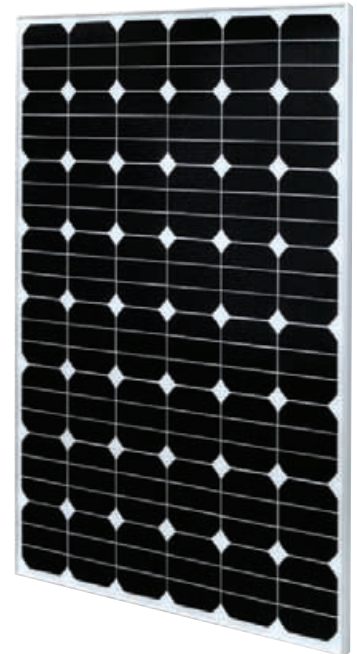


# Phaesun Photovoltaic Modules PN SPR-S130-135-140 - 24V

Phaesun's SPR-S monocrystalline modules has multiple advantages. These modules are made with back-contact monocrystalline solar cells which are aesthetically pleasing in appearance. The cells have a unique structure, different from conventional cells, they yield average conversion efficiencies up to 20%.

## Product Features:

- Photovoltaic modules made with unique back connected cells
- Cells with high conversion efficiency up to 20%
- Manufactured in ISO9001 certified factory
- Design to charge 12 to 48 V batteries for off-grid remote systems
- Made with high quality materials which qualifies high reliability of modules



Technical Data	PN SPR-S135-130	PN SPR-S135-135	PN SPR-S135-140
<b>Electrical Parameters</b>			
Max Power (Pm) [W]	130	135	140
Voltage at Max Power (Vmp) [V]	39.4	39.4	39.4
Current at Max Power(Imp) [A]	3.30	3.43	3.57
Open Circuit Voltage (Voc) [V]	48.2	48.2	48.2
Short Circuit Current (Isc) [A]	3.75	3.80	3.91
Cell Efficiency [%]	18.41	19.11	19.81
Module Efficiency [%]	15.1	15.7	16.2
Max Power Tolerance [%]		±5	
Nominal Operating Cell Temp [°C]		46 ±2	
Max System Voltage [V]		70	
<b>Mechanical Parameters</b>			
Cells Type and Number	Mono. BackContact, 144 pcs.		
Frame	>15µm clear anodized		
Junction Box	AM 1103-2 (IP65)		
Connector	MC 3 compatibel		
Cables [mm]	Cixi Renhe 1x4m <sup>2</sup> , 1 meter (35.4 inch)		
Dimensions (X x Y x Z) [mm]	1083 x 796 x 35 (42.60 x 31.34 x 1.38 inch)		
Weight [kg]	12.25 (27.0 lbs)		
<b>Temperature Coefficients</b>			
Power [%/°C]	-0.38		
Voltage [mV/°C]	-65		
Current [mA/°C]	4.7		

