



**Kingfisher  
Lighting**

A division of the LUCECO group

# CERO Solar Lighting

Dependable solar lighting range for  
pathways, car parks, and public spaces



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# Why CERO Solar lighting?

The CERO Solar range - currently including street lighting and the CERO Solar Sleeve accessory - provides dependable lighting for locations where mains power is unavailable.

By removing the need for trenching, cabling, and ongoing energy costs, CERO helps reduce installation and operational spend while delivering consistent illumination for pathways, car parks, and public spaces with minimal environmental impact.











# Solar lighting in the UK

There is a common misconception that the UK does not receive enough sunlight for solar lighting to be a viable solution. In reality, advances in lighting technology - including intelligent control systems and integrated motion sensors - allow light output and battery capacity to be carefully managed, extending operation hours even through the longest winter nights.

## Net-Zero Targets

As the UK moves toward its Net-Zero 2050 targets, local authorities are challenged to lower carbon emissions without compromising the safety and usability of public spaces. Solar lighting provides a valuable solution, enabling sustainable infrastructure development while maintaining dependable illumination.

## Typical solar applications

Kingfisher Lighting's solar solutions are ideally suited to off-grid and low-infrastructure applications, providing dependable illumination in rural, remote, and non-mains powered locations.

### This includes:



Car parks



Cycleways



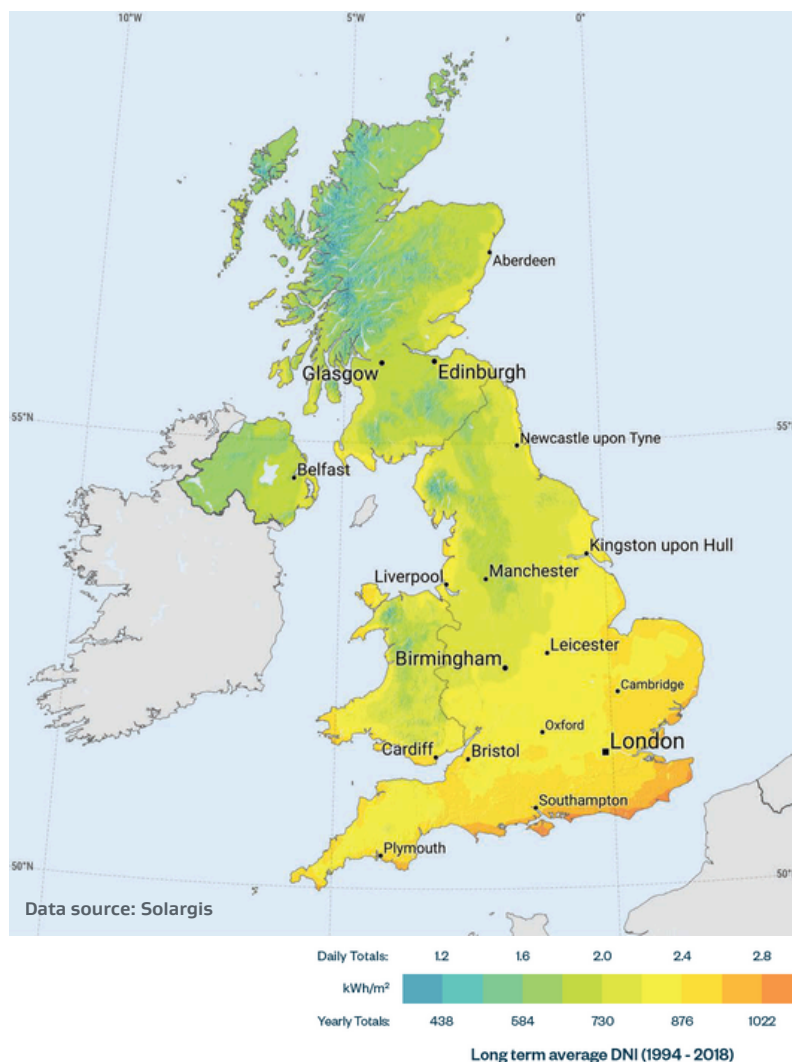
Conservation areas



Footpaths



Parks



## Direct Normal Irradiation Map

United Kingdom

This map presents an overview of the UK's solar resource, using 25 years of recorded data to indicate average daily and annual Direct Normal Irradiation (DNI) levels. DNI is a critical parameter in calculating expected energy-yield and evaluating the performance of solar-photovoltaic systems.

# Solar lighting technology



## How solar works

The photovoltaic effect is a physical and chemical process that generates voltage and electrical current within a material when exposed to light. When sunlight strikes a solar panel, its energy is absorbed by the panel's semiconductor materials, producing direct current (DC) electricity. This electricity is used to charge an integrated battery, which then supplies power to the luminaire.

At Kingfisher Lighting, our solar solutions harness the latest advances in solar technology, combined with premium-grade materials, to ensure consistently high levels of product quality, reliability and performance.

**Alongside the LED light source, every off-grid solar lighting system relies on three essential components: the solar panel, the battery and the control system.**



## Monocrystalline panels

Photovoltaic (PV) cells convert light energy directly into electricity; however, not all solar panels are created equal. At Kingfisher Lighting, we specify high-performance monocrystalline panels, manufactured from single-crystal silicon. This technology delivers superior efficiency and more consistent performance compared to alternative panel types.



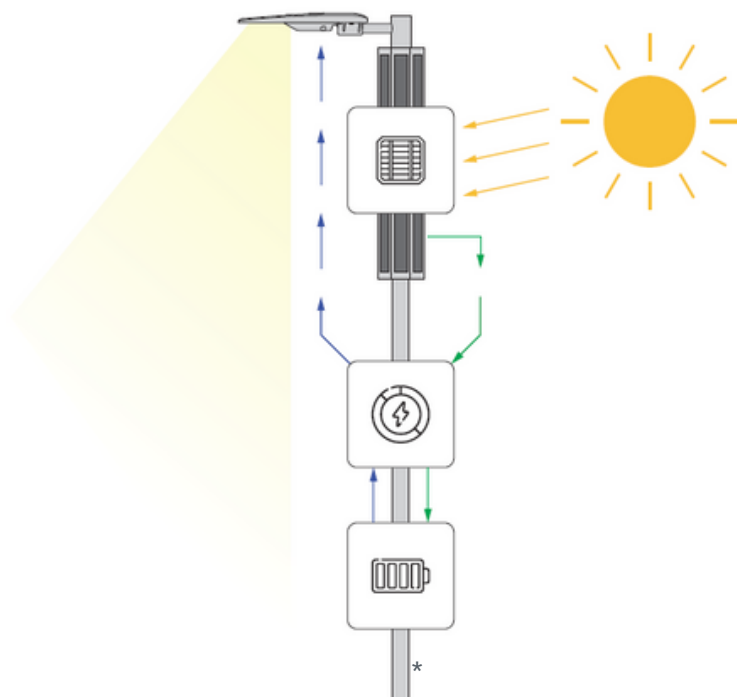
## Lithium iron phosphate batteries

Our solar solutions utilise lithium iron phosphate (LiFePO<sub>4</sub>) batteries which offer significant advantages over other battery types due to their higher energy density, including added safety, longer lifespan and a wider operational temperature range.



## Intelligent control systems

All Kingfisher solar solutions are equipped with intelligent lighting controllers to maximise battery efficiency. Built-in motion detection automatically regulates light levels during low-activity periods, reducing energy consumption while ensuring dependable, consistent illumination from dusk to dawn.

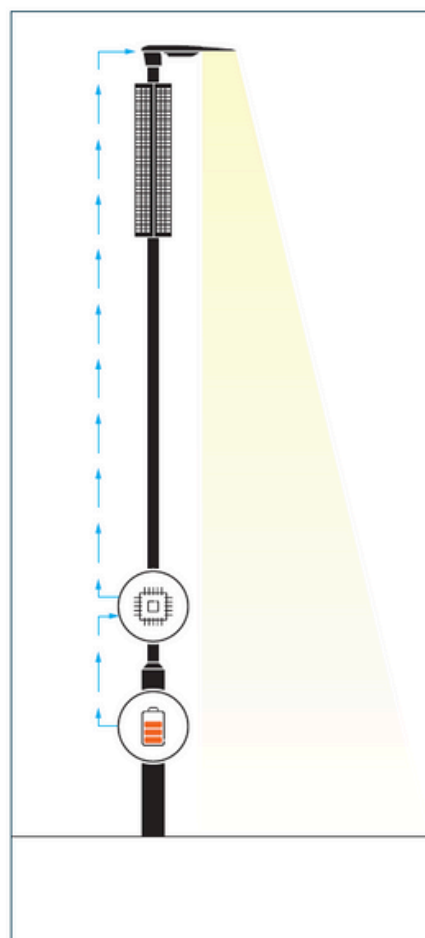
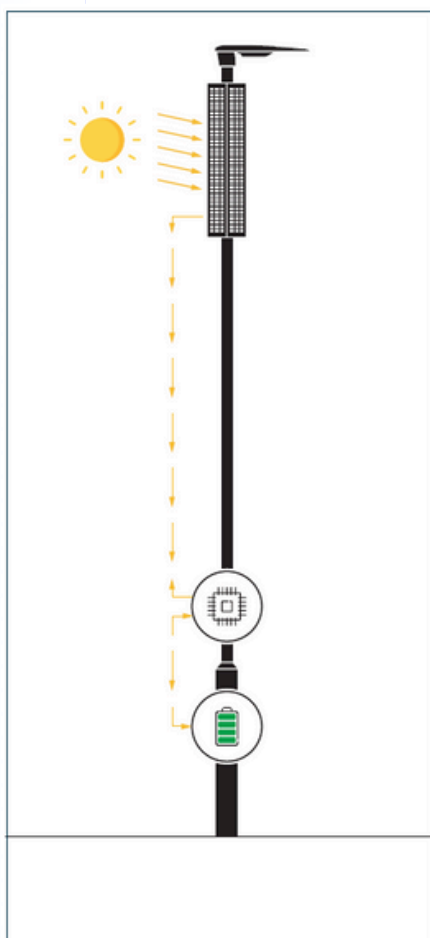


# Off-grid & charging solutions



## How solar works

The CERO Solar lighting systems operates as **off-grid** and **solar charging**. Solar lighting systems harness renewable energy during the day to deliver reliable, intelligent illumination throughout the night without relying on the mains supply.



\* Luminaire shown for demonstrative purposes only.

## Charging

Solar panels capture sunlight and store energy in the system's battery throughout the day. This stored power is managed efficiently to provide dependable illumination after dark.

## Off-grid Solar

Off-grid systems operate independently from the mains supply, using stored solar energy to power the luminaire, and a PIR sensor to ensure illumination is provided when required.



# Introducing CERO Solar Street



## Our Solar lighting solution for pathways, car parks, and public spaces

CERO solar street is a high-performance solar lighting system designed to combine integrated solar technology with intelligent energy management to deliver consistent, efficient lighting in a wide range of environments.

CERO solar street has been developed to provide a dependable lighting solution for locations where power connections are limited or unavailable. Its integrated solar design makes it ideal for pathways, car parks, and open public areas, delivering consistent illumination with minimal environmental impact.

Built for reliability and long-term performance, CERO supports Kingfisher's continued commitment to sustainable, low-energy lighting solutions that meet the needs of modern infrastructure.



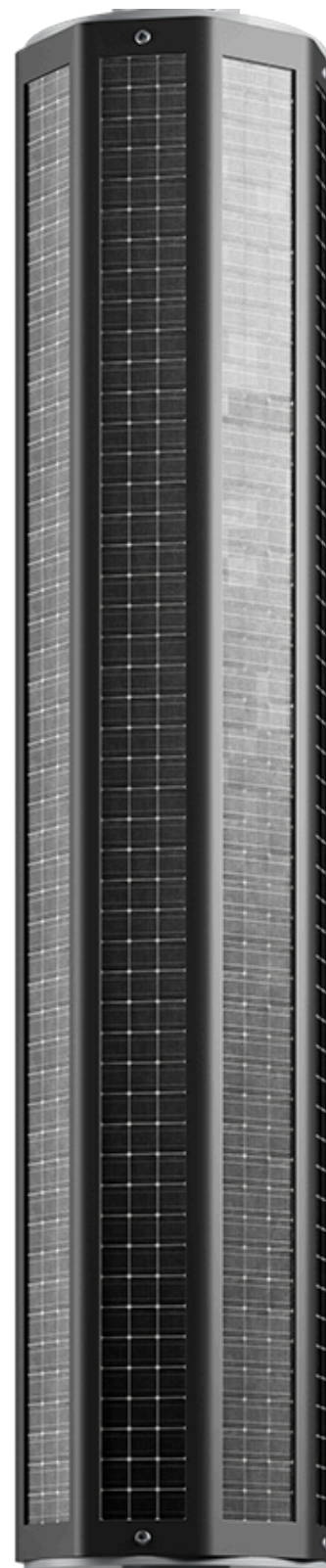
# Introducing CERO Solar Sleeve



## Off-grid Solar system accessory

CERO Solar Sleeve is a vertical solar lighting solution designed for off-grid applications across public realm, residential, and commercial environments. Wraparound photovoltaic panels maximise solar absorption from all orientations, supporting reliable performance throughout the year.

**Available in three sizes, the robust tubular design offers excellent resistance to wind and adverse weather conditions and is available alongside the CERO Solar Street luminaire.**

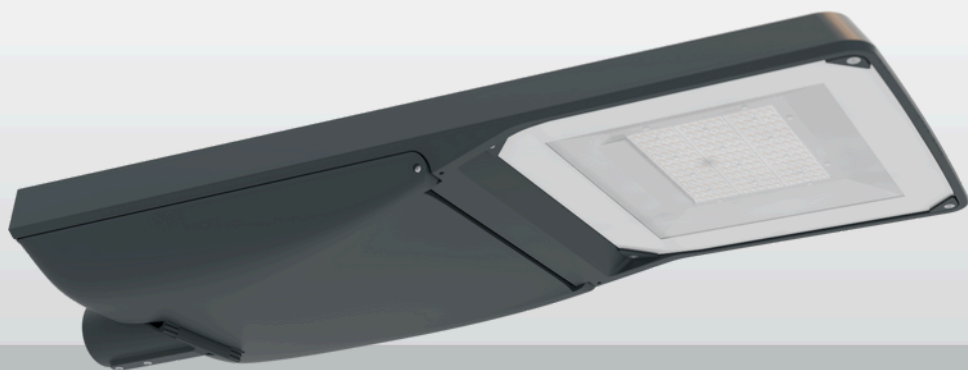




# Kingfisher Lighting

## Datasheet

### CERO Solar Street



#### Specification Text

The CERO Solar Street shall be manufactured from die-cast aluminium and powder coated in RAL 7016 Marine Grade finish. It shall have a power output of 30W - 50W, with an efficacy of up to 203 lm/W. The luminaire shall deliver 5,426 - 9,732 luminaire lumens. It shall have a fully programmable driver with solar control functionality.

Available in 2700K or 4000K, the luminaire shall be IK08 and IP66 rated. It shall have PIR options available.

#### Specification

Weight: Windage:	17.5 kg - 23.5 kg
Material: Paint	0.06m <sup>2</sup> - 0.09m <sup>2</sup>
Finish:	Die-cast Aluminium RAL7016 Anthracite Grey Marine Grade Finish

#### Product Description

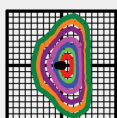
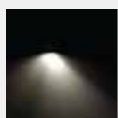
Defined by its sleek angular form and streamlined silhouette, CERO Solar Street is a modern, solar lighting system with an integrated solar panel.



#### Key Features

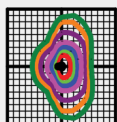
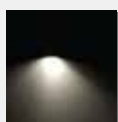
- 30.0W - 50.0W
- 5,426 - 9,732 Luminaire Lumens
- Efficacy up to 205.0 lm/W
- 2700K & 4000K, CRI >70
- IP66, IK08
- Lifetime < 100,000 hrs, L90, B10
- Smart Energy Management
- Built for Harsh Environments

#### Optics



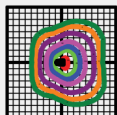
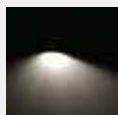
##### T2B Optic

Optimised for car park lighting, providing controlled forward throw and excellent uniformity.



##### T3B Optic

Designed for cycle paths and pedestrian routes, offering medium-wide asymmetric distribution.



##### T4B Optic

Ideal for open area and plaza lighting, ensuring wide, even illumination.

IP66

IK08

DIM

Colour Temperature

Marine Grade Finish

3 YEARS WARRANTY

Control Compatible

100,000 hrs LIFETIME



## Other Options Available

Contact for further details

- Colour Temperature Options
- PIR Options

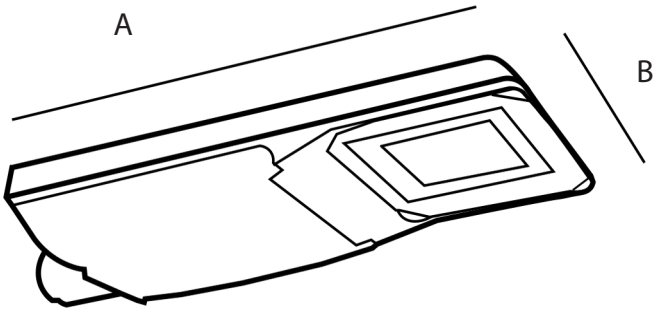
## Mounting Options

- Post Top 60/76 mm
- Side Entry 60/76 mm

## Dimensions

Body Size	A	B	C	D
CERO 1	825	365	145	60/76
CERO 2	1030	445	160	60/76

All measurements in mm



Code	Power (W)	Luminaire Lumens (lm)	Optic	CCT(K)	IP	IK	Weight (kg)	Driver Included	Driver Type
CER1-T2B-4-30MPPT	30.0	5,807	Street Optic T2B	4000	IP66	IK08	17.5	Dimmable	Y
CER1-T2B-3-30MPPT	30.0	5,537		2700	IP66	IK08	17.5	Dimmable	Y
CER1-T3B-4-30MPPT	30.0	5,959	Street Optic T3B	4000	IP66	IK08	17.5	Dimmable	Y
CER1-T3B-3-30MPPT	30.0	5,656		2700	IP66	IK08	17.5	Dimmable	Y
CER1-T4B-4-30MPPT	30.0	6,136	Area Optic T4B	4000	IP66	IK08	17.5	Dimmable	Y
CER1-T4B-27-30MPPT	30.0	5,791		2700	IP66	IK08	17.5	Dimmable	Y
CER2-T2B-4-50MPPT	50.0	9,508	Street Optic T2B	4000	IP66	IK08	23.5	Dimmable	Y
CER2-T2B-27-50MPPT	50.0	9,082		2700	IP66	IK08	23.5	Dimmable	Y
CER2-T3B-4-50MPPT	50.0	9,732	Street Optic T3B	4000	IP66	IK08	23.5	Dimmable	Y
CER2-T3B-27-50MPPT	50.0	9,446		2700	IP66	IK08	23.5	Dimmable	Y
CER2-T4B-4-50MPPT	50.0	9,686	Area Optic T4B	4000	IP66	IK08	23.5	Dimmable	Y
CER2-T4B-27-50MPPT	50.0	9,434		2700	IP66	IK08	23.5	Dimmable	Y



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## Infosheet

# CERO Solar Sleeve



### Product Description

This solar lighting solution utilises high-efficiency monocrystalline photovoltaic panels with advanced HPBC technology to maximise energy capture and long-term durability. The result is reliable, year-round charging performance, even in challenging environmental conditions.

Available in three sizes, the robust tubular design offers excellent resistance to wind and adverse weather conditions. A robust die-cast aluminium frame and lithium iron phosphate battery ensure dependable operation and extended service life. \*



### Features and Benefits

- High-efficiency monocrystalline solar panels with advanced HPBC technology for increased energy capture and durability
- Reliable, year-round charging performance, even in low-light conditions
- Multiple solar panel options: 100 W / 150 W / 200 W \*
- Intelligent pre-programmed dimming to optimise energy usage
- Robust die-cast aluminium construction for long-term outdoor durability \*
- Lithium iron phosphate (LiFePO) battery for enhanced safety and extended service life \*
- Suitable for post-top and side-entry mounting (Ø76 mm / Ø60 mm)

*\* These technical specifications only apply when paired with a CERO Solar Street luminaire*

*\* CERO Solar Sleeve only available when paired with CERO Solar Street, not available separately.*









# Kingfisher Lighting

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Kingfisher Lighting  
Kingfisher House  
Crown Farm Way  
Forest Town  
Mansfield  
NG19 0FT