lamp poles, the S & R Series redefines efficiency and durability, making it the perfect choice for solar streetlights, solar-powered surveillance systems, and solar advertising displays.

Crafted with a robust aluminum alloy casing and an IP67 waterproof rating, this battery pack is built to withstand the toughest environmental challenges. Its customizable capacity ensures it adapts to your unique energy needs, delivering unmatched performance.

Whether powering outdoor systems or providing rapid indoor electricity supply, the S & R Series guarantees reliability and flexibility. Elevate your projects with this state-of-the-art energy solution, engineered for excellence in every detail.



## Lithium Battery Cylinder

### S Series

#### LiFePO4 Lithium Battery Cylinder



| Battery Spec           | S1236              | S1260              | S1290              | S2560              |
|------------------------|--------------------|--------------------|--------------------|--------------------|
| Battery Cell           | 6000mA 3.2V 32700  | ●                  | ●                  | ●                  |
| Nominal Capacity       | 12.8V 36AH         | 12.8V 60AH         | 12.8V 90AH         | 25.6V 60AH         |
| Battery Cell Quantity  | 24 pieces          | 40 pieces          | 52 pieces          | 80 pieces          |
| Array Mode             | 6P4S               | 10P4S              | 13P4S              | 10P8S              |
| Dimension (L*W*H)      | 12.59"*4.92"*4.25" | 20.07"*4.92"*4.25" | 27.95"*4.92"*4.25" | 36.22"*4.92"*4.25" |
| Net Weight             | 9.03lbs            | 11.68lbs           | 18.07lbs           | 27.55lbs           |
| Charge Mode            | C.C +C.V           | ●                  | ●                  | ●                  |
| Charge Cut-off Vol     | 14.6±0.05V         | ●                  | ●                  | ●                  |
| Discharge Cut-off Volt | 11±0.05V           | ●                  | ●                  | ●                  |
| Storage Temperature    | 41F~95F            | ●                  | ●                  | ●                  |
| Operating Temperature  | 5F~+113F           | ●                  | ●                  | ●                  |
| Lifetime (D.OD. 60%)   | 4,000 cycles       | ●                  | ●                  | ●                  |
| Warranty               | 3 Years            | ●                  | ●                  | ●                  |

### R Series

#### LiFePO4 Lithium Battery Cylinder



| Battery Spec              | R1260              | R1290          | R2460          | R2490          |
|---------------------------|--------------------|----------------|----------------|----------------|
| Battery Cell              | 15000mA 3.2V 32140 | ●              | ●              | ●              |
| Nominal Capacity          | 12.8V 60AH         | 12.8V 90AH     | 25.6V 60AH     | 25.6V 90AH     |
| Battery Cell Quantity     | 16 pieces          | 24 pieces      | 32 pieces      | 40 pieces      |
| Array Mode                | 4P4S               | 6P4S           | 4P8S           | 5P8S           |
| Dimension (L*Dia)         | L13.38"*D5.90"     | L24.40"*D5.90" | L24.40"*D5.95" | L47.24"*D5.95" |
| Net Weight                | 12.12lbs           | 17.19lbs       | 22.70lbs       | 34.17lbs       |
| Charge Mode               | C.C +C.V           |                |                |                |
| Charge Cut-off Voltage    | 29.2±0.05V         |                |                |                |
| Discharge Cut-off Voltage | 22±0.05V           |                |                |                |
| Storage Temperature       | 5F~95F             |                |                |                |
| Operating Temperature     | 5F~+113F           |                |                |                |
| Lifetime (D.OD. 60%)      | 4,000 cycles       |                |                |                |
| Warranty                  | 3 Years            |                |                |                |

## SOLAR STREET LIGHT

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### USES AND APPLICATIONS GUIDE

|                   |   |
|-------------------|---|
| Streets Lighting  | V |
| Parking Lots      | V |
| Residential Roads | V |
| Public Parks      | V |
| Sports Lighting   | V |

## ORDERING GUIDE

Ordering Guide: EXAMPLE: HIGHLIGHT SP-OPTC-A-\*\*RD-18V-\*\*80W-30W-3-30K-36AH-BLK-00

| Model             | Solar panel Qty. | Solar panel type | Voltage | Solar panel | LED Power | Distribution type | LED Color Temp | Battery options | LED body color | Motion sensor         |
|-------------------|------------------|------------------|---------|-------------|-----------|-------------------|----------------|-----------------|----------------|-----------------------|
| HIGHLIGHT SP-OPTC | A- 1 pc          | **RD-Round       | 18V     | **80W       | 30W       | 3- Type III       | 30K            | 36AH            | BLK- Black     | 00 – No motion sensor |
|                   | B- 2 pcs         | HE-Hexagon       | 36V     | **100W      | 40W       | 5 - Type V        | 40K            | 60AH            |                | 01 – Motion sensor    |
|                   | C- 3 pcs         | OC- Octagon      |         | **140W      | 50W       |                   | 60K            | 90AH            |                |                       |
|                   | D- 4 pcs         | DE- Decagon      |         | 150W        | 60W       |                   | *Amber         |                 |                |                       |
|                   |                  | DO- Dodecagon    |         | 200W        | 80W       |                   |                |                 |                |                       |
|                   |                  |                  |         | 250W        |           |                   |                |                 |                |                       |
|                   |                  |                  |         | 300W        |           |                   |                |                 |                |                       |

**\*Can customized per to customer requirement**



\*Up on request

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