

# HIGHLIGHT SP-WPTR

## Solar Street Lighting System



# POWERFUL BENEFITS: WHY BEAT THE GRID?



## SAVES MONEY FROM DAY ONE

Eliminates trenching, underground wiring, and utility connection costs.

Reduces installation time and ongoing electricity expenses.



## RELIABLE NIGHTTIME OPERATION

Daytime solar energy is stored in integrated LiFePO<sub>4</sub> batteries to support autonomous dusk-to-dawn operation.

Designed to support high-output lighting configurations up to 100W.



## MINIMAL MAINTENANCE REQUIRED

Integrated system design and lithium battery technology support extended service life and reduced maintenance requirements.



## VERTICAL SOLAR INNOVATION

CIGS amorphous flexible solar panel wrap integrated directly onto the pole.

Enhanced wind resistance and improved shading tolerance compared to conventional top-mounted solar configurations.

# ADVANCED VERTICAL TECHNOLOGY

## Rugged Mounting Poles

- Designed for long-term outdoor installation
- Supports up to 4 integrated CIGS solar wrap panels
- Engineered for structural durability in outdoor environments

## High-Performance Luminaire

- LED power – up to 100W (up to 13,500 lm)
- Available in 3000K-6000K and Amber
- CRI  $\geq 81$
- Designed for high-output area illumination applications



## 360° Vertical Solar Wrap

- CIGS amorphous flexible solar panel wrap integrated directly onto the pole
- Cylindrical 360° configuration for optimized solar exposure throughout the day
- Designed for improved wind-load resistance and shading tolerance

## Smart Power Control

- MPPT (Maximum Power Point Tracking) solar charge controller
- LiFePO<sub>4</sub> battery system – up to 150Ah
- Manual / Automatic / Time control modes
- Autonomous dusk-to-dawn operation

# Warranty & Reliability

SolarPath off-grid lighting systems are engineered for long-term autonomous operation in demanding outdoor environments.

All major system components are selected and tested to ensure durability, performance consistency, and compliance with applicable standards.

<b>Component</b>	<b>Warranty Coverage</b>
Solar Modules	10-year product warranty 25-year performance warranty (power output)
Battery System (LiFePO4)	Expected service life up to 10 years (application dependent)
LED Luminaire, MPPT Controller & Smart Electronics	Manufacturer warranty – coverage period subject to component specification
Pole & Structural Components	Structural design engineered to comply with applicable local wind-load standards

Warranty terms may vary based on system configuration and project conditions. Full warranty details are available upon request.

# Applications & Use Cases

**Urban & Residential Streets** - Suitable for neighborhood streets and collector roadways requiring higher illumination levels and extended light distribution.

**Commercial & Municipal Parking Areas** - Designed for mid-size to large commercial parking lots requiring high-output off-grid lighting and wider area coverage.

**Public Plazas & Open Spaces** - Provides extended coverage for large open public environments and civic gathering areas.

**Industrial & Commercial Facilities** - Effective for logistics areas, access roads, and facility perimeters requiring consistent high-output illumination.

**Residential Developments** - Well-suited for large residential communities, entry corridors, and shared outdoor areas requiring enhanced illumination.

**Remote or Grid-Limited Locations** - Designed for autonomous operation in areas where grid extension is impractical. System configuration should be selected based on photometric design and available solar resources.

*This product is intended for area lighting applications and is not designed for high-mast or highway applications unless specified.*

# Technical Overview

- **Solar module type** - CIGS amorphous flexible solar panel wrap integrated onto the pole
- **Total solar power** - Up to 720W
- **Number of solar modules** - Up to 4 panels
- **Solar charge controller** - MPPT (Maximum Power Point Tracking) solar charge controller
- **Battery type** - LiFePO<sub>4</sub> battery system
- **Battery capacity** - Up to 150Ah
- **LED power** - Up to 100W (up to 13,500 lm)
- **Distribution type** - Type IV / Type V
- **CCT options** - 3000K-6000K / Amber
- **CRI** - ≥81
- **Control modes** - Manual ON/OFF / Automatic ON/OFF / Time control
- **Operation profile** - Dusk-to-dawn (dependent on solar radiation)
- **IP rating** - IP65
- **Operating temperature** - -31°F to 122°F

*Final system configuration may vary based on site conditions and project requirements.*

# HOW TO SPECIFY & ORDER

SolarPath vertical solar lighting systems are fully configurable and engineered as project-specific solutions tailored to site conditions and performance requirements.

- **DEFINE SITE CONDITIONS AND APPLICATION REQUIREMENTS**
- **ESTABLISH LIGHTING LEVELS AND OPERATING PROFILE**
- **CONFIGURE SYSTEM COMPONENTS AND CAPACITY**
- **APPROVE FINAL CONFIGURATION AND ASSIGN CONFIGURATION CODE**

Each approved configuration is assigned a unique SolarPath configuration code used for manufacturing and ordering.

## LIGHTING DESIGN & PHOTOMETRIC SUPPORT

Lighting design and photometric layouts are available upon request to support proper system specification and placement.

## IMPORTANT NOTES

- System performance depends on site conditions and available solar resources.
- Specifications shown are representative and may vary by configuration.
- All system configurations are reviewed and approved prior to manufacturing.

# ORDERING GUIDE

Each approved configuration is assigned a unique SolarPath configuration code used for manufacturing and ordering.

**Example: HIGHLIGHT-SP-WPTR-C-180W-100W-5-40K-150Ah-16FT-GR**

Model	Solar Panel qty	Solar Panel	Led Power	Distribution Type	LED Color Temp	Battery Capacity	Pole Height	Body Color
HIGHLIGHT SP-WPTR	A- 1 panel B- 2 panels C- 3 Panels D - 4 Panels	85W 90W 100W 150W 180W	20W 30W 40W 50W 60W 70W 80W 90W 100W	4 – Type IV 5 – Type V	30K 40K 50K 60K Amber	20Ah 40Ah 60Ah 100Ah 120Ah 150Ah	XXFT	GR - Grey  BLK- Black  *Other colors available upon request

*All system configurations are subject to site conditions, solar availability, and final engineering approval prior to manufacturing.*



# Contact Us

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