prolectric™

SMART CLEAN TECHNOLOGY

Off-Grid Solar Lighting & Power Experts

Pioneers in Solar Technology

As the UK's leading off-grid, renewable lighting and power specialists, we set the benchmark for intelligent, sustainable solar and battery systems, supported by advanced remote monitoring and control.

Since 2011, we have delivered clean, reliable off-grid solutions designed to perform in the real world. By combining solar generation, battery storage and smart energy management, we ensure our lighting, power and infrastructure systems operate dependably all year round – even through challenging UK winters.

Our solar-first approach has redefined what's possible off-grid. From temporary and permanent lighting to hybrid power, battery energy storage and low-power infrastructure systems, every solution is engineered to maximise renewable energy use while maintaining performance without compromise.

Intelligent software sits at the heart of our technology. Our systems automatically adapt to site conditions, optimise battery health without manual intervention and provide continuous insight through the Smart Remote Portal. This enables customers to remotely monitor performance, manage assets and access verified carbon and cost-saving data.

By designing systems rather than standalone products and by working closely with our customers to understand their operational challenges, we continue to lead the transition away from diesel and mains dependency – powering safer, cleaner and more efficient sites across the UK.

Our Ambition

Our ambition is simple: **to power off-grid energy needs with smart, clean, renewable technology**, delivering measurable benefits for our customers and lasting impact for the environment.

From 1W up to 60kW!

Our solutions could help decarbonise up to **42%** of the UK's off-grid generator market* - preventing an estimated **342,484 tonnes of CO2e** from entering the atmosphere each year.

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

Sustainability in Action

At Prolectric, sustainability is built into every system we design, engineer and deploy. We help organisations transition away from diesel and grid dependency by delivering renewable off-grid lighting and power solutions that perform reliably in real-world conditions.

83,137,497 kg of CO_2e avoided

32,353,558 litres of fuel removed

£40,441,948 in cost savings

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.

Reduce your carbon emissions
Since 2017, we have been committed to supporting our customers in their decarbonisation journeys, saving them over £40 million in costs and eliminating over 83 million kgs of CO_2 emissions.

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.

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.

All performance, carbon and cost savings are measured in real time, providing transparent, verifiable data to support operational reporting and sustainability targets.

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.

We work closely with customers from early project stages to understand site constraints, power requirements and operational objectives. Our in-house engineering and design teams enable us to configure, customise and deliver bespoke off-grid lighting and power solutions, ensuring each system is optimised for its specific environment and application.

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.

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

Setup-and-Forget technology
Our systems are engineered to manage themselves. Intelligent software continuously optimises energy generation, battery performance and power distribution, removing the need for manual battery draining, routine intervention or reactive maintenance.

By automatically balancing solar input, stored energy and site demand, Prolectric solutions deliver consistent, reliable performance while maximising battery lifespan, solar utilisation and operational efficiency.

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.

AMPS MEMBER · ConstructZERO · Constructionline Gold Member · CPA Member of Construction Plant-Hire Association · CQMS Safety Scheme · SafeContractor Approved · LRQA Certified ISO 9001 · Cyber Essentials Certified · SCHOOL PARTNER · Smas Worksafe · Darksky Approved

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.

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

We installed 34.8kW of solar panels at our headquarters in Clevedon, saving nearly 200 tonnes of CO_2 annually and generating 264MWh of electricity each year.

2014

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.

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 Prolectric Portals, our cloud-based real-time remote monitoring and control hubs.

2021

We received the prestigious Queen's Awa… rprise and … ased by t… ith Hold… he FTS… 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 AMPS 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, Prolectric 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.

2026

We lead the next phase of site innovation with ProZone smart solar festoon lighting, ProSense for low-power off-grid applications and renewable EV charging supporting the transition to electric fleets.

> 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
CIVIL ENGINEERING

We commit to meaningful benefits, eliminating over **83 million kgs of CO_2** emissions since 2017 and **saving over £40 million** in costs for our customers

Off-Grid Power Solutions

As the UK's off-grid solar and battery experts, we deliver reliable, high-performance renewable power for temporary, permanent and grid-constrained environments - engineered to perform year-round, even in challenging UK conditions.

We were first to market with the ProPower Solar Hybrid Generator in 2019 and continue to lead the evolution of off-grid power by combining solar generation, battery storage and intelligent energy management into fully integrated systems. From portable battery power and high-demand hybrid applications to permanent low-power infrastructure and EV charging, our solutions are designed to replace diesel without compromise.

Our power portfolio supports a wide range of site and infrastructure requirements:

- Portable and flexible power for tools, equipment and welfare
- Hybrid solar power for temporary sites, compounds and operations with variable loads
- High-capacity Battery Energy Storage Systems (BESS) for three-phase and power-intensive projects
- Permanent, low-power solar systems for remote infrastructure and always-on assets
- Off-grid EV charging enabling electric fleets where grid access is limited or unavailable

Each system is engineered around ***real-world load profiles***, autonomy requirements and site conditions - ensuring dependable performance, measurable savings and total operational control.

Designed and manufactured in Britain, Prolectric power systems prioritise solar and stored energy, with back-up generation used only when required. Hybrid power systems can ***reduce generator run-time by up to 90%***, significantly cutting fuel use, maintenance, noise and emissions.

Silent battery operation improves working environments, supports night-time and urban projects and helps sites operate longer hours without disruption.

Integrated with our Smart Remote Portal, customers gain ***real-time visibility and control over their assets***. Users can monitor energy generation, battery status, consumption and savings, adjust schedules, manage loads remotely and access verified carbon and cost-saving data.

This intelligent control is critical to maximising solar contribution, reducing unnecessary generator use and turning sustainability targets into measurable outcomes.

Working in partnership with our customers, we deliver customised and bespoke power solutions that improve efficiency, lower whole-life costs and enable confident transition away from diesel – ***without compromising performance or reliability***.

It is key to deploy the right power solution for each project - whether that's a portable battery unit, a hybrid generator, a high-capacity BESS, a permanent low-power installation or an off-grid EV charging system.

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ProPower
Solar Hybrid Generator

Prolectric'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_2 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 on stored battery power, eliminates noise pollution, improving the working environment for site operatives and making it ideal for residential areas, urban locations and night time 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

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We enable our customers to make remarkable operational savings.

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

ProCharge
Solar Battery Energy Storage System

The 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 with up to 90 kVA generator pass-through capability to support peak site loads
- 3.5 hours charge time from empty (15% - 95% SOC)
- **Engine on time reduced by over 80%**

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 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.
- Enables a scalable site power setup, delivering high output when demand peaks while avoiding unnecessary fuel use, cost and carbon when site power requirements are lower.
- 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_2e.
- **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
- Large EV fleet charging
- Battery-Powered All-Terrain Vehicles
- Mini Diggers and Dumpers
- Scissor Lifts

KIER amey Dawsongroup

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ProVolt
Portable Battery System

ProVolt is a portable energy solution that helps you reduce your environmental impact and improve your working conditions.

Its robust and compact design makes it an essential tool and versatile BESS, meeting the needs of construction sites. With its cutting-edge technology, this battery-powered storage system offers exceptional power and autonomy, while being environmentally friendly.

Features

- 8 kW continuous power and a peak of 15 kW
- Battery capacity up to 10 kWh
- Recharging time on a 16A socket (3kW) = <4h and on a 32A socket (5kW) = 2h
- Output: 16A single-phase socket, 32A single-phase socket, USB-C socket
- Input: 20A Power Twist, daisy chain 32A, waterproof solar charge socket 75A
- Use time at 500W - 20h, at 1kW - 10h, at 3kW - >3h
- Easily moveable at 130kg
- Up to 6 devices can be daisy chained to give 48 kWh - 60 kWh
- Dimensions: 700 x 650 x 740 mm

Benefits

- Energy anywhere, silent and without pollution
- **Working comfort** - No noise, no fumes, portable, lightweight, no maintenance, no cables
- **Cleaner power** - Zero CO_2 emissions when in use, solar rechargeable
- **Versatility** - Indoor and outdoor use, hybridisation with a diesel unit and/or solar panels
- **Robust** - IP54: resistant to dust, mud, water and snow, operating in temperatures from -20°C to +55°C.
- **3 recharging options** - Rapid recharging on mains, using solar energy or at an electric vehicle charging point

Applications

- **Lighting mast:** 14h noise free
- **Single-phase jackhammer 10.8kg - 19J:** 4h
- **Electric drill/core drill on column - 400mm diameter:** Between 3h and 5h
- **WC 11m²:** 24h with ProVolt and solar panels on the roof
- **All-terrain electric articulating boom lift - 15.72m - remote:** Recharge power: 4h & Recharging capacity: 150%
- **Recharging small portable batteries:** Full charge of around 5 batteries

After 5 years of use, you will save

13 tonnes of CO_2e and over £8,432.

Savings based on grid recharging vs diesel and no maintenance

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ProSense
Power for Remote Systems

ProSense is Prolectric's permanent off-grid solar power system, delivering reliable, uninterrupted power for remote low-load applications where mains supply is unavailable or unreliable.

Features

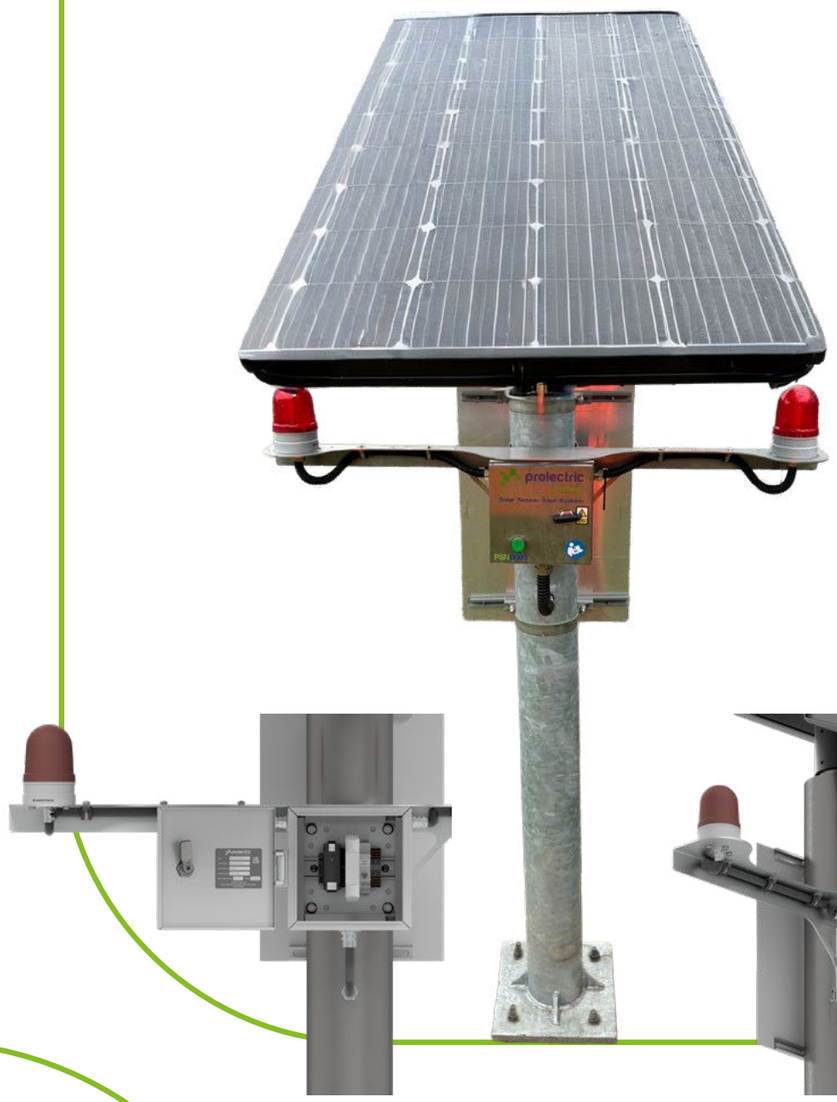
- Permanent off-grid solar power system for remote, low-load applications
- Configured to site-specific requirements, developed in collaboration with customers
- PV module options from 90W to 300W to match energy profile and location
- High-performance $LiFePO_4$ battery storage (1.26 kWh) for dependable energy availability
- MPPT charge controller with high-efficiency tracking and automatic battery protection
- 'Always Monitored' telemetry module providing remote insight into state of charge, PV generation, load and connectivity
- Designed for constant low-power loads up to 6W, with options available for higher demands
- Galvanised steel column and Prolectric-spec mounting bracket for long-term, permanent installation
- IP65-rated components with operating range from -20°C to +50°C
- CE marked, UKCA compliant, designed to relevant BS EN standards

Benefits

- **Reliable, uninterrupted power where mains supply is unavailable or unreliable:** Ensures critical remote assets remain operational year-round, even in challenging UK conditions.
- **Zero-carbon alternative to mains extensions and diesel generators:** Removes fuel use, emissions, noise and the cost and disruption of generator servicing.
- **Lower lifetime operating and maintenance costs:** Permanent, low-maintenance design significantly reduces site visits and ongoing intervention.
- **Remote visibility and peace of mind:** Built-in telemetry allows operators to monitor performance and connectivity without travelling to site.
- **Specified to real-world operational requirements:** Each system is designed around actual load profiles, location and usage rather than off-the-shelf assumptions.
- **Engineered for critical infrastructure environments:** Proven solar and battery technology trusted across telecoms, highways, water and infrastructure projects.

Applications

- Information and emergency call-points
- Sensors and remote monitoring equipment
- Camera and surveillance systems
- Wi-Fi connectivity and access points
- Flood and level detection systems with alert beacons
- Smart metering and telemetry systems
- Signage and low-power public information assets
- Railway asset and signalling monitoring equipment



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EV Charging
Powered by Prolectric

Prolectric delivers reliable EV charging for locations where grid power is unavailable, limited or impractical. Powered by our off-grid solar and battery energy systems, we enable electric vehicle charging anywhere - overcoming grid-constrained sites, temporary works and remote locations - without compromising performance, cost or sustainability objectives.

Features

- Off-grid EV charging solution designed for remote, temporary and grid-constrained sites
- Powered by Prolectric solar hybrid generators and battery energy storage systems
- Supports single- and three-phase EV chargers with outputs up to 22 kW
- Compatible with dual Type 2 charging points and a range of charger configurations
- Rapid, plug-and-play deployment with no requirement for permanent grid connection or civils
- Scalable system design to support everything from small fleets to multi-vehicle charging hubs
- Integrated smart monitoring, load management and reporting
- Optional payment and access management platform with usage and carbon reporting
- Weather-resistant charging hardware suitable for outdoor and temporary environments

Benefits

- **Provide EV charging where grid access is limited or unavailable:** Overcome remote locations, weak connections and long DNO lead times.
- **Reduce diesel use, noise and emissions on site:** Replace generator-only charging and support cleaner, quieter operations.
- **Avoid costly grid upgrades and temporary power infrastructure:** Deliver predictable energy costs and strong total cost of ownership savings.
- **Deploy quickly and adapt as sites evolve:** Charging can be installed rapidly and relocated as project requirements change.
- **Support sustainability and Net Zero commitments:** Deliver measurable carbon savings and compliant reporting.
- **Scale with fleet growth:** Add chargers or increase power capacity as EV demand increases.

Applications

- Construction sites and enabling works (electric vans, plant, ATVs and cars)
- Fleet depots with grid capacity constraints
- Highways laybys, compounds and infrastructure corridors
- Rural council depots and public service yards
- Events, festivals and temporary venues
- Universities, colleges and large campuses
- Retail, logistics, industrial and workplace sites
- Temporary or mobile EV charging hubs

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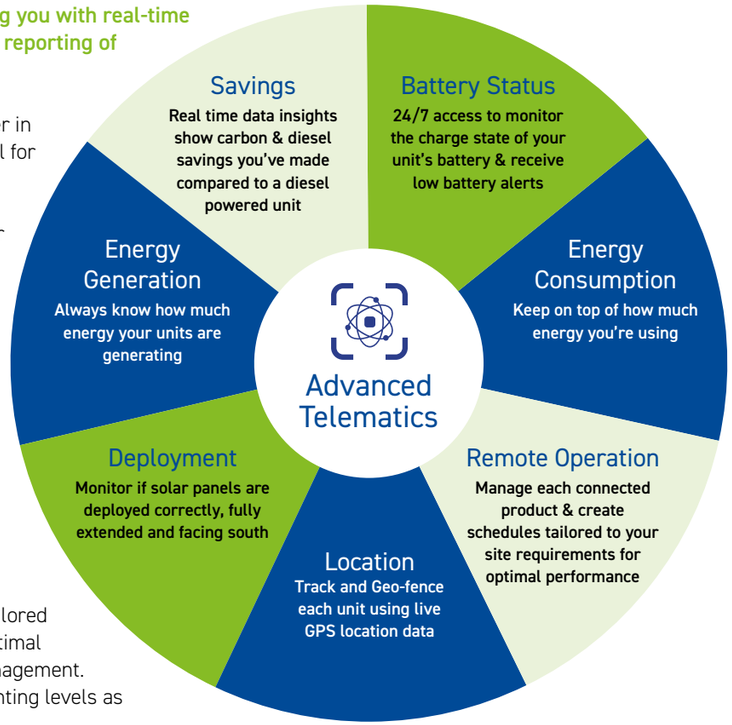
Smart Remote Portal

Game-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

Working 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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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 and Defence Company

We commit to meaningful benefits, eliminating over **83 million kgs of CO_2** emissions since 2017 and **saving over £40 million** in costs for our customers

Temporary Tower Lights

We are pioneers in off-grid solar lighting, delivering intelligent, adaptive temporary lighting systems that improve safety, reduce environmental impact and perform reliably in real-world site conditions - all year round.

Our temporary lighting portfolio is designed to do more than simply illuminate space. By combining solar generation, battery storage and intelligent energy management, we provide responsive lighting where and when it's needed, reducing unnecessary runtime, energy use and light pollution while maintaining safe working environments.

Lighting designed around how sites really operate

Temporary sites are dynamic. Access routes change, work zones move and activity levels vary throughout the day and night. Our temporary lighting systems are engineered to adapt to these conditions, delivering targeted illumination for:

- Work areas and task lighting
- Walkways, access routes and crossings
- Compounds, perimeters and storage areas
- Night-time, urban and noise-sensitive environments

From high-output area lighting to zonal and perimeter lighting, each system is specified to match site layout, risk profile and operational requirements.

Smarter lighting through intelligent control

Integrated intelligent control allows lighting levels to be scheduled and managed remotely, ensuring illumination is delivered at the right brightness, for the right duration, based on site requirements and available energy. Light output can be programmed to reduce or increase at specific times, helping maximise battery autonomy, extend runtime and minimise unnecessary energy use without compromising safety.

All temporary lighting solutions integrate with our Smart Remote Portal, providing remote visibility of performance, energy usage and verified carbon and cost savings. This enables site teams to proactively manage lighting profiles, adapt to changing site conditions and reduce site visits through intelligent scheduling and remote control.

Reliable performance. Measurable impact.

Designed and manufactured in Britain, our temporary lighting systems eliminate diesel, reduce noise and emissions and improve working conditions without compromising illumination levels or reliability. By replacing static, fuel-powered lighting with adaptive solar systems, we help customers deliver safer, cleaner and more efficient sites - even in challenging UK winter conditions.

SKANSKA · Coinford · Bristol Airport · KIER · COSTAIN · Environment Agency · PORT OF DOVER · MILESTONE INFRASTRUCTURE

ProLight
Solar Tower Light

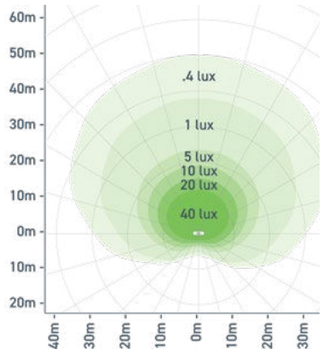
The award-winning Prolectric ProLight Solar Lighting Tower is the UK's only mobile solar lighting tower that operates reliably all-year round, even during winter.

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, 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 Prolectric 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.
- Prolectric 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

ProLight Light Range



ProLight Area 4x60W Lamps
40 lux to 184 sqm
20 lux to 410 sqm
10 lux to 714 sqm
5 lux to 1154 sqm
1 lux to 3190 sqm
.4 lux to 5629 sqm

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

VINCI COLAS RAIL Balfour Beatty SKANSKA

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ProRXM
Solar Tower Light

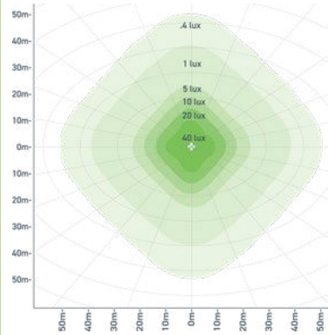
The Prolectric ProRXM is a space-efficient and versatile solar lighting tower that offers outstanding fuel savings and emissions reduction in the same footprint as the standard VT1 diesel powered alternative.

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

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

Network Rail · Balfour Beatty · COLAS RAIL

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ProRXM Hybrid
Solar Tower Light

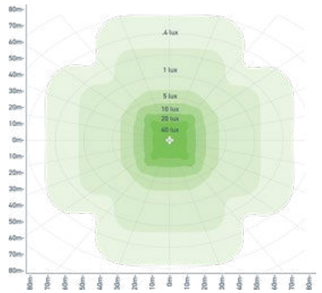
The ProRXM Hybrid is a space-efficient solar hybrid lighting tower designed specifically for Rail and Highway works, fitting in a trackside cess or tight roadside space with the same footprint as a VT1.

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

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ProTemp
Solar Column Light

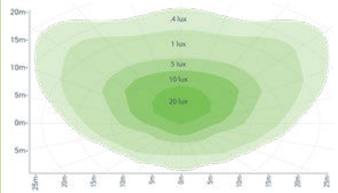
The ProTemp is a temporary solar lighting column that delivers powerful and reliable year round lighting without noise or emissions for sites.

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, 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

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SKANSKA

Environment Agency

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ProZone
Smart Solar Festoon Lighting

Intelligent, energy-saving festoon lighting for safer, cleaner, more efficient sites.

Features

- Modular solar-powered festoon lighting system delivering up to 150m of low-voltage illumination
- Integrated 1.52 kW solar array (4 × 380W panels) to maximise on-site renewable energy generation
- 14.1 kWh battery storage capacity supporting extended runtime and reliable night-time operation without fuel or mains power
- 30m plug-and-play runs with daisy-chaining for scalable layouts
- High-efficiency 1.5W LED lamps with 2m spacing for consistent light distribution
- Dual PIR motion sensors on each run for intelligent, zone-based activation
- Adaptive dimming - lights brighten to 100% when movement is detected and dim to 30% when inactive
- 24V DC low-voltage system improves safety compared to traditional temporary lighting
- Integrated 0–10V dimming control via Prolectric Hub
- Smart Remote Portal connectivity for remote scheduling, brightness control and energy profiling
- Silent, zero-emission operation powered by Prolectric's portable solar battery storage unit
- IP65-rated components designed for harsh site and outdoor conditions

Benefits

- **Reduced energy consumption and extended battery autonomy:** PIR-activated lighting operates only when movement is detected, maximising runtime and reducing charging demand.
- **Improved safety and visibility exactly where needed:** Responsive lighting activates as personnel approach, maintaining safe walkways, access routes and perimeters without over-lighting.
- **Faster installation and easier site reconfiguration:** Modular 30m runs enable scalability and simple reconfiguration as site layouts change.
- **Lower operating costs with no fuel or mains dependency:** Eliminates diesel use, cabling and generator hire, cutting fuel, maintenance and compliance costs.
- **Quieter, cleaner sites with reduced environmental impact:** Zero noise, zero local emissions and reduced light pollution support sustainability targets and community considerations.
- **Full visibility and control of lighting performance:** Remote access through the Smart Remote Portal enables verifiable carbon savings, energy management and operational insight.

Applications

- Construction site walkways and access routes
- Infrastructure, highways and utilities projects
- Compounds, storage areas and site perimeters
- Temporary public environments and events
- Areas requiring low-glare, responsive lighting
- Projects seeking diesel-free, silent lighting solutions

Intelligent, motion-activated lighting with zero diesel - saving £15,500 per annum compared to a traditional diesel tower light.

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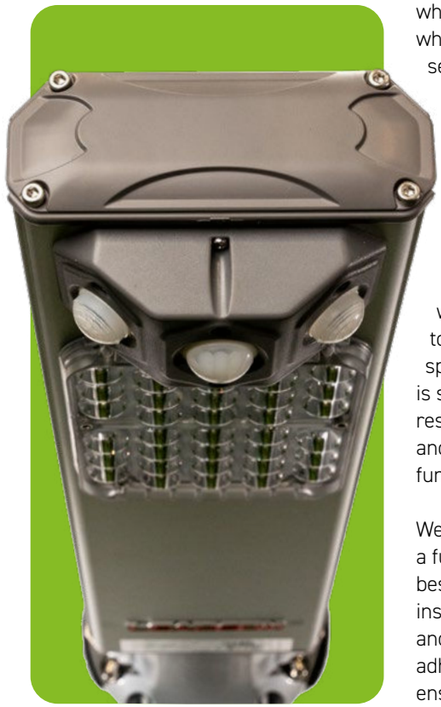
> It's fantastic to be able to work with such a reliable and proactive supplier installing solar lighting adaptions to existing street lighting as well as new designs. The works are incredibly low impact for our families and cause no issues while being completed but result in much better designs as well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

Permanent Lighting Solutions

As a first-to-market innovator, we have spent over a decade mastering the science behind off-grid solar streetlighting, delivering reliable, self-contained lighting systems designed for permanent installations.

We introduced the UK's first solar streetlight in 2011 and have since installed over 10,000 solar-only units nationwide, from the Outer Hebrides to Cornwall. Built and specified for UK conditions, our solar streetlights are engineered to perform consistently through long nights, short winter days and variable weather - without reliance on grid power.

Our permanent lighting solutions eliminate the need for trenching, cabling and electrical connections, significantly reducing installation disruption, programme time and upfront costs. Once installed, the lights operate autonomously, removing ongoing electricity bills and minimising maintenance requirements over their lifespan.



Performance is driven by a modular split-type design, allowing solar panels to be positioned for optimal orientation while delivering light precisely where it's needed. Integrated 3-PIR sensor technology activates lighting only when movement is detected, conserving stored energy, extending autonomy and reducing unnecessary illumination.

This targeted, downward-focused light distribution aligns with DarkSky principles, helping to minimise glare, reduce light spill and limit skyglow. The result is safer, compliant lighting that respects surrounding communities and local wildlife while meeting functional lighting requirements.

We support every installation with a full design-led service, including bespoke lighting layouts, compliant installations, wind-loading analysis and ground surveys. Strict adherence to British Standards ensures long-term safety, reliability and confidence for estate owners, local authorities and infrastructure operators.

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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.

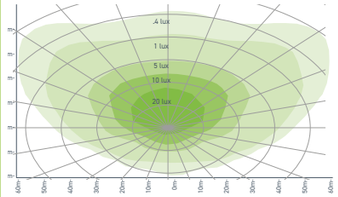
Benefits

- 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

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AE6 Model
Solar Street Light

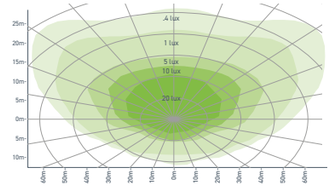
Our brightest and most powerful street light, providing outstanding performance even in the winter months.

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

AE6 Light Range



AE6 Area
1x80W Lamp
6m Column
22° Tilt
.5m Outreach

20 lux to 216 sqm
10 lux to 375 sqm
5 lux to 565 sqm
1 lux to 1,183 sqm
.4 lux to 1,726 sqm

Installation costs are halved compared to conventional mains power

Vistry Group

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ST Bollard
Solar Bollard

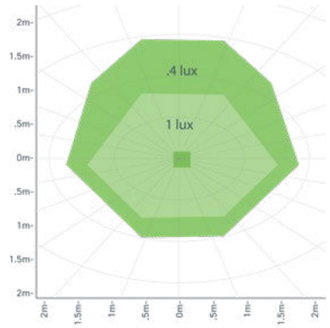
Our ST Solar Bollard Light series is a robust off-grid lighting bollard using the latest solar and LED technology, perfect for streets, car parks and footpaths.

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

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Bespoke Product Innovations

At Prolectric, bespoke innovation is not an exception - it's a core part of how we work.

We collaborate closely with customers to design, engineer and deliver tailored off-grid solar and battery solutions that solve real-world project challenges.

From unique site constraints and complex power requirements to permanent infrastructure and critical environments, our in-house teams translate requirements into dependable, long-term solutions.

Our bespoke capability is built on proven foundations - solar generation, battery storage, intelligent energy management and remote monitoring - adapted precisely to each application.

Every system is designed around location, load, autonomy and performance expectations, drawing on bespoke projects delivered across the UK and EU to ensure reliable year-round operation, even in challenging conditions.

Bespoke solutions range from permanent low-power systems for remote assets, to custom hybrid power configurations, integrated monitoring platforms and specialist mounting, housing or control adaptations.

We work alongside clients, consultants and contractors from early concept through specification, build, deployment and ongoing support.

By combining engineering expertise with real operational insight, we help customers eliminate diesel dependence, reduce whole-life costs and deploy off-grid technology with confidence - no compromise on performance, reliability or safety.

Bespoke does not mean unproven.

Every custom solution is grounded in technologies already trusted across construction, infrastructure, utilities, defence and public sector environments, supported by Smart Remote monitoring and long-term aftercare.

ProSecure
CCTV Security Towers

In 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

In today's increasingly connected world, having access to reliable power and communication systems, even in remote locations, is crucial. Prolectric'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 CLEAN TECHNOLOGY

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Since 2017, Our Customers Have Saved Over:

83,157,497
kg of CO_2e

32,353,558
litres of fuel

£40,441,948
in costs

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