

marlec 

Direct 2025

Renewable power
solutions since 1978

46th
Edition



The UK's Longest Standing Renewable Energy Company

Since 1978

First wind turbines models
being tested on a Ford
Cortina, The UK, 1979.



1978

Marlec is founded in Rutland,
UK, by John Fawkes.



1985

Solar PV products are
added to the portfolio.



1989

Receives the Queen's Award
for Outstanding Export.



2000

Designs the first renewable-
powered bus shelter in Scotland.



2013

Launches Solar iBoost, now a
best-selling energy device.



2022

Introduces Solar Signage Kit
for reliable off-grid lighting.



2023

Launches VEVA, a smart 7.4kW
domestic EV charger.



2025

Launches the Vert X360, and
the Rutland 505 Windcharger

Marlec has been at the forefront of renewable energy for over four decades. As the UK's longest-standing renewable energy company, we are proud to design and manufacture our acclaimed Rutland Windchargers at our dedicated UK facility.

From windchargers to solar technologies and smart home energy devices, we lead the way in delivering off-grid power solutions where connection to the grid is challenging.

Our commitment to quality, innovation, and reliability has made us a trusted partner across industries, both in the UK and Worldwide.

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Marine power solutions





Rutland 1200 Windcharger (packed) - 900 x 390 x 185mm
 Controller (included) - 258x164x68mm
 Remote Display (Optional) - 155x145x60mm

The Rutland 1200 Windcharger

The Rutland 1200 is the latest in the Rutland family of marine turbines used by yachtsmen and women round the world. This high efficiency and technologically advanced turbine comes with a high-tech MPPT controller included, specifically designed for charging 2 battery banks and the ability to accept input from solar panels.

Functionalities

- Silent running in operation
- Unique Tri-namic profile blades
- Low wind start up of 2.5m/s to maximise power generation
- Generates up to 483W@ 15m/s
- Electronic stall protection mode in high winds and over-temperature
- Marine grade, modern and durable, environmentally friendly materials for a high-quality build and finish
- Brushless 3 phase alternator with high-quality rare earth magnets
- 360° Yaw rotation
- Turbine diameter 1200mm
- Weight 7.8kg

MPPT Hybrid Controller Included:

- Intelligently tracks the peak power available to deliver more power generation
- Accepts input from 20A of solar panels (250W @ 12V, 500W @ 24V)
- Charge output to 2 battery banks
- Multi-stage battery charging ensures good battery conditioning
- Temperature compensation
- Optional remote display for viewing information at convenient locations

Price

Description	Part No	Price
Rutland 1200 (12V)	CA-06/01	£1,588.81
Rutland 1200 (24V)	CA-06/02	£1,588.81
1200 Remote Display	CA-07/02	£177.48



The Rutland 914i Windcharger

The Rutland 914i punches well above its size for power, rivalling the claimed outputs of larger turbines owing to its built-in MPPT technology. This continuously matches the turbine speed and generator to their optimum performance to deliver more ampere hours into your battery.

Functionalities

- Ideal for Cruising yachts
- Based on the successful 913, renowned for its smooth, quiet operation
- Built-in Maximum Power Point Tracking
- Low wind start up of 3m/s
- Generates up to 262W@ 15m/s
- Marine grade, modern and durable, environmentally friendly materials for a high-quality build and finish
- Brushless 3 phase alternator
- 360° Yaw rotation
- Turbine diameter 910mm
- Weight 11.6kg



Price

Description	Part No	Price
Rutland 914i (12V)	CA-01/17	£869.18
Rutland 914i (24V)	CA-01/18	£869.18

Rutland 914i Windcharger (packed) - 370 x 300 x 450mm
Select HRSi or HRDi Charge Regulator (see page 16).



The Rutland 505 Windcharger

The Rutland 505 is the latest evolution in our renowned 500mm wind turbine range. Designed with the discerning sailor in mind, this compact windcharger delivers more power, greater efficiency, and improved durability all within the same trusted format. Whether you're moored in a marina or navigating open waters, the 505 offers dependable energy generation, even in light wind conditions.

Developed and manufactured in the UK to ISO9001 standards, the Rutland 505 continues Marlec's legacy of quality and innovation, built on decades of engineering expertise and real-world performance.

Functionalities

- **More Power:** Generates energy even in light winds and marina environments
- Up to 20% higher output than previous Rutland 504 model with same compact design.
- Supplied with dedicated MPPT Charge Controller
- **Efficient Power Conversion:** Can produce more ampere-hours into your battery than some larger competitor models
- **Stronger Construction:** Built to endure the toughest marine environments with UV stable components
- **Safe Operation:** Moulded outer blade ring ensures safety for boat users making it ideal for smaller yachts, boats & barges where space is at a premium.
- Weight 3.5 Kg, Turbine diameter 510mm.

Price

Description	Part No	Price
Rutland 505 (12V)	CA-05/06	£706.26

Rutland 505 Windcharger (packed) - 3550 x 550 x 260mm
Controller (included) - 168 x 147 x 52mm, SMR1 Controller.



Rutland 504 Windcharger

The Rutland 504 is a super compact turbine that is great for trickle charging. You can be sure that when you arrive on board your batteries will be well charged and ready for your appliances.

Functionalities

- Ideal for trickle charging 60-120 Ah battery
- Light and easy to install temporarily
- Low wind start up of 3m/s
- Generates up to 48W@ 15m/s
- Marine grade, modern and durable environmentally friendly materials for a high quality build and finish
- Brushless 3 phase alternator
- 360° Yaw rotation
- Turbine diameter 510mm
- Weight 3.5kg



Price

Description	Part No	Price
Rutland 504 (12V)	CA-05/04	£487.29

Rutland 504 Windcharger (packed) - 355 x 550 x 260mm
168 x 147 x 52mm. Select HRSi or HRDi Charge Regulator (see page 16).



Windcharger Accessories - Mounting Kits

Marine Mounting Kits are comprised of two polished marine grade stainless steel tubes pre-drilled as well as a joiner, deck fixing bracket, pole to stays attachments and stainless steel fasteners. The Marine Stays Kit is highly recommended with the mounting kits to provide a solid mounting and simple installation. The Rutland 914i & 1200 Mtg Kit's include anti-vibration feet as standard.

Rutland 504/505 Marine Mounting Kit

Includes	Part No	Price
2x 1m pole sections	CA-12/01	£176.85

Rutland 914i Marine Mounting Kit

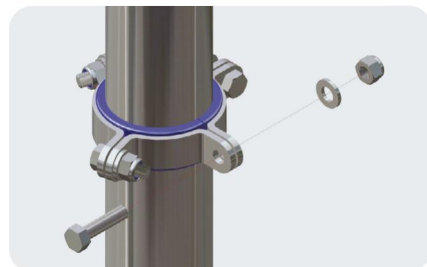
Includes	Part No	Price
2x 1.2m pole sections	CA-12/02	£323.18

Rutland 1200 Marine Mounting Kit

Includes	Part No	Price
Includes 2x 1.35m pole sections	CA-12/38	£356.04

Marine Stays Kit

Includes	Part No	Price
Standard Stays Kit - 2 x 1.2m	CA-12/32	£185.17
Extra long Stays Kit - 2 x 1.35m	CA-12/39	£210.24



Land power solutions



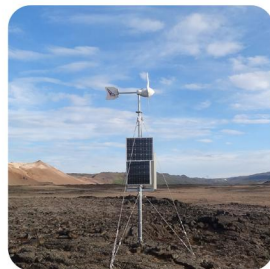


The Rutland FM910-4 Windcharger

The FM910-4 Furlmatic is without doubt the engineer's choice of micro wind turbine for battery charging at off grid locations. Furlmatics are the most trusted choice for organisations around the world that need reliable performance in harsh weather conditions. With tens of thousands of installations globally, Furlmatics have proven their durability and efficiency time and again.

Functionalities

- Extremely durable construction
- Automatic furling tail fin directs the turbine out of high winds
- Low wind start up of 3m/s
- Generates up to 155W@ 15m/s
- Available in 12V & 24V
- Brushless 3-phase alternator
- 360° Yaw rotation
- Turbine diameter 910mm
- Weight 13.1kg



Price

Description	Part No	Price
Rutland FM910-4 (12V)	CA-02/04	£903.76
Rutland FM910-4 (24V)	CA-02/05	£903.76

Rutland FM910-4 Windcharger (packed) - 945 x 344 x 262mm
Select HRSi or HRDi Charge Regulator (see page 16).



Rutland 1200 Windcharger (packed) - 900 x 390 x 185mm
 Controller (included) - 168 x 147 x 52mm
 Remote Display (Optional) - 155x145x60mm

Rutland 1200 Terrain Windcharger

The Rutland 1200 Terrain is specially adapted for the rigours of isolated land based applications. The purpose designed wind only controller incorporates Marlec's MPPT technology to maximise power generation.

Functionalities

- Robust and high-quality design
- Unique Tri-namic profile blades
- Low wind start up of 2.5m/s to max power generation
- Generates up to 483W@ 15m/s
- Available in 12V, 24V & 48V
- Electronic stall protection mode in high winds and over-temperature
- Brushless 3 phase alternator with high-quality rare-earth magnets
- 360° Yaw rotation
- Turbine diameter 1200mm
- Weight 7.8kg

MPPT Hybrid Controller Included:

- Intelligently tracks the peak power available to deliver more power generation
- Multi-stage battery charging ensures good battery conditioning
- Temperature compensation ensures the battery voltage switching points are automatically adjusted to maintain optimum battery performance
- Optional remote display

Price

Description	Part No	Price
Rutland 1200 X (12V)	CA-06/04	£1,588.81
Rutland 1200 (24V)	CA-06/05	£1,588.81
Rutland 1200 X (48V)	CA-06/03	£1,776.63
1200 Remote Display	CA-07/02	£177.48



The Rutland FM1803-2 Windcharger

Marlec's FM1803-2 Furlmatic Windcharger is the most powerful turbine in our portfolio and makes generating energy for power hungry remote sites affordable. This 1.8M diameter turbine is designed for use on land and has a proven track record internationally.

Functionalities

- Robust & powerful rare-earth magnet alternator
- Automatic furling tail fin directs the turbine out of high winds
- Low wind start up of 3m/s
- Generates up to 840W@ 15m/s
- Available in 12V, 24V & 48V
- Brushless 3-phase alternator
- 360° Yaw rotation
- Turbine diameter 1800mm
- Weight 29.2kg

MPC2 Controller Included

- LCD displays battery volts, charge currents, battery status and more
- Automatically stalls the turbine to protect batteries from overcharging
- Manual Shutdown Switch
- Microcontroller-based electronic control that monitors battery voltage, charge current and temperature
- Optimises turbine performance based on the wind speed
- Temperature compensation ensures the battery voltage switching points are automatically adjusted to maintain optimum battery performance

Price

Description	Part No	Price
Rutland FM1803-2 (c/w control gear)	CA-03/02	£2,883.92
FM1803 MPC-2 Control Gear (12V)	CA-04/14	
FM1803 MPC-2 Control Gear (24V)	CA-04/15	
FM1803 MPC-2 Control Gear (48V)	CA-04/16	£294.84 (Extra)

Rutland FM1803-2 Windcharger (packed) - 1200 x 675 x 520 mm



The Vert X360

The Rutland Vert X360 Windcharger is the latest in a long-established range of professional wind turbines from the UK's premium renewable energy manufacturer, Marlec Engineering.

The vertical axis turbine design is ideal for installation in locations where direct wind is not guaranteed, such as in urban or highway environments.

Marlec's custom designed and manufactured MPPT Controller boosts the charge to the batteries and will automatically slow the turbine once fully charged. The Controller is supplied with the turbine.

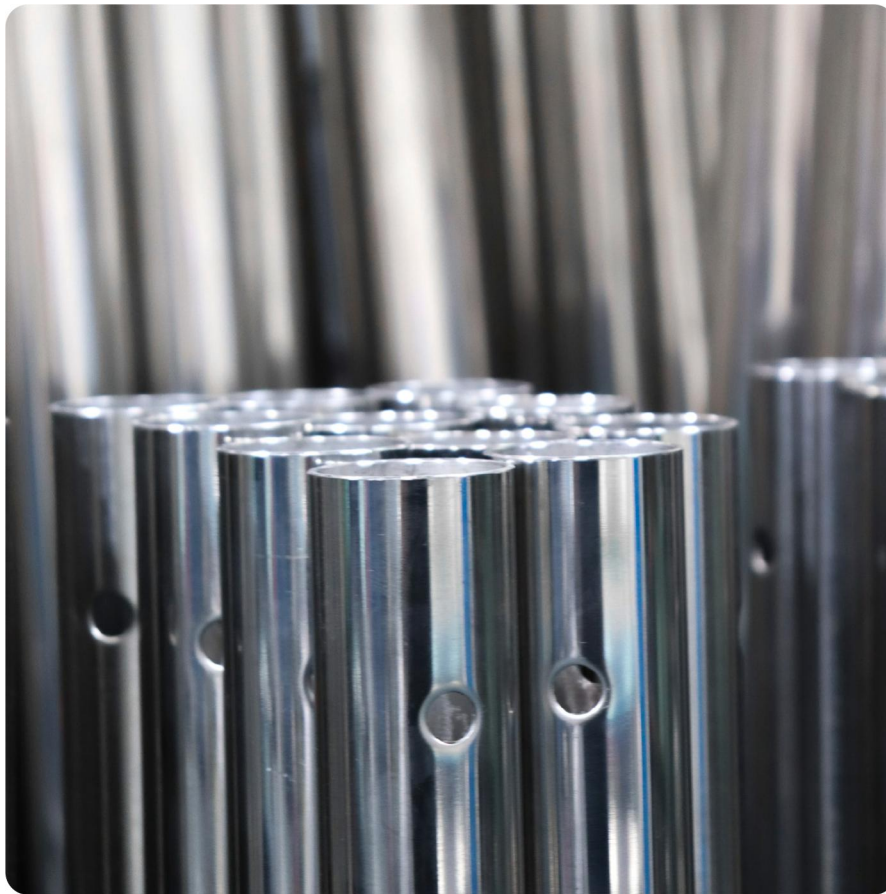
Functionalities

- Extremely durable construction
- Whisper-Quiet Operation
- Manufactured using the latest Neodymium
- Supplied with SMR1 high-efficiency Controller for optimum performance.



Price

Description	Part No	Price
Rutland Vert X360 12v Inc Controller	CA - 09/01	£1413.00



Windcharger Accessories Land Application, Mounting Kits

Land Tower Mounting Kits and Rigging Kits are available separately. Poles must be supported by guys, or the appropriate rigging kit must be used.

Tower Kit-504/505 for temporary installation

Details	Part No	Price
For temporary installation. This is 4.0m (2 x 2m sections) of polished stainless steel.	CA-12/12	£202.07

Tower Kit-910 Series

Details	Part No	Price
For temporary or permanent installation of Rutland 910, 1200 & Vert X360 Windchargers. 6.4m (3 x 2.13m sections) of 48mm diameter galvanized steel tube with joiners.	CA-12/08	£221.99

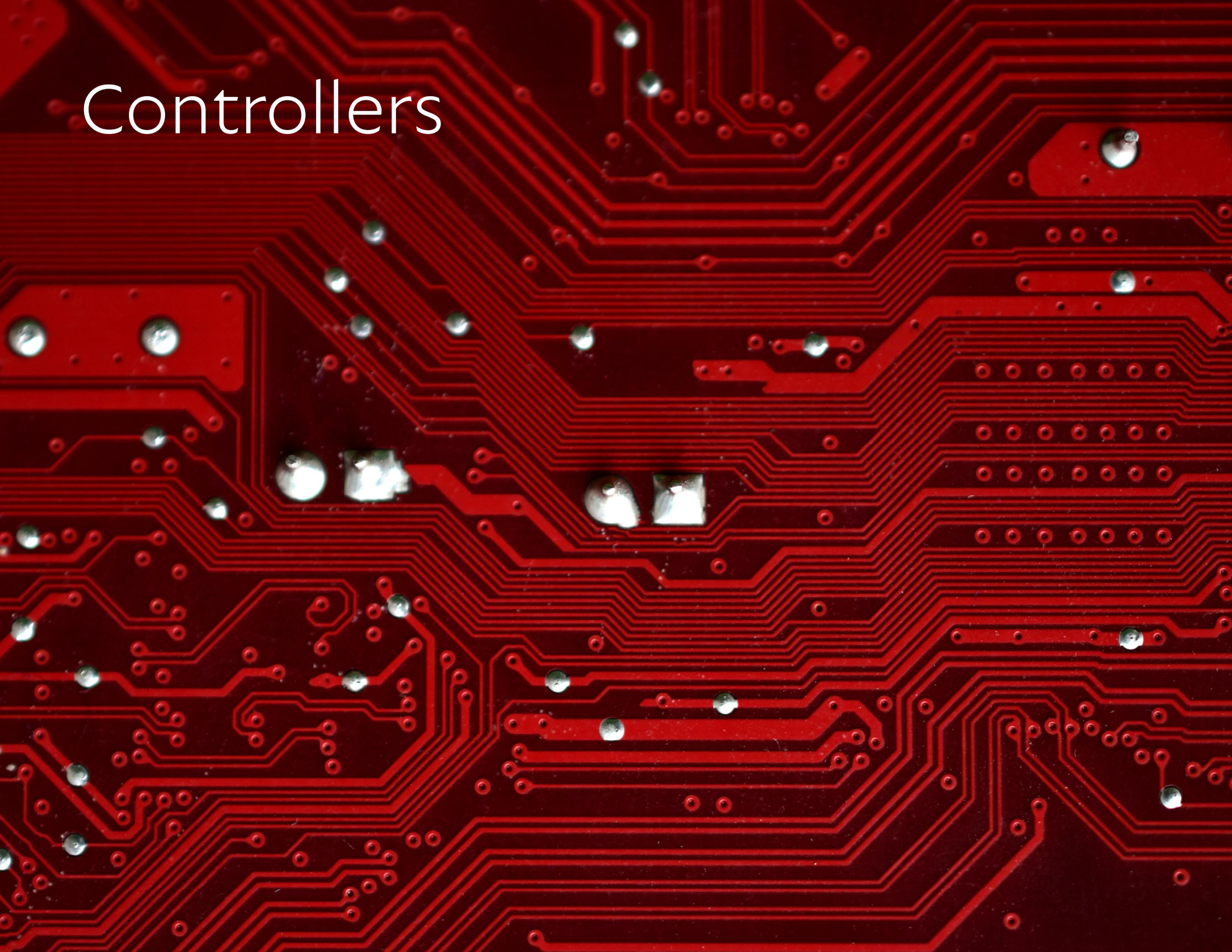
Tower Rigging

Details	Part No	Price
Kit-504/505 To Suit Tower Kit	CA-12/13	£150.64

Tower Rigging Kit-910 Series

Details	Part No	Price
Series complete rigging kit to support the land tower kit in permanent installations.	CA-12/07	£232.60

Controllers





HRSi - Controller

Charge Controller for Single Battery Charging

Functionalities

- Designed for Rutland 504, 914i or FM910-4
- Allows up to 160W input of solar
- LED indicators show battery and charge status
- Turbine/ solar panel shut-down switch
- Bulk & float stage charging for best performance
- Temperature compensation optimises charging
- Automatic detection for 12V or 24V operation
- Dims: 130 x 80 x 42mm
- Weight: 0.185kg

Power	Part No	Price
(12/24V)	CA-11/46	£104.78



HRDi - Controller

Charge Controller for Dual Battery Charging

Functionalities

- Designed for Rutland 504, 914i & FM910-4
- Digital LCD displays battery Volts, charge currents and more
- Charge splitter for 2 battery banks
- Push buttons to scroll screens and amend operating parameters
- Allows connection to remote display
- Automatic detection for 12V or 24V operation
- Reprogrammable for use with other battery types with non-standard voltage settings (with the Marlec programming cable)
- Dims: 193 x 127 x 40mm
- Weight: 0.42Kg

Power	Part No	Price
(12/24V)	CA-11/44	£234.78



HRDi - Remote Display Controller

View the display information on the HRDi controller at a more convenient location, such as the instrument panel.

Functionalities

- Recess or surface mount
- Re-programmable features
- 3m connecting cable supplied (longer cable available)
- Can be used to stall Windcharger
- Dims: 125 x 60mm cut out 130 x 80mm fascia
- Weight: 0.184 kg

Power	Part No	Price
(12/24V)	CA-11/74	£134.26



SMR1 - Controller

The SMR1 Charge Controller is the intelligent companion to the Rutland 505 and Vert X360 designed to maximise turbine performance through advanced MPPT technology for optimal energy harvest in real-time.

Functionalities

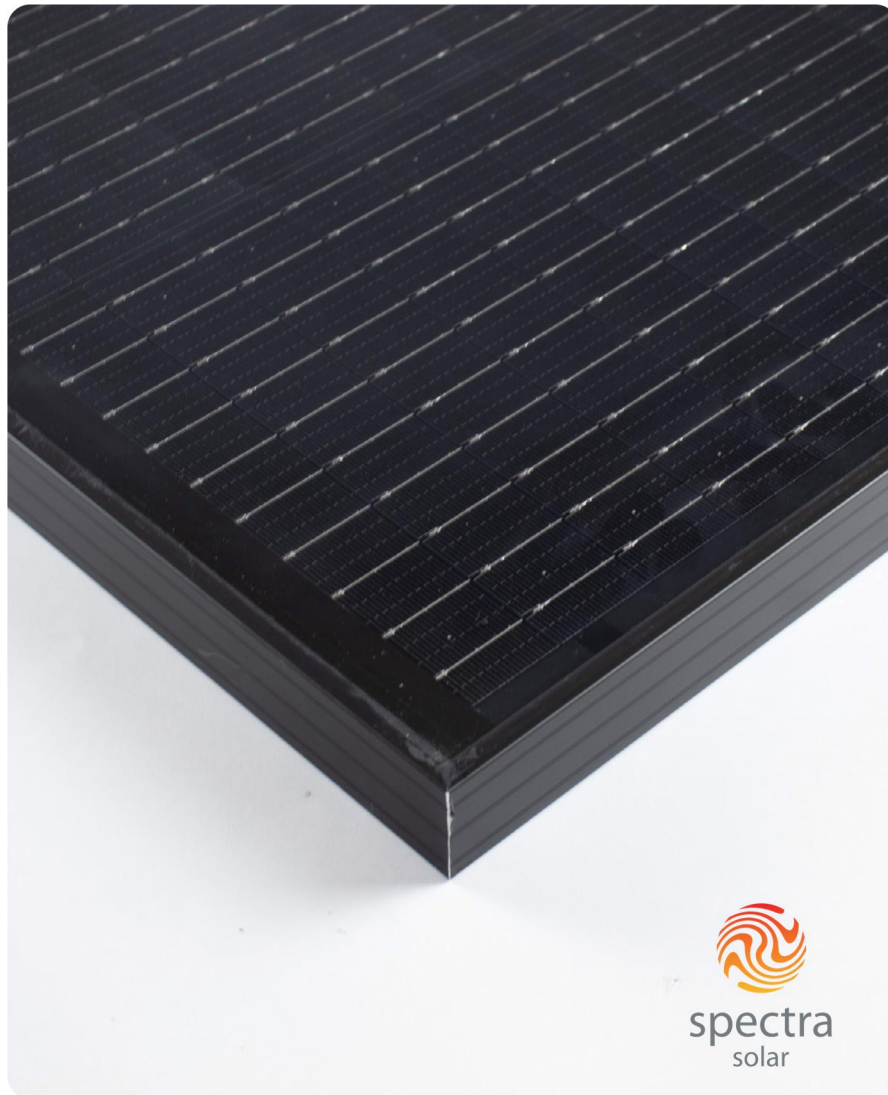
- Supplied with Rutland 505 and Vert X360
- MPPT Boost windcharger performance
- LED Indicators show battery and charge status
- Prevent battery overcharge and windcharger speed
- Temperature compensation optimiser charging
- Dims 125 x 60mm
- Weight: 0.184 Kg

Solar Panels



Spectra PERC-S Framed PV Modules

Spectra PERC-S are a range of “back contact” high efficiency solar panels exclusively designed for Marlec. Unlike conventional panels, these use intelligent PERC (Passivated Emitter Rear Cell) technology and have a Shingled Cell Module Design to achieve 15% higher energy efficiency.



Details

- High light absorbency, especially in low light
- Reliable internal electrical connections
- By-pass diode configuration to avoid ‘hot spots’ occurring in partial shade
- 2°C lower operating temperature results in longer panel life and better power yield
- Lightweight and durable aluminium frame for enhanced wind resistance
- Seamless soldering technology
- Identical frame lengths for combining different ratings to accommodate available space
- 2-year warranty

Suitable Applications:

- Marine Leisure
- Marine Navigational Buoys
- Railways
- Highways
- CCTV
- Telecommunications
- Utilities
- Environmental Monitoring
- Off-grid homes
- Motorhomes
- Signage

Power / Prices

Module Type	Power	Dimensions	Weight	Part No	Price
Spectra PERC-S	30W	515 x 318 x 30	2.3 kg	CA-10/521	£71.98
Spectra PERC-S	65W	668 x 486 x 35	4.2 kg	CA-10/565	£110.21
Spectra PERC-S	85W	942 x 454 x 35	5.3 kg	CA-10/522	£122.15
Spectra PERC-S	110W	942 x 561 x 35	6.3 kg	CA-10/523	£133.83
Spectra PERC-S	150W	942 x 775 x 35	8.3 kg	CA-10/524	£173.99
Spectra PERC-S	220W	1096 x 942 x 35	11.3 kg	CA-10/5220	£220.46
Spectra PERC-S	240W	1203 x 942 35	12.5 kg	CA-10/5240	£255.10
Spectra PERC-S	300W	1524 x 942 x 40	20 kg	CA-10/5300	£274.00
Spectra PERC-S	400W	1690 x 1106 x 40	21 kg	CA-10/527	£311.80

Visit the website to ensure latest specification.

Spectralite SemiFlex & SemiFlex Pro

Spectralite solar panels are compact and efficient, made with ETFE polymer and class A solar cells. Ideal for on-board charging or where non-glass panels are preferred, they lay flat, are walkable, and resist saltwater, scratches, and impact.



Spectra Bifacial Semiflexible

The 10W & 35W are based on an aluminium backplate, which prevents cell cracking and improves heat dissipation.

Spectralite Semiflex Pro

The Pro range is constructed using the market-leading anti-slip Du-Pont coating and a unique composite cell encapsulation providing increased flex. These higher power models also feature two bypass diodes to avoid hotspots occurring in partial shade. 2-year warranty.

Details

- Flexibility to a gentle curve without cell damage
- Rounded corners with eyelets for easy installation
- Built-in blocking diode with 3m cable output

Suitable Applications:

- Marine Leisure
- Marine Navigational Buoys
- Railways
- Utilities
- Environmental Monitoring
- Off-grid homes
- Motor homes
- Signage

Power / Prices

Module Type	Power	Dimensions	Weight	Part No	Price
Spectralite SemiFlex	10W	450 x 200 x 4	0.7 kg	CA-10/450	£49.95
Spectralite SemiFlex	35W	600 x 365 x 4	1.35 kg	CA-10/453A	£109.95
Spectralite SemiFlex Pro	50W	570 x 520 x 3.8	1.22 kg	CA-10/455A	£169.06
Spectralite SemiFlex Pro	100W	1055 x 520 x 3.8	2.26 kg	CA-10/456A	£319.55
Spectralite SemiFlex Pro	150W	1460 x 540 x 3.8	3.26 kg	CA-10/457A	£471.66
Spectralite SemiFlex Pro	200W	1210 x 850 x 4.25	4.25 kg	CA-10/458A	£623.95

Visit the website to ensure latest specification.

Spectra Bifacial

Spectra Bifacial solar panels are double-sided modules that generate solar power from both the front and back, capturing up to 30% more energy than single-sided panels.



Spectra Bifacial Framed

A robust black anodised aluminium framed panel available in 110W, 150W & 400W for professional and leisure uses.

The solar cells feature the latest MBB TOPCon type, seamlessly soldered and with Anti-PID (Potential-Induced Degradation) guarantee to ensure maximum efficiency and a smart look.

Spectra Bifacial Semiflexible

A lightweight but robust solar panel in a UV-resistant ETFE clear encapsulation that captures energy on both sides.

The rounded corners with eyelets make them simple to install on board yachts.

The panels use efficient PERC mono-type cells that are crack and hotspot resistant.

Spectra Foldable

This new Spectra Foldable is really versatile for charging on the go. Its robust black anodised frame includes fold out support legs to angle in any direction, a handle and closing clip. The solar cells are efficient PERC mono type and a 3m plug in cable is included.

Power / Prices

Module Type	Power	Dimensions	Weight	Part No	Price
Spectra Bifacial Flexible	100W	1080 x 535 x 1.75	1.8 kg	CA-10/7100FB	£251.96
Spectra Bifacial Framed	110W	561 x 942 x 35	6.3 kg	CA-10/7110B	£140.73
Spectra Bifacial Framed	150W	775 x 942 x 35	8.3 kg	CA-10/7150B	£182.89
Spectra Bifacial Framed	400W	1690 x 1106 x 40	21 kg	CA-10/7400B	£327.56
Spectra Foldable	100W	1092 x 617 x 22 (unfolded)	3 kg	CA-10/7100 FLD	£237.57

Visit the website to ensure latest specification.

Spectralite Semi Flexible Zippers

The Spectralite SemiFlex Zipper is made with very high efficiency monocrystalline PERC cells which enhance efficiency by improving light capture and very strong ETFE polymer. UV resistant YKK zippers already fitted on the solar panel for an easy installation. Ideal and convenient solution for bimini tops and sprayhoods.



Details

- Durable construction
- Scratch-proof professional ETFE
- Extremely light
- Flexibility to a gentle curve without cell damage
- Sea water resistant & marine grade materials
- YKK UV resistant zippers
- Built-in blocking and by-pass diodes
- Full black design
- Anti-tear screwed junction box with 1m cables and MC4 connectors

Suitable Applications:

- Marine Leisure
- Camping

Power / Prices

Module Type	Power	Dimensions	Weight	Part No	Price
Spectralite SemiFlex Zipper	Power: 100W	1090 x 552 x 3	1.80 kg	CA-10/4100Z	£287.20

Visit the website to ensure latest specification.

Alpex solar panels

Alpex solar panels have a build quality that combines a durable frame and efficient photovoltaic cells, providing reliable power generation in challenging weather conditions. Alpex solar panels are an affordable yet robust solar panel option for applications prone to harsh wind conditions.



Details

- Rugged frames constructed of a heavy-duty anodised aluminium
- Designed to withstand forces over long-term installation
- Models over 30W are certified against degradation from salt mist corrosion
- Anti-reflective coated high transmission glass improves performance
- ISO9002 manufacturing facility
- Panels are backed by IEC61215 and UL1703 international standards
- Marlec is the appointed UK Distributor for Alpex Solar
- 10-year product warranty

Suitable Applications:

- Marine Leisure
- Marine Navigational Buoys
- Environmental Monitoring
- Telecommunications
- Off-grid homes
- Motorhomes
- Railways
- Highways
- CCTV
- Utilities
- Signage

Power / Prices

Module Type	Power	Dimensions	Weight	Part No	Price
AL-10	10W	335 x 280 x 25	1.15 kg	CA-10/101B	£28.95
AL-20	20W	350 x 456 x 25	1.93 kg	CA-10/102	£48.50
AL-30	30W	435 x 665 x 25	3.2 kg	CA-10/103B	£71.50
AL-40A	40W	435 x 665 x 25	3.18 kg	CA-10/104A	£85.95
AL-80B	80W	796 x 665 x 35	6.1 kg	CA-10/110B	£119.95
AL-100	100W	1006 x 675 x 30	7.5 kg	CA-10/107A	£145.95
AL-135	135W	1320 x 680 x 50	10.5 kg	CA-10/114	£196.95
AL-200 (24V)	200W	1382 x 982 x 35	15 kg	CA-10/111	£237.50
AL-270	270W	1640 x 990 x 35	18.2 kg	CA-10/115	£249.95

Visit the website to ensure latest specification.

Ameresco Solar Framed PV Modules

This US designed solar panel is created to the highest standards and their extensive accreditation tests make them suitable for use in hazardous applications such as offshore structures. Ameresco solar panels are highly reliable, have a long service life, and are used in hostile environments around the world.



Details

- Designed for charging batteries at permanent or mobile installations
- Durable 50mm frames keep their strength in the toughest of weather conditions
- Efficient poly and monocrystalline cells make up the various models available.
- Certified for use in Class 1, Division 2 (C1D2) hazardous locations
- Certified to IEC 61215, IEC 61730, UL 1703 & ULC1703
- Marlec is the appointed Distributor for Ameresco Solar
- 10-year product warranty

Suitable Applications:

- Oil and gas platforms
- Railways
- Highways
- CCTV
- Telecommunications
- Utilities
- Environmental Monitoring
- Oil Rigs
- Off-grid homes
- Motor homes
- Marine Navigational Buoys
- Marine Leisure
- Signage

Power / Prices

Module Type	Power	Dimensions	Weight	Part No	Price
Ameresco 10 M	10W	421x 269 x 22.5	1.5 kg	CA-10/91	£73.40
Ameresco 20 J-V	20W	425 x 502 x 50	3.0 kg	CA-10/152	£101.95
Ameresco 30 J-V	30W	790 x 358 x 50	3.90 kg	CA-10/153	£142.75
Ameresco 40 J-V	40W	650 x 537 x 50	5.75 kg	CA-10/154	£167.25
Ameresco 50 J-V	50W	835 x 537 x 50	6 kg	CA-10/155	£178.45
Ameresco 90 J-V9	90W	1204 x 537 x 50	7.7 kg	CA-10/157	£316.15
Ameresco 140 J-V	140W	1504 x 674 x 50	12 kg	CA-10/159	£346.75

Visit the website to ensure latest specification.

SunWare Semi-Flexible PV Modules

SunWare solar panels are expertly built in Germany, with solar experience dating back to 1987. Using high-efficiency monocrystalline PERC cells, they run cooler and deliver excellent power output. Designed for marine use, they are durable, semi-flexible, walkable, and saltwater resistant.



Details

- These non-glass panels are shatter-proof and lightweight
- Sea water resistant & marine grade materials used
- Rugged anti-slip walk-on surface
- Screwed and sealed junction box on the front or rear
- 3m waterproof cable with in-line cell protector
- Flexible over 3% of their length to fit slight curves
- Soil-resistant coating keeps the solar panels generating efficiently
- Marlec is the appointed UK Distributor for SunWare
- 3-year warranty

Suitable Applications:

- Marine Leisure
- Marine Navigational Buoys
- Railways
- Highways
- CCTV
- Telecommunications
- Utilities
- Environmental Monitoring
- Off-grid homes
- Motorhomes
- Signage

Power / Prices

Module Type	Power	Dimensions	Weight	Part No	Price
SW20143 12V Slim	15W	468 x 243 x 5	0.8 kg	CA-10/217	£247.40
SW40143 12V Rect	15W	468 x 243 x 5	0.8 kg	CA-10/218	£247.40
SW20145 12V Slim	30W	273 x 807 x 5	1.6 kg	CA-10/201	£319.97
SW20163 12V Rect	30W	481 x 426 x 5	1.3 kg	CA-10/202	£338.50
SW20146 12V Slim	45W	273 x 1154 x 5	2.2 kg	CA-10/204	£372.35
SW20164 12V Rect	45W	481 x 599 x 5	1.8 kg	CA-10/205	£400.77
SW20165 12V Rect	60W	481 x 772 x 5	2.3 kg	CA-10/207	£529.33
SW20166 12V Rect	90W	481 x 1119 x 5	3.6 kg	CA-10/208	£633.32
SW20185 12V Rect	120W	689 x 1012 x 5	4.7 kg	CA-10/209	£717.45

Visit the website to ensure latest specification.

SunWare Textile Foldable PV Modules

SunWare's Textile solar panels are a space-saving power solution, utilising unused sprayhood space. Made from semi-flexible panels with a durable fabric surround, they're easy to install, remove, and store flat. Waterproof connectors ensure quick and reliable installation.



Details

- Seawater resistant and marine-grade fabric
- Waterproof plug and coupler are enclosed for easy electrical installation
- Monocrystalline PERC solar cells for maximum performance
- Non-glass module with unbreakable Nowoflon foil
- 10m of cable and a waterproof connector included
- A convenient and high-quality solution for temporary installations
- LOXX fasteners are built-in for easy installation
- 100% maintenance-free, self-cleaning surface
- 3-year warranty

Suitable Applications:

- Marine Leisure
- Motorhomes

Power / Prices

Module Type	Power	Dimensions	Weight	Part No	Price
TX-12039 - Single	45W	873 x 431	2.2 kg	CA-10/211	£537.83
TX-12052 - Single	60W	1108 x 431	2.6 kg	CA-10/212	£630.19
TX-22039 - Double9	90W	873 x 826	4.2 kg	CA-10/213	£970.33
TX-22052 - Double	120W	1108 x 826	4.6 kg	CA-10/214	£1,168.42
TX-42039 - Quadruple	180W	929 x 1590	8.2 kg	CA-10/215	£1,523.33
TX-42052- Quadruple	240W	1164 x 1590	8.6 kg	CA-10/216	£1,717.82

Visit the website to ensure latest specification.

Solar charge controllers

Solar Charge Controllers

Solar regulators provide battery overcharge protection and some models include a deep discharge protection feature. All solar regulators include diodes to prevent reverse current in the dark. To calculate the regulator needed, divide the solar panel's Watt rating by the system Voltage to arrive at the maximum Amps. Choose a regulator of this minimum rating. E.g. $65W/12V = 5.4\text{Amps}$



Steca PR 3030



Solsum 10.10



Steca PWM

Marlec has distributed for Steca for many years giving us a wealth of experience with their range. We recommend Steca Solar regulators to all our customers and specify them in many of our professional power systems. All Steca regulators come with 5 years warranty. The Steca range offers regulators with either simple LED system indicators or LCD displays.

Solsum and PR Ranges feature:

- Efficient Pulse Width Modulation (PWM) charge regulation
- Battery deep discharge protection disconnects the load & auto reconnects once recovered
- Automatic detection of operating voltage - 12/24 V
- Temperature-compensated regulation

PR Range includes additional features:

- LCD for charge & discharge currents, Volts and more
- Push button field adjustable parameters plus more
- External temperature sensor available

Power / Prices

Model	Operating voltage	Max rated current	Part No	Price
Solsum 6.6F	12V / 24V	6 Amps	CA-11/14	£30.20
Solsum 8.8F	12V / 24V	8 Amps	CA-11/15	£38.50
Solsum 10.10	12V / 24V	10 Amps	CA-11/16	£47.80
Steca PR1010	12V / 24V	10 Amps	CA-11/37	£100.60
Steca PR1515	12V / 24V	15 Amps	CA-11/34	£111.90
Steca PR2020	12V / 24V	20 Amps	CA-11/35	£125.70
Steca PR3030	12V / 24V	30 Amps	CA-11/36	£152.00

Visit the website to ensure latest specification.

Spectra PWM & MPPT

Spectra is Marlec's own range of solar charge controllers for PV systems, and The range is available in PWM (Pulse Width Modulation) and MPPT (Maximum Power Point Tracking).



PWM

These intelligent regulators use PWM technology to deliver bulk, absorption, float and equalised charging regimes ensuring batteries get fully charged and are maintained in good condition.

MPPT

These MPPT solar controllers use full digital technology to efficiently track the Max Power Point at 99.9% to boost the energy yield of your solar panels. Multi-stage charging ensures good battery conditioning to improve the lifetime of batteries too.

Both Types Feature

- User-adjustable voltage setting
- Automatic system voltage setting
- Low-voltage disconnect feature
- Temperature compensation
- Overcurrent and reverse discharge protection
- LCD display with push-button operation
- PWM 10A, PWM 20A & 10A MPPT models include USB charging points
- 20A & 40A are Bluetooth compatible
- All Spectra regulators come with 2-year warranty

Power / Prices

Model	Max solar panel rating	Dimensions (mm)	Part No	Price
Spectra PWM 10A	12V 125W 24v 250W	160 x 88 x 43	CA-11/110	£37.20
Spectra PWM 20A	12V 250W 24v 500W	178 x 102 x 46	CA-11/111	£43.50
Spectra PWM 30A	12V 375W 24v 750W	196 x 111 x 54	CA-11/112	£74.95
Spectra MPPT 10A	12V 130W	189 x 96 x 53	CA-11/130	£66.95
Spectra MPPT 20A	12V 260W 24v 520W	137 x 137x 68	CA-11/135	£127.95
Spectra MPPT 40A	12V 520W 24v 1040W	197 x 137 x 98	CA-11/136	£163.95

Morningstar PWM

Morningstar is the world's leading brand of solar regulators and in our experience offers one of the most robust products in the market. Every product in the range is built to the highest standards and will last in the toughest of applications. All Morningstar regulators come with a 5 year warranty. Marlec are proud to be an appointed Morningstar distributor.

Morningstar PWM Regulators Range

Efficient Pulse Width Modulation shunt charge regulation. Low voltage disconnect facility on all models except the SunGuard. Marine rated terminals throughout.

- SunGuard and SunSaver models for single battery banks
- SunSaver duo for dual battery banks
- Remote Meter option for the Duo model, 10m cable included.
- Available in 12 & 24V



SunSaver SS & SL



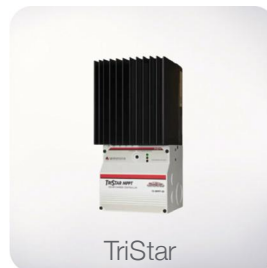
SunSaver Duo



SunGuard



Remote Meter



TriStar

TriStar PWM Regulators

Tristar PWM regulators control charge and load and act as diversion regulators. Flexible operation from 12-48V with power handling capacities up to 45 & 60A. High efficiency PWM charging control ensures batteries are fully replenished and battery capacity is maximised.

- LED indicators
- RS232 communications socket for connection to a PC
- Reverse polarity and other protections make this a very rugged product for use in professional systems

Power / Prices

Model	Operating voltage	Max rated current	Dimensions (mm)	Part No	Price
SunGuard 4.5A	12V	4.5 Amps	64 x 51 x 38	CA-11/26	£46.90
SunSaver SS-10 L	12V	10 Amps	152 x 55 x 34	CA-11/38	£99.45
SunSaver SS-10 L	24V	10 Amps	152 x 55 x 34	CA-11/10	£110.15
SunSaver SS20L	12V	20 Amps	152 x 55 x 34	CA-11/11	£136.65
SunSaver SunLight SL-10	12V	10 Amps	169 x 55 x 34	CA-11/29	£123.95
SunSaver Duo SSD-25	12V	25 Amps	170 x 56 x 41	CA-11/12	£131.55
Remote Meter (MPPT & Duo)	---	---	114 x 114 x 35	CA-11/13	£120.35
TriStar 45A PWM Controller	12V / 24V / 48V	45 Amps	260 x 127 x 71	CA-11/66	£242.75
TriStar 60A PWM Controller	12V / 24V / 48V	60 Amps	260 x 127 x 71	CA-11/58	£304.95

Morningstar MPPT

With well over 4 million products sold in over 100 countries since 1993—functioning in some of the most extreme environments and mission-critical applications in the world—Morningstar Corporation can truly claim to be “the leading supplier of solar charge controllers for off-grid applications.”



Morningstar EcoPulse and EcoBoost

Morningstar’s reputation for exceptional quality and reliability in professional systems can be found in their new Essentials range, designed for leisure and less complex applications.

Both Types Feature

- Built-in display
- Pulse Width Modulation type regulation
- 4-stage charging keeps batteries in top condition
- Built-in dusk-to-dawn lighting controller
- Adjustable charge settings
- Adjustable load controls -inc low voltage disconnect /reconnect
- Marine-rated terminals up to 16mm²
- LED fault indicators & charge /battery status indicators
- Battery reverse polarity protected

Eco Boost additional features

- Gain up to 30% more from your solar panels using Morningstar’s Trakstar MPPT technology EcoBoost
- MPPT enables the use of higher voltage panels for 12/24V charging
- Includes 2 x USB charger points and a mobile phone holder

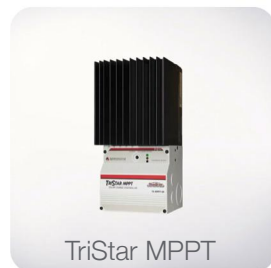
Power / Prices

Model	Max solar panel rating	Dimensions (mm)	Part No	Price
EcoBoost MPPT 20A	12V 300W 24V 600W	200 x 170 x 70mm, 1.4kg	CA-11/121	£251.90
EcoBoost MPPT 40A	12V 560W 24V 1120W	200 x 170 x 70mm, 1.4kg	CA-11/122	£428.35

Morningstar MPPT

The Tristar MPPT models feature a wide operating voltage range making them ideal for large professional PV systems up to 3kWp. Designed for tough environments, the TriStars incorporate a number of electronic overload protection features.

- Suitable for 12V, 24V, 36V and 48V battery systems
- Industry-leading 99% peak efficiency for off-grid charge controllers
- Environmental protective features, e.g. marine-rated terminals
- Extensive networking & communications capability for system monitoring, data logging and adjustability
- TriStar MPPT can handle up to 130% of rated output power, allowing for the oversizing of the PV array, yielding more and higher power throughout the day



SunSaver MPPT

The SunSaver MPPT improves the performance of small PV systems and enables the use of larger, high voltage solar panels in 12V or 24V battery charging applications. The 4 stage charging also promotes longer battery

TriStar Meter -2

The meter connects to the Tristar PWM or MPPT controller and will display information about the operation of your system. Can be flush mounted up to 30m from the controller with supplied cable.

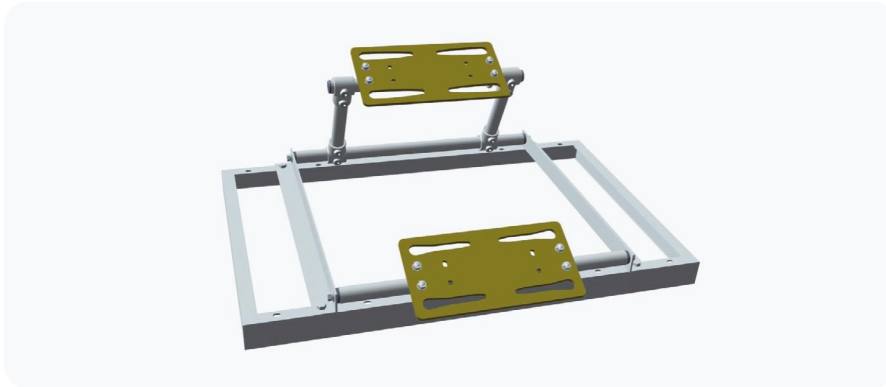
Power / Prices

Model	Max solar panel rating	Dimensions (mm)	Part No	Price
SunSaver MPPT 15A	12V 200W 24V 400W	169 x 64 x 73	CA-11/56	£341.65
TriStar MPPT 30A	12V 400W 24V 800W 48V 1600W	291 x 130 x 142	CA-11/87	£529.35
TriStar MPPT 45A	12V 600W 24V 1200W 48 V2400W	291 x 130 x 142	CA-11/62	£647.65
TriStar MPPT 60A	12V 800W 24V 1600W 48V 3200W	291 x 130 x 142	CA-11/65	£790.45
TriStar Remote Meter -2	---	116 x 116	CA-11/64	£168.25
TriStar Digital Meter-2	---	116 x 116	CA-11/63	£136.65

Solar Mounting Kits

Marlec's solar mounting kits are an easy to assemble and install mounting option for glass solar panels. They are designed and manufactured in the UK, using high-quality materials and components. The kits are compatible with Marlec's wide range of glass solar panels and all the necessary components are included.

- Single and dual brackets are available.
- Models available for Ameresco, Alpex and Spectra solar panels
- Optional bird spikes are available



Spectra PERC-S

Mounting Type	Part No	Price
Solar Pole Mnt Kit 1 x 30W	CA-12/0030PS	£99.58
Solar Pole Mnt Kit 1x 65W	CA-12/0065PS	£103.12
Solar Pole Mnt Kit 1 x 85W	CA-12/0085PS	£110.86
Solar Pole Mnt Kit 1 x 110W	CA-12/0110PS	£137.28
Solar Pole Mnt Kit 1 x 150W	CA-12/0150PS	£148.77
Solar Pole Mnt Kit 1 x 220W	CA-12/0220PS	£173.06
Solar Pole Mnt Kit 1 x 240W	CA-12/0240PS	£174.82
Solar Pole Mnt Kit 1 x 400W	CA-12/400	£182.40

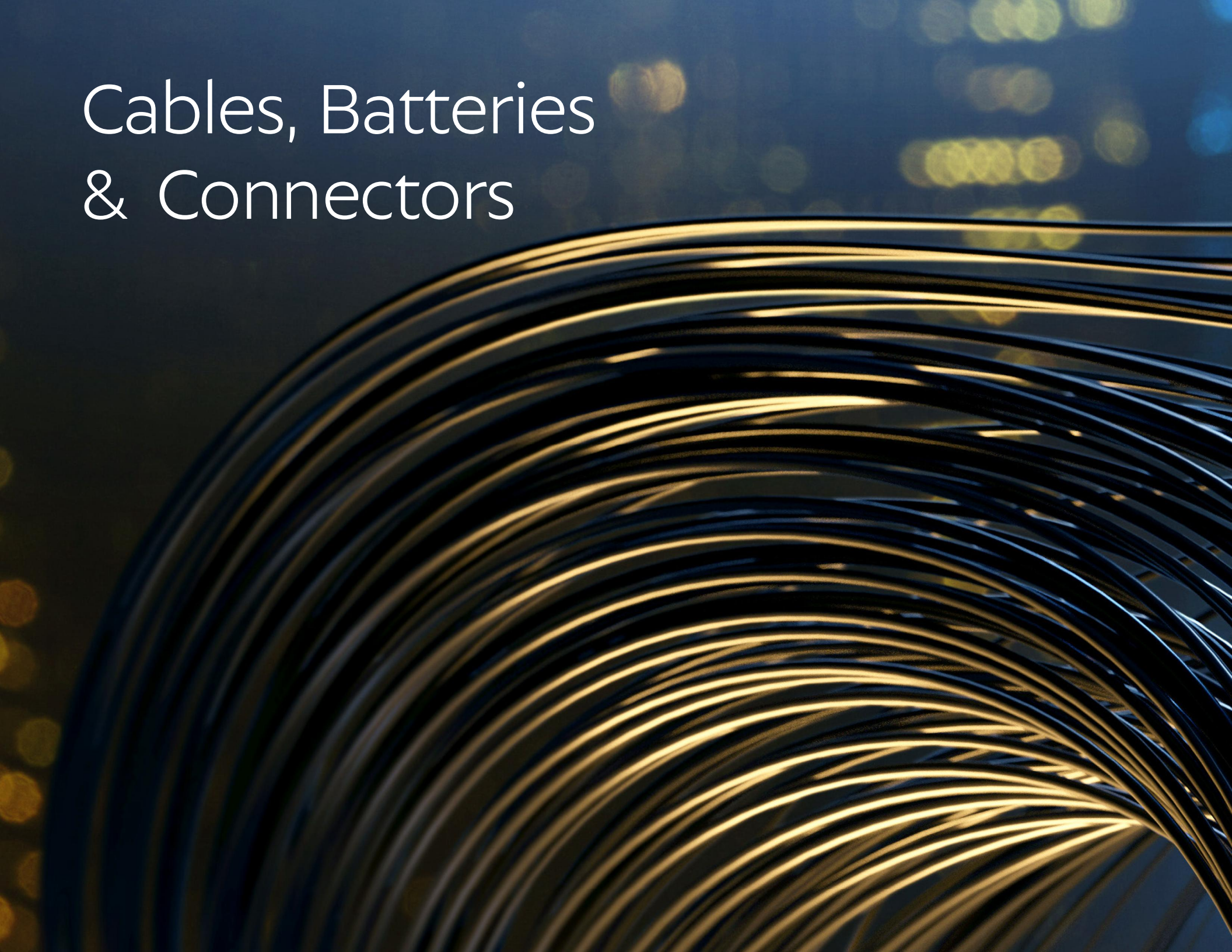
Alpex Mounting Kits

Mounting Type	Part No	Price
Solar Pole Mnt Kit 1 x 20W	CA-12/0020A	£76.02
Solar Pole Mnt Kit 1x 30W	CA-12/0030A	£82.16
Solar Pole Mnt Kit 1 x 40W	CA-12/0040A	£88.71
Solar Pole Mnt Kit 1 x 50W	CA-12/0050A	£95.99
Solar Pole Mnt Kit 1 x 80W	CA-12/0080A	£100.98
Solar Pole Mnt Kit 1 x 100W	CA-12/0100A	£113.15
Solar Pole Mnt Kit 1 x 135W	CA-12/0135A	£164.94
Solar Pole Mnt Kit 1 x 200W	CA-12/0200A	£183.25

Ameresco Mounting Kits

Mounting Type	Part No	Price
Solar Pole Mnt Kit 1 x 10W	CA-12/0010	£57.67
Solar Pole Mnt Kit 2 x 10W 410M	CA-12/51	£61.31
Solar Pole Mnt Kit 1x 20W	CA-12/0020	£90.79
Solar Pole Mnt Kit 2x 20W Am420J	CA-12/53	£126.36
Solar Pole Mnt Kit 1 x 30W	CA-12/0030	£90.79
Solar Pole Mnt Kit 2 x 30W	CA-12/0030D	£126.36
Solar Pole Mnt Kit 1 x 40W	CA-12/0040	£95.68
Solar Pole Mnt Kit 2 x 40W	CA-12/0040D	£126.36
Solar Pole Mnt Kit 1x 50W	CA-12/0050	£94.43
Solar Pole Mnt Kit 2x 50W	CA-12/0050D	£132.50
Solar Pole Mnt Kit 1 x 90W	CA-12/0090	£105.51
Solar Pole Mnt Kit 2 x 90W	CA-12/0090D	£196.25
Solar Pole Mnt Kit 1 x 140W	CA-12/0140	£196.25
Solar Pole Mnt Kit 2 x 140W	CA-12/0140D	£208.57

Cables, Batteries & Connectors



Cables, Batteries & Connectors

Getting the right size cable is essential to safety and efficient operating of your wind turbine system. Select cable diameters related directly to the length to be used. More info can be found on our website and product manuals. The below cables are round and tinned for marine use.



MC-T4 Cables & Connectors

Details	Part No	Price
T4 Plug / Socket In-line Diode 15A	901-151	£13.95
MC-T4 Branch Connectors Plug/Socket (Pair)	901-152	£22.05

Rutland 504, 914 & FM910-4 2 core copper cables:

Details	Part No	Price
OceanFlex 2.5mm ² for 0-20m lengths in 12 / 24V	902-036	£3.97
4mm ² for up to 30m lengths in 12 / 24V	902-021	£5.61

Solar Cable

Details	Part No	Price
4mm ² black solar cable	902-251	£2.16

Solar Cables 4mm T4

Details	Part No	Price
Plug/socket (pair) 5M	SA-13/20	£37.60
Plug/socket (pair) 10M	SA-13/21	£50.35

Rutland 1200 3 core tinned copper cables:

Details	Part No	Price
4mm ² for up to 10m lengths in 12V or 40m in 24V	902-042	£10.45
6mm ² for up to 20m lengths in 12V or 75m in 24V	902-043	£23.63

Battery Clamps

Details	Part No	Price
Marlec Battery Clamps	901-039	£9.57
OJOP Battery Clamps	901-030	£20.44

Off-Grid Batteries

Two or more batteries can be connected in parallel to increase the capacity in ampere-hours or in series to increase the voltage to 24V. The battery capacity selected depends on the charge input and the electrical equipment load. Typically we recommend a reserve capacity of between 3-10 days of energy. Call our sales team to discuss your requirements. All batteries come with 2 years warranty.

Absorbed Glass Mat (AGM) Batteries

AGM batteries are a quality alternative to the traditional “wet” lead-acid range. They are robust and able to deep cycle more than wet batteries. The electrolyte is contained in a glass mat which will not leak, even if the casing is broken so they are ideal for leisure applications. 3-5 year expected life.

Gel Batteries

GEL Batteries are designed for professional or system critical installations. They are able to withstand a higher number of deep cycles and are a good choice for standby power in professional applications. 5 year expected life.

Lithium batteries available on request

Gel Batteries

Ah Rating @ C20	Part No	Price
12	CA-17/04	£54.09
18	CA-17/30	£79.41
36	CA-17/36	£133.77
45	CA-17/31	£173.62
60	CA-17/32	£226.04
88	CA-17/37	£322.14
105	CA-17/33	£346.32
122	CA-17/38	£393.54
161	CA-17/35	£480.46
191	CA-17/39	£551.46
246	CA-17/40	£738.17
263	CA-17/41	£796.89

AGM Batteries

Ah Rating @ C20	Part No	Price
12	CA-17/17	£37.72
38	CA-17/21	£132.14
59	CA-17/20	£198.49
88	CA-17/23	£258.60
91	CA-17/19	£281.06
113	CA-17/24	£304.92
135	CA-17/26	£376.69
169	CA-17/25	£441.90
188	CA-17/28	£500.34
236	CA-17/29	£589.64



Chargemetrix

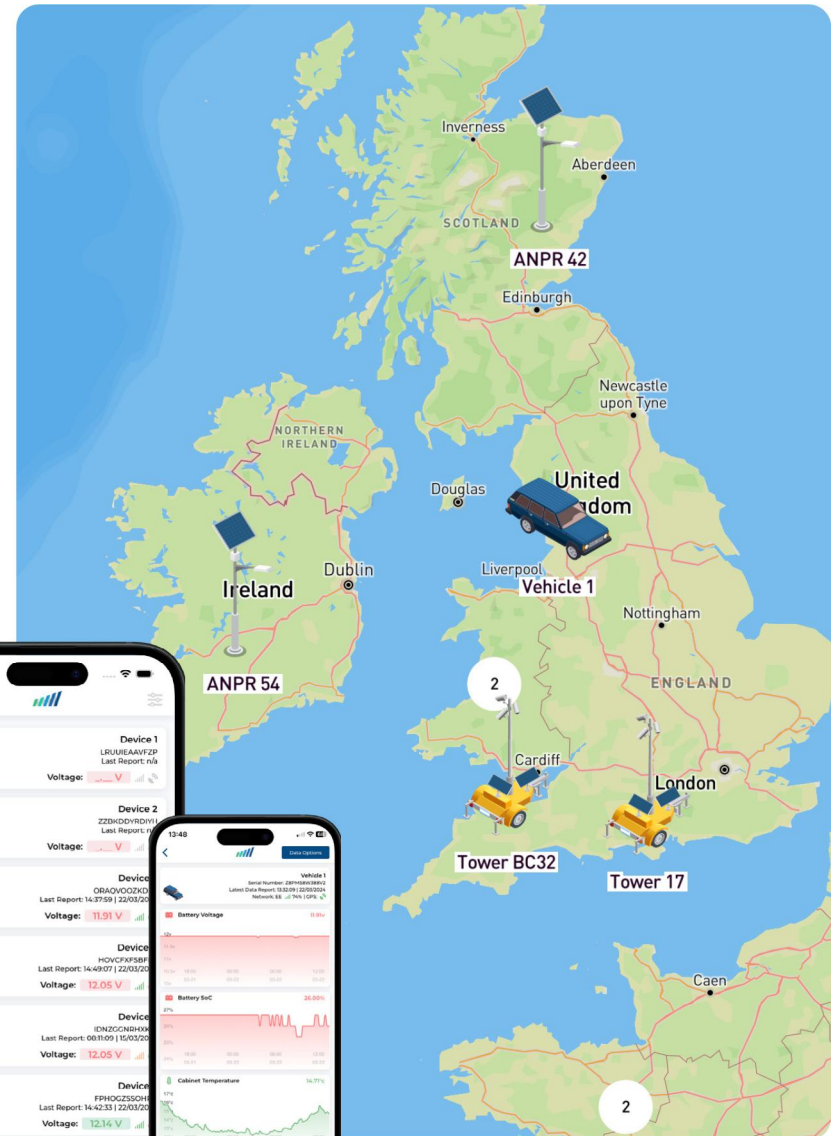
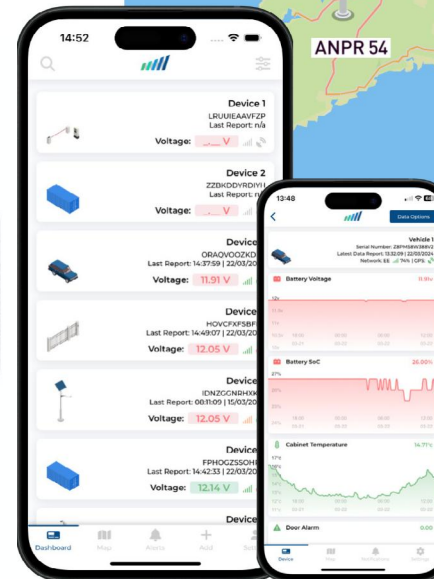
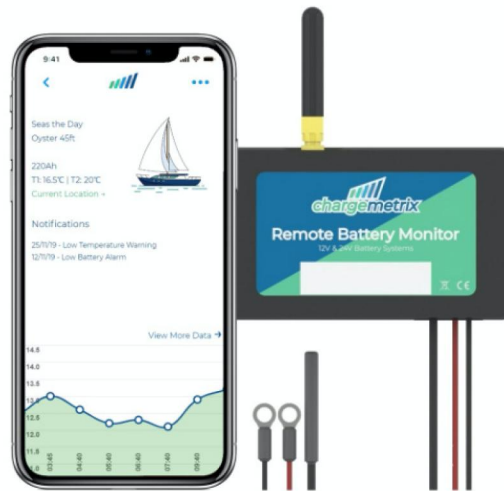
The Chargemetrix Battery Monitor is a smart device that allows you to monitor the battery performance from anywhere, anytime. It connects to the battery via a simple clamp and sends data to your smartphone or web dashboard a cellular network.

You can access real-time and historical information about your battery voltage, current, state of charge, temperature, and more. You can also set up alerts and notifications to warn of any potential issues or failures.

The Chargemetrix Battery Monitor helps to optimise your battery usage, extend its lifespan, and prevent costly damage. It is compatible with any 12V or 24V battery system and works in any location with cellular coverage.

Features

- Suitable for marine, leisure and commercial applications
- Works on all devices (PC's, mobile phones and tablets)
- GPS for location and tracking
- Updates every 15 minutes
- Low power consumption
- Global operation
- Instant email notifications
- Comprehensive reporting
- Made in the UK



Details	Part No	Price
Chargemetrix Battery Mailer	915-071	£189.00



Professional Off-Grid Solutions



Professional Systems

Our UK manufactured green systems are market leaders in providing power to professional applications, thanks to their comprehensive design process, product reliability and the ability to be made bespoke to suit customer requirements. Marlec's green systems can be seen around the world providing vital power to infrastructure.

Applications

- Street Lighting
- CCTV
- Environmental Monitoring
- Highway & Railway signage
- Telecommunications
- Rail
- ANPR
- Monitoring Systems





Solar Signage

In 2022 we introduced a new off-grid lighting controller to our portfolio. The Marlec LC101 controller uses state of the art technology to maximise the power generated from the solar panel, as well as giving full control to the customer for programming all lighting parameters (Lux levels, dimming levels and dusk-to-dawn settings).

These new lighting kits offer the signage industry a fully off-grid signage illumination solution, an alternative to the expensive mains electricity-powered systems that are used widely today.

- Environmentally friendly
- Easy to Install
- Minimum Disruption
- Maintenance Free
- Year-Round Power Generation







Solar iBoost+

Divert excess solar PV energy to your hot water tank and get free hot water with Solar iBoost+. With over 120,000 installations Solar iBoost+ has become the must-have home energy product for homeowners with solar PV.

Functionalities

- Uses surplus solar (100W+) to heat water and reduce energy bills.
- Compatible with battery systems; programmable and adjustable settings.
- Wireless setup with LED indicators and real-time/historical display.
- CE & UKCA certified. 2-year warranty. Size: 288 x 255 x 100mm, 1.95kg.

iBoost+ Buddy

The optional iBoost+ Buddy allows homeowners to remotely monitor and control their Solar iBoost+ from anywhere in the home. Its eco-gauge and intuitive traffic light indicator show when surplus energy is available, and the Boost function can be activated at the touch of a button.



Solar iBoost+ Heat Pump Interface

The smart solution for combining your Heat Pump and Solar iBoost+ on a single immersion heater. Operate both devices seamlessly and safely, without complex wiring or costly installations.

Functionalities

- Save on installation time
- Smart immersion control
- Simple and reliable operation
- Compatible with all major heat pumps
- Optimised for British homes
- Smart integration for the UK homes.
- 230V AC supply (up to 3kW or lower)

How it works

1. Detects control signal the Solar iBoost+ or heat pump.
2. Switches immersion control to the active device.
3. Allows immersion to be used by Solar iBoost and Heat Pump to heat hot water





Visit www.vevacharger.com for the latest customer feedback and detailed specifications.



VEVA is the intelligent EV charging solution that brings reliability and simplicity together. Designed to work with or without solar panels, VEVA gives you full control over how and when you charge. With easy app integration, load balancing, and solar compatibility, it's the smart 7.4kW EV choice for cost-effective, future-ready charging at home or at work.

Functionalities

- Available in Tethered & Untethered
- Simple to install & commission
- Load Balancing & PEN Protection Built-in
- Compliant & Future-proofed
- Intelligent & controllable
- Compatible with Solar PV
- Interchangeable fascias
- Free IOS & Android mobile app

Veva Mobile App

- Customise charging schedule
- Select charging modes (Grid, hybrid, solar or custom schedule)
- View charging status
- Adjustable pricing input for accurate reporting
- Charging history analysis
- Activate holiday lock
- Solar compatible
- Fault notifications
- Manage user access





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