HIGHLIGHT SPWPLP

Curved Vertical Solar Integration: Flexible, Powerful, Autonomous

The ultimate off-grid solar light pole solution for urban, residential, and infrastructure applications.

SolarPath™ sun solutions

POWERFUL BENEFITS: WHY BEAT THE GRID FOR AREA & PEDESTRIAN LIGHTING?

SAVES MONEY FROM DAY ONE

Eliminates trenching, wiring, and grid connection costs from day one. No utility bills, no infrastructure delays, and no ongoing electricity expenses.

RELIABLE NIGHTTIME OPERATION

Solar energy is stored during the day and delivered through high-efficiency LED luminaires at night.

LOW MAINTENANCE, LONG-TERM OPERATION

Solar energy is stored during the day and delivered through high-efficiency LED luminaires at night. Fully off-grid solar lighting with MPPT energy management and lithium batteries, designed for long-term, low-maintenance operation.

VERTICAL SOLAR INNOVATION

Curved, pole-wrapped solar panels provide high wind resistance, reduced soiling, and architectural integration.

SolarPath™ sun solutions

ADVANCED VERTICAL TECHNOLOGY

Rugged Mounting Poles

- Wind-load certified pole design
- Height options: 13 ft to 32 ft (project dependent)
- Suitable for street and area lighting installations

High-Performance Luminaires

- LED power up to 150W
- Luminous output up to 18,990 lumens
- CCT options: 3000K / 4000K / 5000K / 5700K
- CRI: >81
- Distribution types: Type I, II, III, IV, V
- Single or double arm configurations available

Curved Vertical Solar Wrap

- CIGS amorphous flexible solar panel wrap integrated around the pole
- High tolerance to shading and partial sunlight
- No penetration, ballast, or racking required
- Self-cleaning curved surface reduces dust and dirt buildup
- Designed for high wind load environments

Smart Power Management

- MPPT (Maximum Power Point Tracking) charge controller
- Optimized for solar-only, off-grid operation
- Efficient energy harvesting and battery utilization

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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.

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Applications & Use Cases

- **Urban & Residential Streets -** Provides reliable off-grid lighting for local and residential roads where trenching and grid extension are complex or costly. Ensures consistent illumination, safety, and long-term performance with minimal maintenance.

- **Parking Lots & Access Roads -** Delivers uniform lighting for parking areas, drive lanes, and access roads without utility coordination. Ideal for fast deployment in existing or new developments with limited infrastructure.

- **Public Parks & Open Spaces -** Designed for parks, plazas, and public gathering areas requiring aesthetic, unobtrusive lighting solutions. Supports safety and visibility while preserving landscape design and minimizing site disruption.

- **Pedestrian Pathways & Walkways** - Provides consistent illumination for sidewalks, trails, and walking paths to enhance safety and user comfort. Operates autonomously without trenching, making it ideal for landscaped or sensitive environments.

- **Residential Roads & Communities -** Supports lighting needs within residential developments, including internal roads and shared spaces. Offers a clean, architectural solution with low operating and maintenance costs.

- **Sports & Recreational Areas** - Suitable for recreational zones and sports-adjacent areas requiring dependable nighttime illumination. Flexible system configuration allows adaptation to site conditions and lighting requirements.

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

Technical Overview

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

Solar Configuration – Curved vertical CIGS flexible solar panel wrap integrated around the pole

Total Solar Power - Up to 900W, configurable, up to 5 solar modules per pole

Solar Charge Controller – MPPT (Maximum Power Point Tracking), optimized for off-grid operation

Battery Type – Lithium (LiFePO4)

Battery Capacity & Autonomy - Voltage options: 12.8V / 25.6V, Up to 150Ah, configurable based on lighting profile

LED Luminaire - LED power up to 150W, Luminous output up to 18,990 lm

Control Modes – Manual ON/OFF, Automatic ON/OFF, Time-based control, Dusk-to-dawn

Ingress Protection (IP Rating) – IP65

Operating Temperature Range – -4°F to +131°F

Pole Height – 13 ft to 32 ft, configurable per project

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. Designed to meet applicable UL and IEC standards

Final configuration may vary based on project requirements.

Product Overview

How to Specify & Order

This solar lighting product is a fully configurable, project-specific solution designed for off-grid and grid-challenged applications.
System configuration is defined based on site conditions, lighting requirements, and operational needs.

CONFIGURABLE PARAMETERS

Physical & Power

- Mounting configuration and installation method
- Pole height and structural configuration
- Solar capacity and panel layout
- Battery type, voltage, and capacity
- Finish, color, and environmental specifications

Lighting & Control

- LED luminaire type and optical distribution
- Lighting levels suitable for pedestrian and area lighting
- Control modes and operating logic
- MPPT-based energy management architecture

HOW TO SPECIFY & ORDER

1. Define site conditions and application requirements
2. Select pole height, LED power, and optical distribution
3. Define solar capacity and battery size
4. Assign final configuration and 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

ORDERING GUIDE

HIGHLIGHT SPWPLP

EXAMPLE: SPWPLP-A-85W-SLA-30W-1-30K-30AH-1-GR-00

Model	Solar Panel Qty	Solar Panel	Led Head	Led Power	Distribution Type	Led Color Temp	Battery capacity	Arm	LED Body color	Options
SPWPLP	A - 1 Panel B - 2 Panels C - 3 Panels D - 4 Panels E - 5 Panels	85W 90W 100W 150W 180W	SLA SLB SLG SLE SRS SRL SKA SKB SIA SIB SID SIC FLA FLB FLC	30W 40W 60W 80W 90W 120W 150W	1 - type I 2 - Type II 3 - Type III 4 - Type IV 5 - Type V	30K 40K 50K 57K	30AH 40AH 50AH 60AH 80AH 100AH 120AH 150AH	1 –Single arm 2 – Double arm	GR-Grey other colors are available	00 –No motion sensor 01 –With motion sensor

Contact Us

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