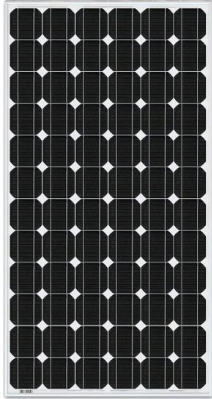


# BlueSolar Monocrystalline Panels



**BlueSolar Monocrystalline 280W**

- Low voltage-temperature coefficient enhances high-temperature operation.
- Exceptional low-light performance and high sensitivity to light across the entire solar spectrum.
- 25-year limited warranty on power output and performance.
- 2-year Limited warranty on materials and workmanship.
- Sealed, waterproof, multi-functional junction box gives high level of safety.
- High performance bypass diodes minimize the power drop caused by shade.
- Advanced EVA (Ethylene Vinyl Acetate) encapsulation system with triple-layer back sheet meets the most stringent safety requirements for high-voltage operation.
- A sturdy, anodized aluminum frame allows modules to be easily roof-mounted with a variety of standard mounting systems.
- Highest quality, high-transmission tempered glass provides enhanced stiffness and impact resistance.
- Pre wired quick-connect system with PV-ST01 connectors.



**PV-ST01 connectors**

Type	Module Size	Glass size	Weight	Electrical data under STC <sup>(1)</sup>				
				Nominal Power	Max-Power Voltage	Max-Power Current	Open-Circuit Voltage	Short-circuit Current
				P <sub>MPP</sub>	V <sub>MPP</sub>	I <sub>MPP</sub>	V <sub>oc</sub>	I <sub>sc</sub>
Module	mm	mm	Kg	W	V	A	V	A
SPM30-12	532x418x23	527x413	3.0	30	17.5	1.71	21.6	1.83
SPM50-12	810x534x35	804x528	6.5	50	17.5	2.86	21.6	3.05
SPM80-12	1205x545x35	1189x528	8.2	80	17.6	4.54	21.88	4.98
SPM130-12	1456x666x35	1450x660	13.0	130	17.7	7.35	21.6	7.94
SPM180-24	1580x808x50	1574x802	15.5	180	36.3	4.95	44.6	5.61
SPM280-24	1956x992x50	1924x974	23.0	280	36.7	7.63	43.78	7.98
Module		SPM30-12	SPM50-12	SPM80-12	SPM130-12	SPM180-24	SPM280-24	
Nominal Power (±3% tolerance)		30W	50W	80W	130W	180W	280W	
Cell type		Monocrystalline						
Number of cells in series		36				72		
Maximum system voltage (V)		1000V						
Temperature coefficient of P <sub>MPP</sub> (%)		-0.48/°C	-0.48/°C	-0.48/°C	-0.48/°C	-0.48/°C	-0.48/°C	
Temperature coefficient of V <sub>oc</sub> (%)		-0.34/°C	-0.34/°C	-0.34/°C	-0.34/°C	-0.34/°C	-0.34/°C	
Temperature coefficient of I <sub>sc</sub> (%)		+0.05/°C	+0.05/°C	+0.05/°C	+0.05/°C	+0.05/°C	+0.05/°C	
Temperature Range		-40°C to +80°C						
Surface Maximum Load Capacity		200kg/m <sup>2</sup>						
Allowable Hail Load		23m/s, 7.53g						
Junction Box Type		PV-RH0301						
Connector Type		PV-ST01/M PV-ST01/F						
Length of Cables		900mm						
Output tolerance		+/-3%						
Frame		Aluminium						
Product warranty		2 years						
Warranty on electrical performance		10 years 90% + 25 years 80% of power output						
Smallest packaging unit		1 panel						
Quantity per pallet		88 panels	44 panels	44 panels	40 panels	52 panels	36 panels	

1) STC (Standard Test Conditions): 1000W/m<sup>2</sup>, 25°C, AM (Air Mass) 1.5

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