

HIGHLIGHT SP-WSDL

**Vertical Solar Integration: Elegant, Efficient,
Autonomous**

**A fully off-grid solar light pole designed for decorative
and area lighting applications where aesthetics,
reliability, and low maintenance are essential.**

POWERFUL BENEFITS: WHY BEAT THE GRID?



SAVES MONEY FROM DAY ONE

Eliminates trenching, cabling, and grid connection costs.

No utility bills, no infrastructure delays, and reduced installation time.



RELIABLE NIGHTTIME OPERATION

Solar energy is collected during the day and stored in high-quality lithium batteries, delivering consistent illumination at night.



LOW MAINTENANCE, LONG-TERM OPERATION

Autonomous solar operation with MPPT energy management and lithium battery storage.

Designed for long service life with minimal maintenance requirements



DECORATIVE VERTICAL SOLAR DESIGN

Curved vertical solar wrap provides a clean, architectural appearance while maintaining efficient energy harvesting.

ADVANCED VERTICAL TECHNOLOGY

Rugged Mounting Options

- Wind-load certified pole design
- Direct burial or anchor base installation

High-Performance Luminaire

- Decorative LED luminaire suitable for pedestrian and area lighting
- Designed for efficient illumination with minimal light pollution
- LiFePO₄ battery chemistry
- Long service life and stable performance

360° Vertical Solar Wrap

- CIGS amorphous flexible solar panel wrap integrated around the pole
- Wind-resistant design with hydrophobic self-cleaning coating
- Reduced dust accumulation and improved long-term performance

Smart Power Management

- MPPT (Maximum Power Point Tracking) solar charge controller
- Optimized for fully off-grid, solar-only operation



Warranty & Reliability

SolarPath solar lighting systems are engineered for fully autonomous, off - grid operation and long term reliability in demanding environments.

All system components are selected and tested to ensure reliability, durability, and consistent performance over time.

Component	Warranty Coverage
Solar Modules	Performance warranty up to 10 years
Battery System (LiFePO4)	Expected service life up to 10 years
LED Luminaire, MPPT Controller & Smart Electronics	Manufacturer warranty
Pole & Structural Components	Designed to meet local wind-load requirements

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

Applications & Use Cases

- **Urban & Residential Streets** - Ideal for local roads and residential streets where decorative design and off-grid operation are required.
- **Parks & Public Open Spaces** - Suitable for parks, plazas, playgrounds, and public gathering areas requiring aesthetic, unobtrusive lighting.
- **Pedestrian Pathways & Trails** - Designed for sidewalks, walking paths, promenades, and bike trails where safety and visual appeal are essential.
- **Parking Areas & Access Roads** - Provides consistent illumination for parking lots and access lanes without trenching or utility coordination
- **New Developments & Infrastructure Projects** - Well-suited for residential, mixed-use, and commercial developments requiring fast installation and future-proof design.
- **Remote or Grid-Challenged Locations** - An effective solution for areas with limited grid access, frequent outages, or high infrastructure costs.

System configuration, lighting levels, battery capacity, and pole height are defined based on project requirements, site conditions, and operational needs.

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Technical Overview

System-level specifications for reference. Final configuration may vary by project.

Solar Configuration – Vertical cylindrical CIGS amorphous flexible solar panel wrap integrated around the pole

Total Solar Power – Up to 540W, up to 3 solar modules

Solar Charge Controller – MPPT (Maximum Power Point Tracking), infrared solar charging controller

Battery Type – LiFePO₄ (Lithium Iron Phosphate)

Battery Capacity & Autonomy – Up to 150Ah, configurable based on lighting profile and site conditions

LED Luminaire – Up to 60W (up to 7,404 lumens)

CCT Options – 3000K–6500K

CRI – >70

Control Modes - Manual ON/OFF, Automatic ON/OFF, Time-based control

Operating Profile - Programmable (dependent on solar radiation)

Ingress Protection (IP Rating) - IP66

Operating Temperature Range – 26°F to 131°F

Pole Height – Up to 25 ft

Mounting / Installation Options – Direct burial or anchor base

Standards & Certifications – UL 1703, ULC ORD C1703, UL 2703, IEC 61646, IEC 61730-1 & -2, IEC 61701, IEC 62716, DEWA

Final configuration may vary based on project requirements.

Product Overview



How to Specify & Order

SolarPath vertical solar lighting systems are fully configurable, project-specific solutions for off-grid applications. Each system is designed based on site conditions, lighting requirements, and long-term performance expectations.

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

CONFIGURABLE PARAMETERS

Physical & Power

- Pole height and mounting method
- Solar capacity (vertical wrap configuration)
- Battery type and capacity
- Finish and environmental specifications

Lighting & Control

- Luminaire type and optical distribution
- Lighting levels for pedestrian and area lighting
- Control modes and operating logic

HOW TO SPECIFY & ORDER

1. Define site and application requirements
2. Establish lighting and operating profile
3. Configure system components
4. Approve final configuration and assign part number

Each approved configuration is assigned a unique SolarPath configuration code (part number) used for manufacturing and ordering.

LIGHTING DESIGN & PHOTOMETRIC SUPPORT

Photometric layouts and lighting calculations are available upon request to support planning, compliance, and optimal performance.

IMPORTANT NOTES

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



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