

# SWPLB 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 Lighting**

We design and install solar-powered lighting systems tailored for all kinds 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 provide 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 SWPLB with solar wrap panel LED light is an architectural independent lighting solution ideally for various applications such as parks, pathways, bike lanes, remote areas, golf courses, beach resorts, marinas, residential areas and landscape lighting projects.

The architectural patented design in combination with a robust high LED lighting output in a high-grade construction makes it your ideal choice for all your self-contained lighting projects. SWPLB works completely without wiring and gets its power from the sun, using a special energy storage system, which requires no replacement of batteries for several years.

Energy storage and usage is controlled by a unique built-in self-decisive software algorithm. Cloudy days or shaded areas, the intelligent energy saving SWPLB always provides perfect lighting conditions.

### Technical specification

|                         |                                                                         |                                                  |
|-------------------------|-------------------------------------------------------------------------|--------------------------------------------------|
| Solar Module Parameters | Type                                                                    | CIGS Amorphous flexible solar panel wrap on pole |
|                         | Power                                                                   | Up to 80W                                        |
| Solar Charge Controller | MPPT (Maximum Power Point Tracking), infrared solar charging controller |                                                  |
| Battery                 | LifePO                                                                  | Up to 40AH                                       |
| LED Light Parameters    | Light Source Power                                                      | Up to 20W                                        |
|                         | Brightness                                                              | 3,000LM                                          |
|                         | CCT (Correlated color temp.)                                            | 3,000K-6,000K                                    |
| Operation profile       | Programmable, Dusk to Dawn (dim per to solar radiation)                 |                                                  |
| IP Rating               | IP65                                                                    |                                                  |
| Operation Temperature   | -4°F~140°F                                                              |                                                  |
| Pole Height             | Up to 6.5’FT                                                            |                                                  |
| Body material           | Stainless steel/ Aluminum pole                                          |                                                  |
| *Depend on quantity     |                                                                         |                                                  |



# FLEX SERIES -1.7N

CIGS Flexible Modules:  
High Power Density in a Flexible Form Factor

## Solar cylindrical wrap pole panel data sheet

### Key Features

- Record efficiency level in a CIGS flexible form factor.
- Low installed weight at less than 2.9 kg/m<sup>2</sup> (<0.6lb/ft<sup>2</sup>)
- No penetration, ballast or racking required.
- Applicable for high wind load and high shading losses.
- Bypass diodes reduce PV system shading losses.
- Directly bonds to many approved surfaces.

### Reliability and safety

- IEC 61646, IEC 61730-1 & -2, IEC 61701, IEC 62716, DEWA.
- UL 1703, ULC ORD C 1703, UL 2703.
- 5 years workmanship.
- 10/25 years warranty against power loss.





## FLEX SERIES

### SP-FWSP- CIGS MODULE SERIES

#### Electrical performance AT STC<sup>1</sup>

| Nominal Power PMPP              | (W) | 85       | 90    | 100   | 150   | 180   |
|---------------------------------|-----|----------|-------|-------|-------|-------|
| Power Output Tolerance          | (W) | +5/-0    | +5/-0 | +5/-0 | +5/-0 | +5/-0 |
| Maximum Power Voltage VMPP      | (V) | 18.44    | 24.84 | 18.2  | 18.8  | 22.23 |
| Maximum Power Current IMPP      | (A) | 4.72     | 3.71  | 5.49  | 7.96  | 8.08  |
| Open Circuit Current VOC        | (V) | 22.7     | 30.64 | 22.47 | 22.5  | 26.5  |
| Short Circuit Current ISC       | (A) | 5.28     | 4.19  | 5.93  | 8.38  | 8.38  |
| Maximum Series Fuse Rating      | (A) | 10       |       |       | 15    |       |
| Maximum System Voltage (IEC/UL) | (V) | 1000/600 |       |       |       |       |

<sup>1</sup>Standard Test Conditions (STC): 1000 W/m<sup>2</sup>, 77°F cell temperature, AM 15 spectrum.

#### Thermal Characteristics

| NOCT                         | (°F)   | 118.4 |
|------------------------------|--------|-------|
| Temperature Coefficient PMPP | (%/°F) | 32.68 |
| Temperature Coefficient VOC  | (%/°F) | 32.50 |
| Temperature Coefficient ISC  | (%/°F) | 32.01 |

#### Physical and Mechanical Specifications

| Length                    | 6.56'                                                                                    | 4.92'    | 4.92'    | 4.92'    | 5.74'    |
|---------------------------|------------------------------------------------------------------------------------------|----------|----------|----------|----------|
| Outside Diameter          | 4.72"                                                                                    | 5.51"    | 6.29"    | 8.62"    | 8.62"    |
| Inside Pole Diameter      | No need                                                                                  | No need  | <4.25"   | <4.49"   | <4.49"   |
| Thickness with mold       | 0.09"                                                                                    | 0.09"    | 0.09"    | 0.17"    | 0.17"    |
| Weight with aluminum mold | 22.66lbs                                                                                 | 18.62lbs | 20.83lbs | 31.96lbs | 37.36lbs |
| Junction Box Type         | IP68                                                                                     |          |          |          |          |
| Cell Type                 | Copper Indium Gallium Di selenide (CIGS)                                                 |          |          |          |          |
| Certifications            | UL 1703, ULC ORD C1703, UL 2703, IEC 61646, IEC 61730-1 & -2, IEC 61701, IEC 62716, DEWA |          |          |          |          |



# SOLAR STREET LIGHT

| USES AND APPLICATIONS GUIDE |  |
|-----------------------------|--|
| Pathways                    |  |
| Bike Path                   |  |
| Public parks                |  |
| Gardens                     |  |
| Landscaaping                |  |

## ORDERING GUIDE

Ordering Guide: EXAMPLE: SWPLB-50W-10W-30K-20AH-4.9FT-BLK-AB-00

| Model | Solar panel | LED Power | Color Temp. | Battery capacity | Pole height | Body color                           | Installation option     | Options                   |
|-------|-------------|-----------|-------------|------------------|-------------|--------------------------------------|-------------------------|---------------------------|
| SWPLB | 50W         | 10W       | 30K         | 20AH             | 4.9 FT      | <b>BLK-</b> Black                    | <b>AB-</b> Anchor bolts | 00- Motion Sensor         |
|       | 80W         | 15W       | 40K         | 30AH             | 6.5FT       | *other colors available upon request |                         | 01- Without motion sensor |
|       |             | 20W       | 60K         | 40AH             |             |                                      |                         |                           |



\*Up on request

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