



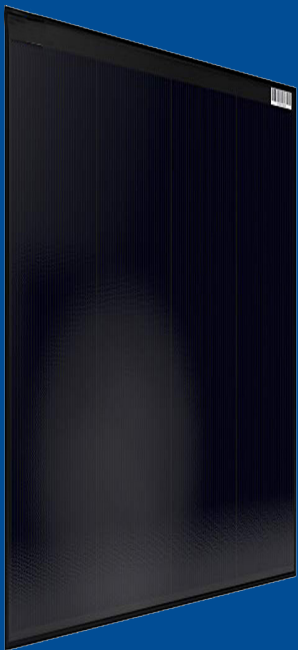
spectra
solar

Spectra PERC-S Solar Panels

Marlec's new PERC Shingle technology solar panels are a new efficient way to generate free solar energy while using the minimum of space and weight. You can enjoy faster charging to run all the things you want whether it's for leisure or for critical commercial use.

Available in:

30W, 65W, 85W, 110W, 150W, 220W, 240W, 300W & 400W (other sizes available on request)



Typical Applications

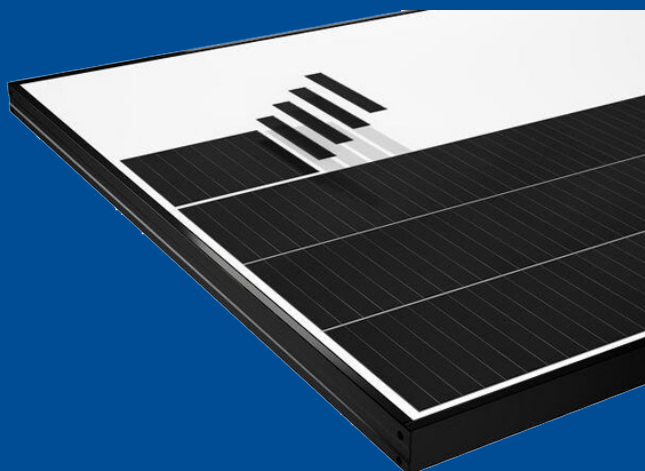
The Spectra PERC-S are designed for battery charging in off-grid power applications such as:

- Motor homes & caravans
- Off-grid homes & cabins
- Sail boats
- Isolated telecoms & security systems
- Traffic signage & street lighting



How does it work?

The solar cells use Shingle technology of overlapping small cells so that the electrical connectivity is at the rear, leaving all the front of the cell exposed to light. Combined with low resistive losses and shadow resistance these technically constructed panels are superior in performance to most conventional crystalline panels. They have the added benefit of withstanding higher wind loads without being damaged.



Features

- Monocrystalline solar cells
- Shingle technology offering more shade resistance
- Potted junction box with 900mm flying lead and MC4 type connectors
- Reinforced black aluminium frame withstands high wind loads
- Safety glass



The Marlec Assurance

We are proud to include the PERC-S panels to Marlec's own brand Spectra range alongside other quality and trusted solar and wind energy products. Founded in 1978, we are the UK's longest established renewable energy company bringing our 40 years of unrivalled experience to our valued customers. Contact our expert sales team at www.marlec.co.uk or sales@marlec.co.uk.



Marlec Engineering Co Ltd
Rutland House, Trevithic Road, Corby,
NN17 5XY, UK

sales@marlec.co.uk www.marlec.co.uk



Spectra PERC-S

Technical Specifications



Specifications										
Panel Model	PERC S30	PERC S65	PERC S85	PERC S110	PERC S150	PERC S220	PERC S240	PERC S300	PERC S400	
Part No	CA-10/521	CA-10/565	CA-10/522	CA-10/523	CA-10/524	CA-10/5220	CA-10/5240	CA-10/5300	CA-10/527	
Cell	Monocrystalline PERC solar cells with shingle technology									
Dimension of module (LxWxD)	515 x 318 x 30mm	668 x 486 x 35 mm	942 x 454 x 35mm	942 x 561 x 35mm	942 x 775 x 35mm	1096 x 942 x 35 mm	1203 x 942 x 35mm	1524 x 942 x 35 mm	1690 x 1106 x 40mm	
Weight	2.3kg	4.2kg	5.3 kg	6.3 kg	8.3 kg	14 kg	12.5kg	20 kg	21.0 kg	
Characteristics										
Power at STC (Pm)	30W	65W	85W	110W	150W	220W	240W	300W	400W	
Maximum power voltage (Vmp)	19.04V	18.3V	18.3V	18.3V	18.3V	18.3V	18.3V	38.6V	67.3V	
Maximum power current (Imp)	1.58A	3.55A	4.64A	6.01A	8.20A	12.02A	13.11A	7.77A	5.94A	
Open circuit voltage (Voc)	21.5V	21.41V	21.41V	21.42V	21.42V	21.42V	21.42V	43.52V	78.8V	
Short circuit current (Isc)	1.78A	3.76A	4.76A	6.25A	8.46A	12.67A	13.64A	7.98A	6.34A	
Tolerance (%)	0 ~ +3									
Module efficiency	18.32%	20.02%	19.88%	20.81%	20.63%	20.93%	21.17%	20.89%	21.4%	
STC: Irradiance 1000 W/m ² , cell temperature 25 °C, AM 1.5										
Operating temperature	-40 ~ +90°C									
Components & Mechanical Data										
Front Glass	Tempered Glass with Anti Reflective Coating(Typical Grain Upto 3.1%)									
Junction Box	IP-65	IP-68 with 2 Bypass Diodes							IP-68 with 3 Bypass Diodes	
Cable	Wireable Junction Box	900 mm x 2 ea 4.0mm ²								
Connector Type		MC4								
Frame	Black anodized aluminium									

* Specifications are subject to change without notice.

