spectra solar
from Marlec

spectra solar

...The convenience of fully charged batteries at no running cost to you!

- **Ever been caught out by flat batteries?**
- **Have they stopped you from setting off for a sail?**

Now you can keep batteries topped up for FREE!

Flat batteries are at best a nuisance and at worst a hazard but can easily be avoided using the abundant and natural power of the sun. Solar energy gives you the convenience of power being available for engine starting, lighting and other low energy applicances. Once installed the hotovoltaic solar panel works quietly and efficiently at recharging without any effort on your part!

Each Spectralite panel in the range is suited to topping up 12V deep cycle batteries in leisure applications. In wintertime you can avoid the trouble of taking batteries home to maintain them and replace natural discharge by simply installing a solar panel to suit the battery capacity, weather conditions and location of your battery. *Most importantly you'll arrive to a battery that is not flat!*

What size of solar panel do I need?

In the UK we recommend a minimum ratio of 10W (Watts) of solar panel to every 100Ah capacity of battery to replace natural discharge typically experienced over the winter time. In the summer time that 10W solar panel's performance increases to a potential 3 Ampere hours (Ah) per day and therefore 21Ampere hours (Ah) weekly - that's often enough for a weekend's cruising electrical needs for lighting etc.

Spectra Product Range and Specification

Choose from the range below based on the minimums recommended above and simply scale up on the same basis for larger batteries, ie 20W of solar panels for 200Ah of battery bank. For faster battery replenishment or where more power is consumed use larger solar panels than the minimum ratio or multiple units in parallel. More than one Spectralite panel can be connected in parallel to increase Ampere rating at 12V or in series to increase voltage to deliver 24V. Note that only same size panels can be connected in series mode.

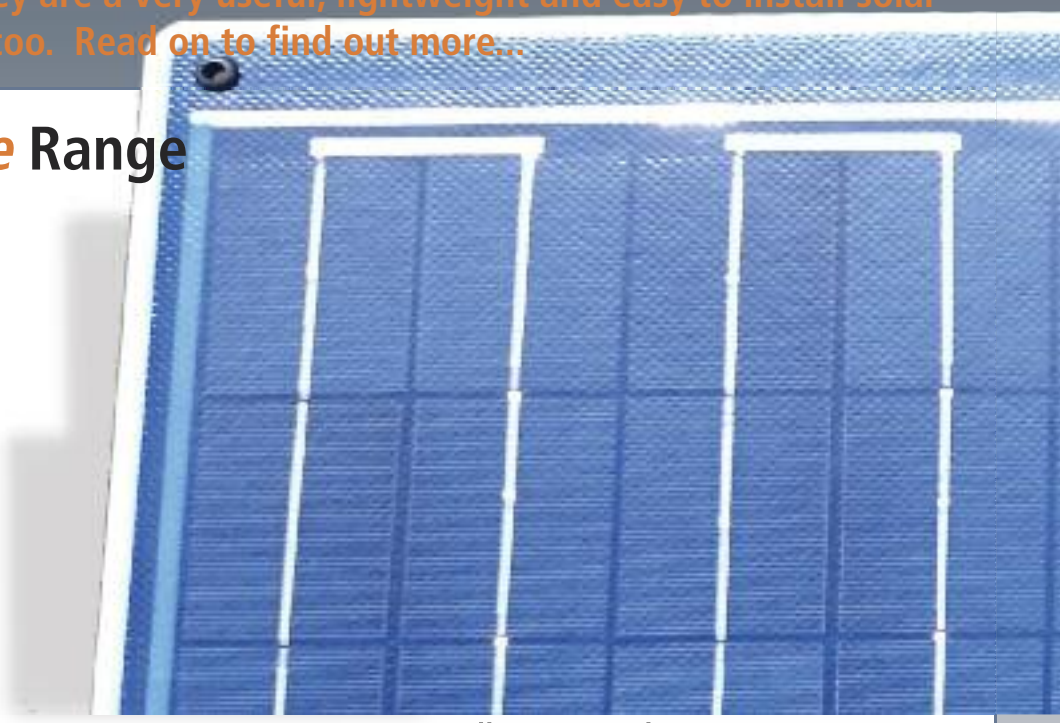
SPECIFICATION	Spectra*lite* 50	Spectra*lite* 30	Spectra*lite* 20	Spectra*lite* 10	Spectra*lite* 5
Peak Output	48W	28.5W	19W	10W	5W
Operating Current	2.8A	1.61A	1.12A	640mA	300mA
Open Circuit Voltage	20.7V	21.5V	21.5V	19.6V	20.2V
Dimensions mm (over junction box)	483x800x3 (13)	559x483x3 (13)	559x381x3 (13)	381x304x3 (13)	304x254x3 (13)
Gross (Net) Weight kg	2.6 (2.04)	1.8 (1.5)	1.4 (1.2)	1.3 (1.06)	0.68 (0.57)
Part No.	CA-10/41	CA-10/39	CA-10/38	CA-10/37	CA-10/36

Spectra Solar Features

Spectra Solar has been designed with the yachtsman in mind so we ensure that all models:

- ✓ **Are robustly designed and built so they can even be walked on in soft soled shoes**
- ✓ **Are conveniently lightweight and elegantly slimline so are easily installed**
- ✓ **Include a sealed junction box with blocking diode and 3m of output cable**
- ✓ **Have fixing holes sealed with an eyelet for a quality finish**

The range of Spectra*lite* solar panels can be mixed and matched to suit the spaces you have available on board. They are a very useful, lightweight and easy to install solar panel in other applications too. Read on to find out more...



Spectra*lite* Range

Our Build Quality

Spectralite is a range of semi-flexible solar panels made from efficient and stable crystalline cells. These cells are sealed between a fibreglass substrate that ensures durability whilst keeping weight low and a scratchproof Tedlar superstrate with excellent light transmissive properties.

Shadow Resistant

The cells of the Spectralite 50, 30, 20 & 10 are quite uniquely arranged in 2 halves, each producing full voltage. Should one half become shaded the other half exposed is still capable of generating its part of the panel's power output. This is especially useful on board where shading is common and you can arrange the positioning of the panel to maximise efficient solar power generation.

Semi-Flexible Design

These solar panels are designed to be gently curved to follow a coachroof and can be fixed using the 4 screw holes or Sikaflex adhesive to avoid drilling holes. This keeps the panel smooth and flat to the boat surface so the area remains useful compared with bulky glass panels. Spectralite are light in weight so are very convenient for portable uses too. The maximum permitted curvature of each panel is; 5-10 models 5mm, 20-30 models 10mm and 50 model 15mm.

How Do I Install Spectra Solar?

Electrical connection is simple, connect directly to a battery or through a solar regulator to prevent overcharge. A regulator is recommended if the system is to be left unattended for long periods or the solar panel to battery ratio exceeds the minimum of 10W to 100Ah of battery. Spectralite are light in weight so are very convenient for portable uses too.

Spectra Solar Panels Save You Money

Spectra solar panels are not only an affordable choice for maintaining your batteries but you'll even save money too on avoiding mains hook up costs and replacing deep discharged batteries. A well maintained battery delivers more charge and discharge cycles and has a longer life, so you keep on saving costs.

Marlec have been designing renewable energy systems since 1979 and our experience is second to none so call us today for professional free advice about your system.

NB. Specifications are subject to change without notice

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