



Off-Grid Solar Lighting & Power Experts



“  
**As solar and battery experts, we are leading the UK's transition to renewable off-grid lighting and power.**  
”

John Foster -  
Managing Director

## Pioneers in **Solar Technology**

As the UK's leading off-grid, renewable lighting and power specialists, we lead the way in innovation and engineering standards of sustainable solar lighting and hybrid power technology as well as advanced telematics software.

Since 2011, we have delivered clean, sustainable and smart solar products. Engineering the most advanced off-grid telematics software, which ensures that our lights and generators work all year round, even in the challenging UK winters.

Our game-changing generators are also redefining temporary power with innovation, efficiency, and sustainability, using a solar-first approach to high load site requirements.

Our temporary lights autonomously adapt to ensure they stay on throughout the night, our batteries don't need draining to maintain their lifespan and our Smart Remote Portal offers the most in-depth diagnostic and remote management functionality on the market.

All of these attributes make us truly unique and demonstrate how we are always leading the way, powering the route forward for off-grid solar technology.



# Our Ambition

To power the world's off-grid energy needs with smart, clean, renewable technology.

From **1W** up to **60kW!**

Our technology could help to de-carbonise up to **42%** of the UK's off-grid generator market\*.

Saving **342,484 tonnes** of CO<sub>2</sub>e from entering Earth's atmosphere each year.



# Sustainability in Action

At Prolectric, sustainability is at the heart of everything we do. We're driving the transition to renewable, off-grid power with innovative solar technology that eliminates diesel reliance and cuts carbon emissions.

**44,579,650**  
Carbon Savings  
(kgs of CO<sub>2</sub>e)

**16,706,771**  
Diesel Savings  
(Litres)

**20,144,054**  
Cost Savings  
(GBP)



\*2019 ONS - 27113110 (CN 850211) - Generating sets UK.

VIDEO



# Why Partner With Us



## Sustainability is at the heart of our business

Unlike other manufacturers, we have been a solar first business since our inception. Our sole objective is to build the world's cleanest, most advanced, off-grid products; supporting our customers to move away from fossil fuels.



## Smart Remote Portal

Our Smart Remote Portal software enables you to manage your lighting and power units remotely, turning assets on and off from anywhere in the world. You can also remotely diagnose if you suspect something isn't right, see product locations, set alarms if products are moved and view carbon and cost saving reports.



## Working in partnership with you

We collaborate with every customer, ensuring they have everything they need to succeed. Our experts, like our products, operate 24/7 whenever you need them.



## Reduce your carbon emissions

Since 2011, we have been committed to helping our customers, saving them over £14 million in operational costs and preventing over 33 million kgs of CO<sub>2</sub>e being emitted.



## Save money

Our customers save tens of thousands every year on diesel, refuelling and maintenance by using our renewable solutions. Our units commonly reach cost neutral point within 2 years compared to an equivalent diesel alternative.



## Lights that work all winter

Our patented technology makes our lighting towers smart and are the only lights proven to work autonomously, all year round, in any weather, any season, across the UK.



## Improved working conditions

Your site operatives enjoy better working conditions due to no fumes, emissions or noise, meaning a reduced impact on their breathing and hearing.



## Setup-and-Forget technology

Ours are the only units on the market where software manages battery performance, meaning no need to drain the battery or follow a monthly maintenance program. Our units are truly a Setup-and-Forget technology.



## Engineered in Britain

Every product is engineered to the highest standards at our manufacturing facility near Bristol.



## Silent nights

Our lights and generators are ideal for urban areas, providing completely silent operation. They prevent disruptions to nearby residents and allow customers to start work earlier and finish later.


VIDEO





# Our Journey


Since 2011, we've been helping major construction and infrastructure to deliver more sustainable worksites, using sustainable technology that can completely replace fossil fuel fleets.



**We installed 34.8kW of solar panels at our headquarters in Clevedon,** saving nearly 200 tonnes of CO<sub>2</sub> annually and generating 264MWh of electricity each year.


**2011**

We introduced the first all-in-one solar-powered street light to the UK. Ensuring it worked all year round in the UK, in all weather conditions, took six months of intensive work.

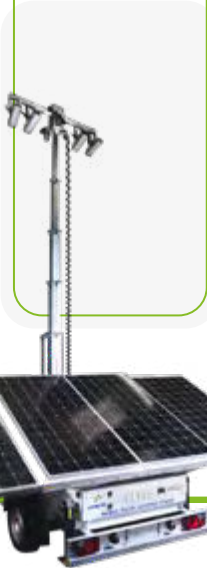


**2012**

Demand for our solar street lights was rocketing. We ended the side of our business that managed large-scale solar PV installations so that we could focus solely on product development.

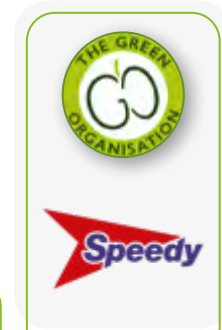


**2014**




**2016**

We launched the ProLight, the UK's first mobile solar lighting tower. We continued to invest in sustainable solutions at our Clevedon HQ, with the installation of air source heat pumps.




**2017**

Industry awards and nominations started to come in thick and fast, including the NCE Tech Fest Awards (Finalist, Carbon Reduction), Green Apple Award (Winner, Environmental – Carbon Reduction) and Speedy Supplier Awards (Innovation of the Year).




**2019**

We acquired Solatainer, the off-grid solar generator, to add to our range of products. We were a finalist in the Highways England Awards, in the Excellence in Environment and Sustainability category, and won the Green Apple Award (Environmental – Carbon Reduction) again!



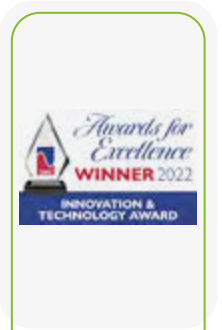
**2020**

We launched our ground-breaking ProPower solar hybrid generator, as well as the Proelectric Portals, our cloud-based real-time remote monitoring and control hubs.




**2021**

We received the prestigious Queen's Award for Enterprise and were purchased by the Hill & Smith Holdings PLC, the FTSE 250 £1Bn international group providing sustainable infrastructure and safe transport solutions. We were also named Wates Innovation Partner Winners and won the Kier Green Dragon Award.




**2022**

Demand for our ProPower 30kWh solar-hybrid generator accelerated fast. We won the AMP Innovation & Technology Award and were nominated for the Business Insider 'Made in the South West' and Bristol Business Awards.




**2023**

We introduced our new rehire division ProRehire, to work directly with rental companies through our cross-hire model. After the successful introduction of our original ProPower, we launched our powerful ProPower 3-Phase solar hybrid system.



**2024**

In the pursuit of achieving new engineering standards and to improve lighting efficiency, Proelectric launched the ProRXM Hybrid Solar Lighting Tower in 2024, in response to market demand.



**2025**

We launched our game-changing ProCharge Solar Battery Energy Storage System to facilitate large power-hungry sites and drive the change to renewable resources.



Prolectric have been an outstanding supplier. Their products are fantastic and save our customers a fortune financially, as well as reducing carbon emissions by substantial amounts across various site locations. A key thing about Prolectric, is you are not left on your own when you buy the product, which can be daunting to those trying to enter the world of solar power, the support is truly unmatched.

Laura Tudhope - Plant Manager

**ASKAM**  
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# Off-Grid Power Solutions

**We are the leaders in renewable off-grid power, introducing the UK's first solar hybrid generator in 2019, setting the standard for sustainable temporary off-grid power.**

**As the off-grid solar and battery experts, we provide foolproof, renewable power solutions that deliver dependable performance, overcoming every challenge that the UK climate brings.**

Engineered in Britain to the highest standards, our ProPower Solar Hybrid Generator redefines temporary power with innovation, efficiency, and sustainability.

Our ProCharge Solar Battery Energy Storage System (BESS) is perfectly engineered for construction, infrastructure, and utility projects. With three times the output power and 3.5 times the battery capacity of our single-phase system, the ProCharge 3-Phase is ideal for high-demand applications requiring 20kVA - 45kVA, making it the go-to choice for larger, power-intensive sites.

Every product is built from the ground-up, with precision engineering and an in-depth understanding of solar and battery technology. Our ProPower reduces engine runtime by up to 90%, with the integral engine serving only as a backup for high loads and short battery recharges.

The ProPower is silent and programmable, perfect for urban areas and noise sensitive sites, offering silent



We've helped our customers prevent over **11 million kilograms of CO<sub>2</sub>e** from entering the atmosphere since 2020 and supported them in **saving over £6 million** in diesel costs.



operation and customisable settings for maximum adaptability. Improving work environments through minimising fumes and noise, creating a healthier, safer and more comfortable atmosphere for site operatives.

As your trusted partner in solar hybrid power, we provide tailored solutions and full control over your power assets, empowering you to transition from diesel to sustainable alternatives.

We deliver customised, high-performance solar hybrid power solutions that maximise savings, improve efficiency, and meet the unique needs of each customer. Our in-house design and production teams allows us to deliver both customised and fully bespoke power units tailored to your specifications.



**ASKAM**  
CIVIL ENGINEERING

**Balfour Beatty**



**Templine**

**NIXON**  
HIRE

**SPL POWERLINES**  
SPECIALIST POWER SOLUTIONS

**KIER**



# ProPower Solar Hybrid Generator

**P**rolectric's ProPower Hybrid Solar Generator is a revolutionary off-grid sustainable power solution, combining solar power and diesel backup for efficient and eco-friendly energy.

The hybrid power generator has been specially designed to deliver temporary power to the infrastructure, construction and events sectors, amongst others.

## Features

- 3.04kW solar panel array with hydraulic extension
- 35 kWh heavy-duty, deep-cycle battery technology
- Mobile trailer mounted or skid based
- Back up generator with 17.5kVA - 22.5kVA peak output (Single-Phase)
- Internal bunded fuel tank - 130L (30-45 hours run-time, load dependent)

## Benefits

- The ProPower Solar Hybrid Generators come with a solar array, inverter and single-phase HVO or diesel generator for backup power, ideal for power applications up to 20kVA.
- The ProPower packs the latest solar and battery storage technology into a compact trailer – making it a powerful, clean, and easy to deploy solar battery generator.

Whatever sector you operate in, the ProPower is the ideal low noise, compact solution for powering up to six welfare cabins 24 hours a day, 7 days a week.

- Using this technology, the ProPower can cut fuel usage by up to 90% and in turn reduce carbon emissions and greenhouse gas emissions. As such, the ProPower offers huge CO<sub>2</sub> benefits vs traditional diesel generators.
- The inclination of the ProPower solar panels can be adjusted for optimum performance, leading to an increase in solar generation of up to 15%, adjusted for year round performance.
- The ProPower, running predominantly on solar, reduces noise pollution onsite which makes it ideal for residential areas, urban locations and night projects.
- The ProPower is mounted on a portable trailer, making it faster and easier to setup on smaller compounds.
- Manage your ProPower from anywhere, anytime using our Smart Remote Portals' powerful remote-control functionality.
- **Total Cost of Ownership:** Savings over a 7-year period, equate to over **£88,000 per unit**, with cost neutrality achieved in just 2 years and 4 months compared to a diesel alternative.

## Applications

- Welfare cabins and site offices
- Charging of power tools
- Charging of electrical plant equipment
- General onsite temporary power

We enable our customers to make remarkable operational savings.

**Save £17,382**  
annually on fuel,  
refuelling, and  
maintenance per unit.



ASKAM  
SPECIALIST SERVICES

Magnox

NIXON  
HIRE

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KIER

SPL POWERLINES  
AN ERMCO COMPANY

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spec sheet



VIDEO





# ProCharge Battery Energy Storage System

**T**he ProCharge 3-Phase Solar Battery Energy Storage System (BESS) – a cutting-edge solution for clean, quiet, and sustainable temporary power.

Perfectly engineered for construction, infrastructure, and utility projects, this compact, skid-mounted unit integrates the latest in solar and battery storage technology to deliver reliable power with minimal environmental impact.

## Features

- The only BESS unit with 12x integrated solar panels
- 12x hydraulically operated 440W solar panels with a total capacity of 5.28kW and actuators to extend the panels out autonomously
- 120 kWh battery capacity
- 45 kVA inverter power, handling generator loads up to 100 kVA
- 3.5 hours charge time from empty (15% - 95% SOC)

## Benefits

- The ProCharge's solar array and inverter produce 3X the output power and 3.5X the battery storage of our single-phase system. As such, it is best suited to high-power applications above 20kVA and up to 45kVA, making it ideal for larger, more power-hungry sites and sectors.
- The 3-phase battery energy storage system enables work sites to scale up their sustainable power delivery

depending upon their power requirements. It can connect up to the majority of existing diesel generators, up to 100kVA, to give more flexibility in fleet management. It also offers greater compatibility, as the majority of work sites in the UK are wired up with 3-phase distribution boards.

- Improve the performance of your Stage 5 generator and reduce breakdown risk from running at low loads.
- Monitor and control settings remotely via an integrated micro-controller and GPS, streamlining site operations and reducing downtime.
- Operates quietly, making it perfect for urban environments and night-time projects, minimising disruption in residential areas.
- Estimated annual savings reported on the Kier A417 'Missing Link Project' of £69,000 and 150,000 kgs of CO<sub>2</sub>e.
- **Total Cost of Ownership:** Savings over a 7-year period, equate to over **£400,000 per unit**, with cost neutrality achieved in under a year, compared to a diesel generator alone.

## Applications

- Large Site Compounds
- Electric Telehandlers
- Small EVs
- Battery-Powered All-Terrain Vehicles
- Mini Diggers and Dumpers
- Scissor Lifts



Scan here for  
spec sheet







We were impressed with the build quality and the safety aspects of the products - electrically and especially with no manual handling of heavy batteries which so many similar solutions required. We have continued to work with Prolectric to develop our solutions; we have fed back ideas to make the units even better and these have been taken onboard and incorporated into the latest versions. Overall, a great innovative company to work with.

Major Multinational Security Company for  
Defence Application



# Temporary Tower Lights

We are pioneers in off-grid solar lighting, having launched the UK's first solar lighting tower in 2016. With over 3,000 units deployed, we continue to lead the way toward a sustainable future.

As the off-grid solar and battery experts, we deliver robust and reliable off-grid solar solutions. Through our expertise, we have overcome the challenges of the UK climate, ensuring foolproof performance even during the harshest winters.

Engineered in the UK to the highest British Standards, our solar lighting solutions are specifically designed to overcome the challenges of British winters.

**Patented AI Lighting Technology:** Optimise's battery reserves by imperceptibly dimming lights during the night, eliminating the need for manual recharging.

**Smart Energy Management:** Automatically adjusts light output after three consecutive days of low solar yield to maintain safety and working conditions without compromise.

**Unmatched Reliability:** Built to overcome the winter energy deficit caused by powering 4x 60W LEDs, a feat unattainable by standard solar-only lights in the UK.



We commit to meaningful benefits, eliminating over **33 million kgs of CO<sub>2</sub>** emissions since 2017 and **saving over £14 million** in operational costs for our customers.



**Data-Driven Precision:** Patented software leverages 10 years of climate data, battery state monitoring, and GPS location for optimal performance.

**True "Setup-and-Forget" Technology:** Unlike all other solar lights, Prolectric lights require no monthly battery draining or recharging, ensuring seamless and effortless operation.

As your trusted partner in transitioning from diesel to solar, we empower you with complete control of your assets, to deliver cost-effective and sustainable solar solutions that maximise efficiency and minimise environmental impact.

SKANSKA





# ProLight Solar Tower Light

The award-winning Proelectric ProLight Solar Lighting Tower is the UK's only mobile solar lighting tower that operates reliably all-year round, even during winter.

### Features

- Bright illumination with 4x 60W LED lights, 5,629 sqm light coverage and up to 40,000 lumens
- 1,520W solar panels
- Battery capability of 14.4 kWh, lasting 4x longer, reducing replacement costs and maintenance visits
- Our patented technology ensures the lights work all-night long, year-round - overcoming the need to drain and recharge the batteries regularly

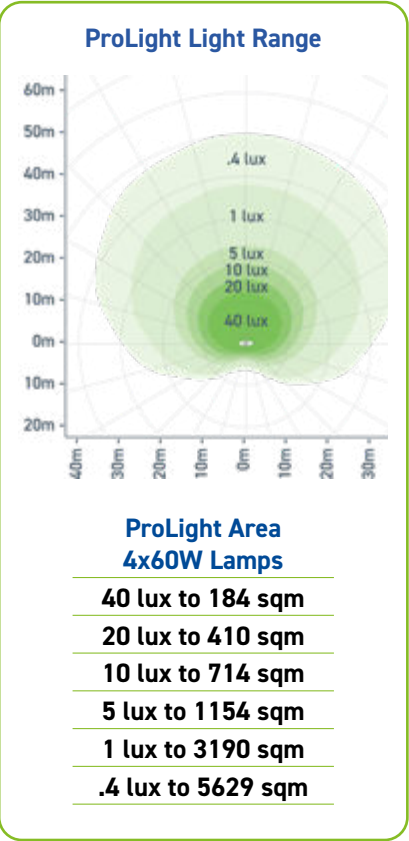
### Benefits

- The ProLight is the high performance, low operating-cost alternative to diesel generator tower lights, that's easy to set up - and forget.
- The ProLight never needs to be refuelled, so you save fuel and labour costs, while it continues to provide powerful light.
- With no carbon emissions, danger of spills or noise.

- The trailer-mounted battery powers the lights, so that even on winter days with 16 hours of darkness, the unit operates consistently and reliably.
- The Proelectric Automatic Mast Safety System (PAMS) is a fail-safe system that stops a light from being moved with the mast raised, avoiding danger to personnel including inadvertent striking of overhead powerlines.
- Proelectric offers a full lighting design service to ensure you have the optimum temporary lighting configuration for your site.
- Total Cost of Ownership:** Savings over a 7-year lifecycle translate to **£26,000 per unit**. Giving rapid ROI, helping you achieve cost neutrality in just 1 year and 8 months compared to the most common diesel lighting tower in the UK.

### Applications

- Infrastructure projects including rail and highways
- Development of commercial and residential estates
- Temporary site works
- Security lighting



Achieve cost neutrality in just 1 year and 8 months compared to the most common diesel lighting tower in the UK.

Save **£10,806** annually on fuel, refuelling, and maintenance per unit.



Balfour Beatty

SKANSKA

Scan here for spec sheet



VIDEO





# ProRXM

## Solar Tower Light

**T**he Prolectric ProRXM is a space-efficient and versatile solar lighting tower that offers outstanding fuel savings and emissions reduction in the same footprint as the standard VT1 diesel powered alternative.

### Features

- Bright illumination with 4x 60W floodlights, 5,292 sqm light coverage and up to 36,000 lumens
- 810W slidable solar panels with hydraulic operation
- Battery capability of 14.4 kWh, lasting 4x longer, reducing replacement costs and maintenance visits
- Our patented technology ensures the lights work all-night long, year-round - overcoming the need to drain and recharge the batteries regularly

### Benefits

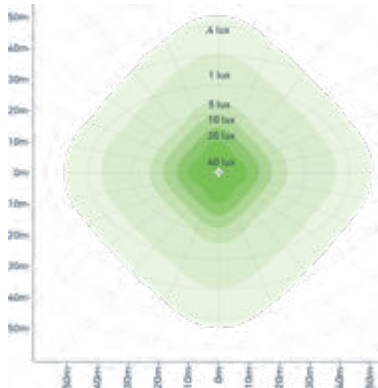
- Specifically developed as a compact solar lighting tower that provides completely reliable, bright solar lighting in the same footprint as a standard VT1 diesel generator light.

- The trailer mounted battery bank has sufficient capacity to ensure that even on winter days with 16 hours of darkness, the unit operates consistently and reliably.
- As a solar-only tower light the ProRXM emits no fumes or greenhouse gas emissions using no fuel thereby saving you on fuel and refuelling costs and avoid spills.
- Each light is fitted with a fail safe system (PAMS) to ensure this towable unit can't be moved with the mast still deployed, removing the risk of injury and damage.
- The ProRXM tower light is perfect for urban, residential or night time projects as there is zero noise.

### Applications

- Infrastructure, rail and construction projects
- Site welfare compounds and walkways
- Temporary car parks
- Off-grid emergency response
- Outdoor events and festivals

### ProRXM Light Range



### ProRXM Area 4x60W Lamps

40 lux to 189 sqm
20 lux to 388 sqm
10 lux to 664 sqm
5 lux to 1068 sqm
1 lux to 2978 sqm
.4 lux to 5292 sqm



Balfour Beatty



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Achieve cost neutrality in just 1 year and 8 months compared to the most common diesel lighting tower in the UK.

Save **£10,806** annually on fuel, refuelling, and maintenance per unit.



VIDEO





# ProRXM Hybrid Solar Tower Light

**T**he ProRXM Hybrid is a space-efficient solar hybrid lighting tower designed specifically for Rail and Highway works, fitting in a trackside cess or tight roadside space with the same footprint as a VT1.

## Features

- Bright illumination with 4x 60W-180W lights, up to 16,993 sqm light coverage and 118,000 lumens
- 810W slidable solar panels with hydraulic operation
- Battery capability of 11.37 kWh, lasting 4x longer, reducing replacement costs and maintenance visits
- Back up generator with 3.5 kVA (Single-Phase)
- Internal bunded fuel tank - 150L

## Benefits

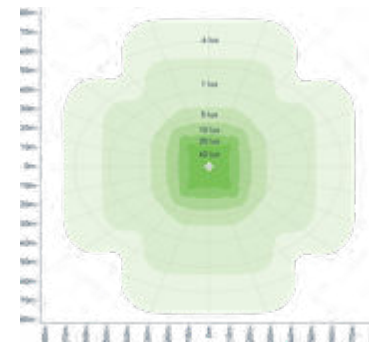
- To avoid damage, the solar panels fold away neatly on the top of the unit and are covered when not in use. Once extended, a hydraulic mechanism tilts the panels diagonally to minimise space, while capturing maximum sunlight.

- The trailer mounted battery bank has sufficient capacity to ensure that even on winter days with 16 hours of darkness, the unit operates consistently and reliably.
- As a solar 1st and diesel 2nd tower light you save costs on fuel and refuelling while simultaneously reducing carbon emissions and fuel usage, avoiding spills. Maintenance is reduced as the generator run-time is remarkably less.
- The ProRXM Hybrid is a portable trailer mounted tower light with a retractable towbar and our Automatic Mast Safety System (PAMS) is a fail-safe system built-in to avoid danger and personnel injury.
- Perfect task lighting for worker safety and site security.

## Applications

- Rail and highway works
- Trackside cesses or tight roadside space
- Site welfare compounds and walkways
- Temporary car parks
- Off-grid emergency response

## ProRXM Hybrid Light Range



## ProRXM Hybrid Area 4x180W Lamps

40 lux to 435 sqm

20 lux to 905 sqm

10 lux to 1647 sqm

5 lux to 2896 sqm

1 lux to 9314 sqm

.4 lux to 16993 sqm

Requires only 1 refuel per year and can achieve a yearly saving of £9,922 and 12,665 kgs of CO<sub>2</sub>e compared to a VT1 diesel alternative.





# ProTemp Solar Column Light

**T**he ProTemp is a temporary solar lighting column that delivers powerful and reliable year round lighting without noise or emissions for sites.

### Features

- Delivers high-quality LED bright light from a single 20W lamp, 687 sqm light coverage and up to 3,800 lumens
- With a 150W solar panel, the ProTemp is designed for busy areas with higher traffic
- Column mast has a telescopic wind-up arm for easy installation

### Benefits

- Prolectric's solar lights offer a flexible alternative to fuel-generator lighting, with clean, silent, low-carbon operation that requires minimal maintenance.
- As a reliable alternative to mains-

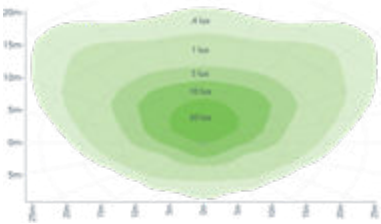
power lighting, the ProTemp dispenses with the need for a contractor and significantly saves installation costs.

- It will continue reliably even through dark, winter days.
- There's no danger of fuel spills, no carbon emissions and no noise.
- Every ProTemp is fitted with a smart PIR to optimise power usage in the unit.
- The motion detection system automatically regulates the light source from full bright to dim mode when the area is entered by a vehicle or person to increase battery autonomy and minimise light pollution.

### Applications

- Temporary works
- Car parks and welfare compounds
- Outdoor events and festivals
- Emergency response lighting

### ProTemp Light Range



### ProTemp Area 1x20W Lamp

20 lux to 32 sqm
10 lux to 106 sqm
5 lux to 194 sqm
1 lux to 468 sqm
.4 lux to 687 sqm





It's fantastic to be able to work with such a reliable and proactive supplier installing solar lighting adoptions to existing street lighting as well as new designs. The works are incredibly low impact for our families and cause no issues while being completed but result in much better designs as well as eliminating the cost of traditional street lighting electricity bills for our client.

Christopher Irons - Regional Billable Works Manager

**VIVO**



# Permanent Lighting Solutions

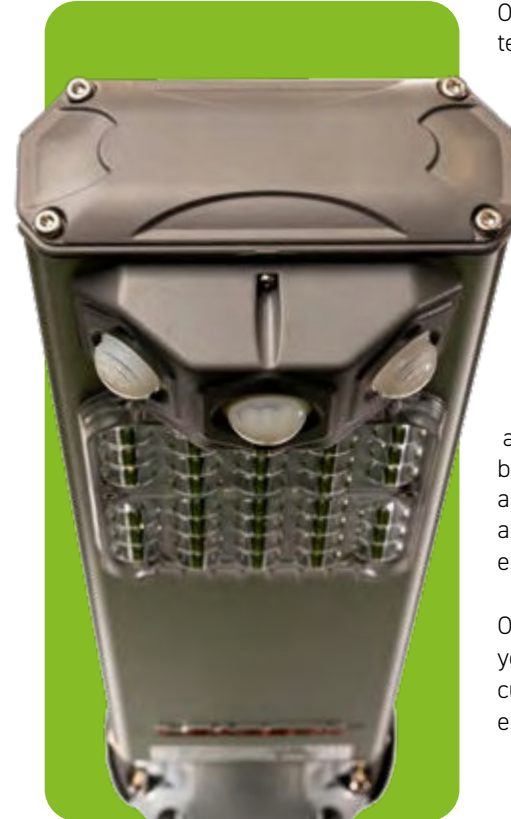
As the first to market innovator, we have mastered the science behind off-grid solar streetlights.

We introduced the UK's first solar streetlight in 2011. Since then, we have installed over 10,000 solar only streetlights across the UK, from the Outer Hebrides to Cornwall.

British Engineering to the highest standards, we pioneer solar streetlights that set the benchmark for reliability and innovation.

By understanding the complexity of solar and battery technology, we design solar solutions that **perform consistently, even under the most challenging conditions, during the UK winter.**

Our modular Split-Type design provides a flexible setup for optimal solar panel positioning (facing South), maximising solar yield, while illuminating targeted areas.



Our innovative 3-PIR sensor technology ensures light is provided only when needed, reducing power wastage and minimising light pollution.

We are your trusted partners in solar lighting, offering a full-service package that ensures seamless, safe, and reliable operation year-round.

Our comprehensive service includes bespoke lighting designs and compliant installations, backed by robust wind-loading analysis and ground surveys. Strict alignment with British Standards ensures safety and reliability.

Our advanced remote portal gives you full control to program and customise light setups across your entire estate.





# AE3 Model Solar Street Light

**A** medium to high power solar street light, integrating all components, making the installation and maintenance easy, saving labour and service costs.

### Features

- Split-Type design allows users to adjust the direction of the solar panel and LED light head depending on the site requirements.
- Our unique 3-PIR sensor technology ensures wider motion detection, giving up to 20m detection; 15m forwards and 12m either side.
- Solar array of up to 90W and illumination from 5W to 40W, up to 7,200 lumens.
- Battery capability of up to 615Wh, also features an exclusive technology that extends its lifespan to over 8 years.

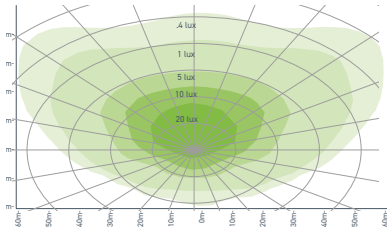
### Benefits

- We offer a full-service package that ensures seamless, safe, and reliable operation year-round.
- Our comprehensive service includes bespoke lighting designs and compliant installations, backed by robust wind-loading analysis and ground surveys.
- Strict alignment with British Standards ensures safety and reliability.
- Our advanced remote portal gives you full control to program and customise light setups across your entire estate.

### Applications

- Residential new builds
- Retrofits to avoid expensive recabling
- New sites with no mains power

### AE3 Light Range



**AE3 Area**  
**1x40W Lamp**  
**6m Column**  
**22° Tilt**  
**.5m Outreach**

**20 lux to 84 sqm**

**10 lux to 211 sqm**

**5 lux to 369 sqm**

**1 lux to 881 sqm**

**.4 lux to 1,310 sqm**



Scan here for  
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# AE6 Model Solar Street Light



**O**ur brightest and most powerful streetlight, providing outstanding performance even in the winter months.

### Features

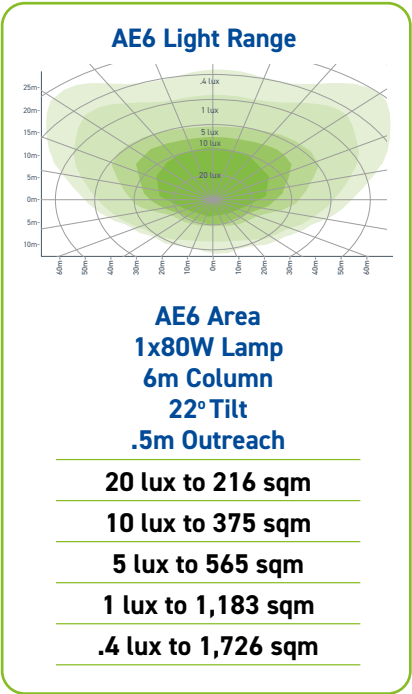
- Split-Type design provides a flexible setup for optimal solar yield and variable light direction.
- Our unique 3-PIR sensor technology ensures light is provided only when needed.
- Solar panels from 150W to 300W and a battery capability of up to 2,458Wh.
- Highest quality LEDs ensure crisp and bright illumination from 5W to 80W, up to 14,800 lumens.

### Benefits

- Designed and engineered specifically for all year-round operation, as tested in the north of Scotland.
- Installation costs are halved compared to conventional mains power.
- No need for ducting, cables and trenching - reducing disturbance to the estate residents.
- Removes grid resilience and ensures illumination in a power cut.

### Applications

- Commercial estate lighting
- Easy installation for busy public areas such as airports
- Light safety for business parks



Installation costs are halved compared to conventional mains power.





# ST Bollard

## Solar Bollard

**O**ur ST Solar Bollard Light series is a robust off-grid lighting bollard using the latest solar and LED technology, perfect for streets, car parks and footpaths.

### Features

- The All-in-One compact design uses the latest LED technology for bright illumination.
- With next-generation battery charging to optimise power usage.
- Light directed downward, for full concentration of light onto the ground surface.
- We also offer a domed design which has a 90 degree light distribution cut-off - dark sky approved.

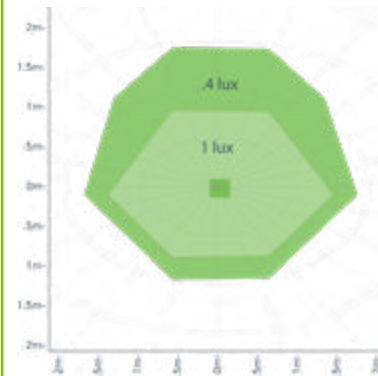
### Benefits

- No need for cabling and trenching - reducing interruptions to the public.
- It has an integrated charging unit to optimise battery charging and ensure light levels remain bright, providing a safer environment.
- The vandal-resistant bollard street light has a polycarbonate domed head for added strength and durability.

### Applications

- Solar lighting for government infrastructure projects
- Community developments
- Marine projects
- Hospitality and tourism facilities

### ST Bollard Light Range



**ST Bollard Area  
1x1W Lamp  
1m Height**

**1 lux to 6 sqm  
.4 lux to 11 sqm**



# ProSecure CCTV Security Towers

**I**n the evolving landscape of security, where reliability and sustainability are paramount, Prolectric has once again set the standard with our ProSecure range. These innovative, off-grid, standalone solar-powered security towers are designed to meet the rigorous demands of modern surveillance, providing a versatile, eco-friendly solution that doesn't compromise on effectiveness.

## Features

- From a 150W solar panel to a total peak output of 1,520W, delivering a high yield of solar power.
- Up to 14.4kWh battery capability, lasting 4x longer, reducing replacement costs and maintenance visits.
- Comes with an integrated charging unit that constantly monitors battery status.
- Equipped with GPS and a micro-controller for real-time data tracking and remote control, making it a truly "Setup-and-Forget" solution.
- Our patented technology ensures the lights work all-night long, year-round - overcoming the need to drain and

recharge the batteries regularly.

- Mounted on a mobile trailer with side forklift pockets for easy transportation and deployment.
- Back-up HVO or diesel generator with 3.5kVA peak output on the ProSecure Hybrid.
- Internal bunded fuel tank - 150L (300 hours run-time at 0.5 litres per hour).

## Benefits

- **High Solar Power Output:** Ensures reliable operation even during extended periods of low sunlight, maintaining continuous surveillance.
- **Robust Battery Storage:** Provides substantial energy storage for uninterrupted off-grid operation, reducing the need for frequent maintenance.
- **Advanced Safety System:** Enhances operational safety by automatically managing mast deployment and retraction, minimising risks during adverse conditions.
- **Remote Monitoring Capabilities:** Allows for efficient remote management and monitoring, reducing the need for on-site personnel and enabling quick response to issues.
- **Mobility and Flexibility:** Facilitates

rapid relocation across sites, providing adaptable security solutions for dynamic environments.

- **Compact Solar Power System:** Delivers a sustainable power source suitable for lower energy consumption applications, ensuring continuous operation in remote locations.
- **User-Friendly Mast Design:** Simplifies installation and adjustment, allowing for quick deployment and optimal camera positioning.
- **Integrated Battery Management:** Ensures batteries are maintained at optimal levels, prolonging lifespan and reducing maintenance efforts.
- **Stable and Secure Mounting:** Provides a sturdy and secure foundation, ensuring stability in various environmental conditions and deterring tampering.

## Applications

- Infrastructure and construction sites
- Car parks
- Health and safety monitoring
- Anti-theft guarding
- Security gate guarding
- Mines and quarries



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# ProConnect Remote Off-Grid Power

**I**n today's increasingly connected world, having access to reliable power and communication systems, even in remote locations, is crucial. Proelectric's innovative off-grid solar-powered solutions are designed to meet that need – delivering uninterrupted power for Wi-Fi connectivity wherever it's needed, even in the most isolated locations.

## Features

- 810W to 3040W solar panel array with hydraulic extension for high efficiency energy generation.
- Utilises heavy duty, deep-cycle batteries with a capacity from 14.4 kWh to 24 kWh, to ensure consistent power availability.
- Our patented technology ensures the lights work all-night long, year-round - overcoming the need to drain and recharge the batteries or carry out regular maintenance routines.
- Integrated with the Smart Remote Portal, providing real-time data on

performance metrics such as solar yield, battery usage, and system status.

- Mounted on a mobile trailer with side forklift pockets for easy transportation and deployment.
- Equipped with a 17.5kVA - 22.5kVA peak output back-up HVO or diesel generator to ensure uninterrupted power during extended periods of low sunlight.
- Internal bunded fuel tank - 130L (30-45 hours run-time, load dependent).

## Benefits

- **Reliable Connectivity in Remote Areas:** Delivers dependable Wi-Fi and communication solutions for large remote sites, temporary bases, outdoor events, emergency responses, and more.
- **Environmental Sustainability:** Generates clean energy, resulting in zero fuel consumption, carbon emissions, and noise pollution.
- **Cost Efficiency:** Reduces operational costs by eliminating fuel expenses and minimising maintenance requirements.

- **Enhanced Safety Features:** Incorporates advanced safety systems to ensure secure and reliable operation in various environments.
- **User-Friendly Management:** Offers intuitive remote monitoring and control, allowing users to efficiently manage and optimise system performance from any location.

## Applications

- Large remote sites
- Temporary bases
- Outdoor events
- Emergency responses
- Remote healthcare
- Disaster relief
- Rescue operations
- Military operations
- Broadcast services
- Power grid failure



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# Smart Remote Portal

**G**ame-changing telematics – providing you with real-time data and remote monitoring, control and reporting of your Prolectric products.

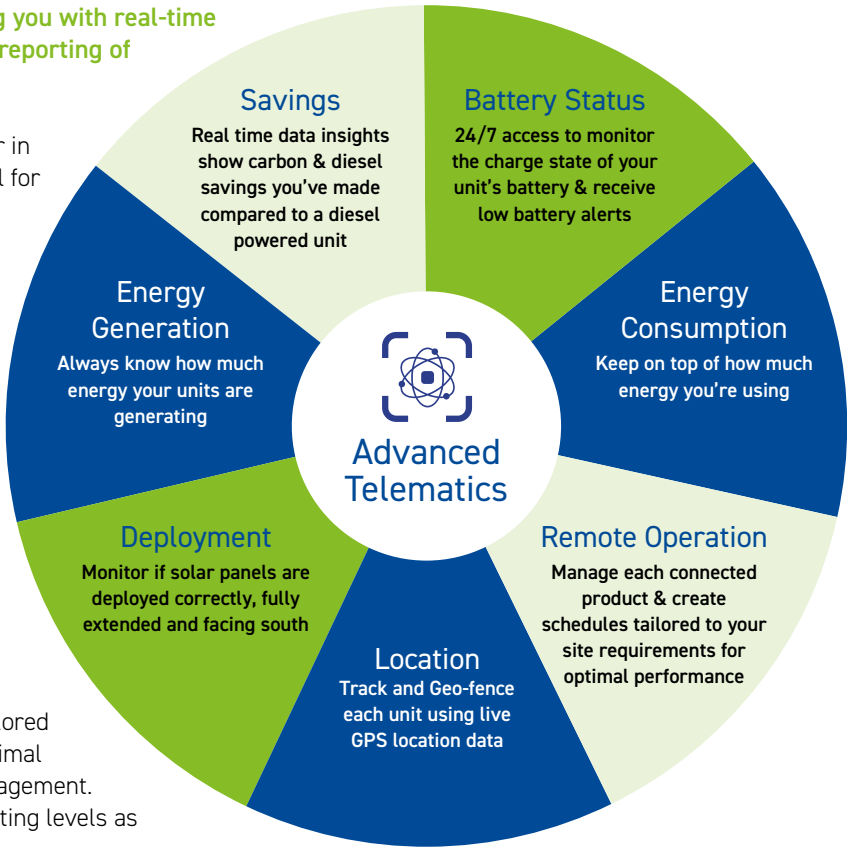
Our Smart Remote Portal is a game-changer in remote device management, and is essential for managing our products effectively.

Unlike traditionally powered products, solar power is unpredictable and managing the energy output is critical to conserving energy when a unit is not required. Our portal enables seamless management and operation of every unit from anywhere in the world.

**Monitoring and Diagnostics:** In-depth diagnostics on each unit's performance, including GPS location tracking, deployment, solar yield and battery usage.

**Remote Management:** Turn on and off each connected product and create schedules tailored to your power and site requirements for optimal performance, giving you flexible power management. Also adjust the maximum and minimum lighting levels as needed.

**Reporting:** Real-time insights through live reporting, tracks your carbon emissions and operational cost savings compared to traditional diesel-powered products.



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# Smart Distribution Board

**W**orking in collaboration with the Smart Remote Portal our Smart Distribution Board plays an important role in managing the power output from our Solar Hybrid Generator and our Battery Energy Storage System.

The distribution board enables customers to effectively manage the various outputs powered by the ProPower or ProCharge ensuring that power is only going to the applications that require it.

Commonly this is used in a multi welfare cabin setup. Once the site has finished for the evening the Site Manager can remove the power to the canteen and toilet blocks, while maintaining all night power to the drying room.

This can be applied as a schedule using the portal or be triggered remotely by logging into the portal. Reducing site energy wastage is crucial to improving sustainability but also to ensuring that the battery state of charge is maximised, using more solar energy and reducing the frequency that the back-up generator needs to be used.



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Since 2017, Our  
Customers Have  
Saved Over:



**44,580**  
tonnes of CO<sub>2</sub>e



**16 million**  
litres of diesel



**£20 million**  
in operational costs

