

The Green Column



Renewable Powered Off-Grid Lighting Range for Remote Illumination

The Marlec Green Column range is an environmentally friendly, cost saving solution to provide amenity lighting at remote sites.

Locations previously deemed too far from the grid but require lighting can now be considered for a Green Column.

The wind and solar powered solution delivers free, renewable energy which is stored in a battery ready to be consumed when darkness falls. High output LED street lights or flood lights can be installed depending on your requirements.

Green Columns are already in use all over the UK on footpaths, playgrounds and car parks.

It's environmentally friendly!

- Green Column's produce their own power so there's no on-going use of fossil-fuels.
- Installation has very minimal environmental impact as only a small bored hole is normally necessary.



It's cost effective!

When you install a Green Column there's no need to dig trenches for underground cables as it is totally independent of the grid.

By generating its own power from the wind and sun there will be no grid connection charges, no on-going energy or standing charges.

Installation is quick and easy by your own contractor or ask Marlec for a full quotation.

Versatile in applications!

The Green Column has proved the ideal lighting solution for:

- Rural footpaths
- Airfields
- Car parks
- Play areas
- Bus shelters
- Remote homes
- Harbour side areas
- Developing countries
- Conservation areas



Established and reliable products!

Marlec has been manufacturing micro wind turbines since 1979 and products are installed worldwide in some of the harshest weather conditions. The Green Column kit uses our own proven Rutland wind turbines and professional Ameresco photovoltaic panels.

The storage battery is a long life sealed unit that requires no maintenance and the whole electrical connection comes together at our purpose designed programmable system controller.

The raise and lower columns are manufactured to our specification by Abacus Lighting, one the UK's most reputable street lighting suppliers.



From the Sahara to the Antarctic, the Rutland furling Windchargers have a reputation for durability and reliance in service.

Flexible solutions specific to your needs!

The Marlec Green Column range can be designed for your bespoke requirements. Utilising the latest custom LED luminaires we can provide lighting for pedestrian safety and area flood lighting from dusk until dawn or activated by motion. Our system engineers can provide a quotation for based upon the site locations and lighting need.



Wind & solar Green Column street light



Solar Green Columns at Olympic Park



Wind & solar Green Column flood lighting for play areas



PIR activated solar Green Column flood lighting for car parks

Green Column Specifications

Each system is individually tested and incorporates the following components and features:

Rutland Windcharger

Our world renowned quiet, compact and efficient Windcharger of less than 1m in diameter. Charging starts at just 2.5m/s (5mph) so a gentle breeze is all that is required to deliver power.

Solar Panels

Each Green Column is supplied with a photovoltaic panel as standard, size is dependant upon application. The solar panel complements the Windcharger delivering power throughout the summer and into icy cold winter days.

Energy Efficient LED Technology

The Green Column utilises the latest high output custom LED luminaires manufactured in the UK by Candela Light. The optics are designed to minimise upward light pollution thereby maximising the performance and light towards the ground. The lamps is activated by the controller's light level and timer settings, these are adjustable by the user or factory set to your specification.

Battery

A high quality sealed battery is used to deliver power over a long life. The maintenance free battery provides energy storage for back up power over periods of low wind & solar power generation. The reserve is determined by usage but typically 4/5 days in wintertime and up to 10 days in summertime.

Raise and Lower Type Column

The purpose designed 8m column raises and lowers for ease of installation and inspection using a hydraulic counterbalance unit available to hire or purchase. The tower is manufactured to BS5649 and is finished galvanised to ISO1461. Paint finishes are available to order, please ask our sales team for a quotation.

Control Gear Housing

Finished to the same standards as the column this houses the battery and controller conveniently at ground level and the door secures with security keys provided.

Optional Features to Order:

- ♦ Green Columns are supplied galvanised as standard. RAL colours are available at cost.
- ♦ Passive Infra Red (PIR) activated lanterns are available to reduce power consumption.
- ♦ Anti-climb spike bracket available to order.

Owing to continuous product improvements specifications may be subject to change without notice

Please call Marlec to discuss any proposed applications.

Designed & Manufactured in the UK by:

Marlec Engineering Company Ltd

Rutland House, Trevithick Road, Corby,
Northants NN17 5XY

Tel: +44 (0)1536 201588 Fax: +44 (0)1536 400211

Email: sales@marlec.co.uk

Or visit our website: www.marlec.co.uk



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