

- A complete photovoltaic industry chain Beyondsun group have a complete photovoltaic industry chain including crystalline wafer, solar cells, solar modules and photovoltaic system applications.
- Top quality We guarantee our products above 90% power output in 10 years and above 80% in 25 years, working life over 25 years.



Features

- High-efficiency solar cell ensures high performance of solar module and create more power in peak hours
- Anti-reflecting coating and high-transmission rate glass increase the power output and mechanical strength of solar module
- Torsion and corrosion-resistant anodized frame ensures dependable performance, even through harsh weather conditions
- Lightweight and pre-drilled mounting holes for easy installation
- Water-resistant junction box
- Designed specially to meet our customer demands for residential, commercial and industrial use



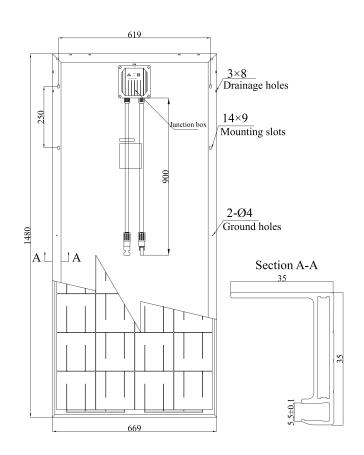






Mechanical Characteristics

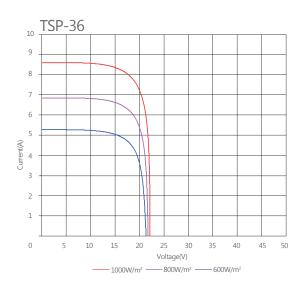
Type of Cell	Poly-Crystalline 156 x 156mm			
Cells Array and Number	4 x 9 (36pcs)			
Dimensions	1480 x 669 x 35mm			
Weight	12kg			
Front Glas	3.2mm Tempered Glass			
Frame	Anodized Aluminium Alloy			
Encapsulation	Glass/EVA/Cells/EVA/TPT			
Relativ	0 to 100%			
Resistance	227g steel ball fall down from 1m height and 60m/s Wind			
Snow load parameters	5400Pa			



Temperature Coefficients

Nominal Operating Cell Temperature(NOCT)	50°C ± 2°C
Temperature Coefficient of Pmax	-(0.410±0.05)%/K
Temperature Coefficient of Voc	-(0.320±0.01)%/K
Temperature Coefficient of Isc	(0.050±0.01)%/K
Maximum Series Fuse/current rating	15A

I-V Characteristics Curve



Electrical Characteristics

Characteristics	TSP130	TSP135	TSP140	TSP145	TSP150	TSP155
Open-Circuit Voltage (Voc)	22.14V	22.20V	22.31V	22.38V	22.47V	22.53V
Optimum Operating Voltage (Vmp)	17.89V	17.94V	18.00V	18.06V	18.11V	18.17V
Short-Circuit Current(Isc)	8.01A	8.22A	8.43A	8.62A	8.78A	8.86A
Optimum Operating Current (Imp)	7.27A	7.53A	7.78A	8.03A	8.28A	8.53A
Maximum Power at STC (Pmax)	130W	135W	140W	145W	150W	155W
Module Efficiency	13.1%	13.6%	14.1%	14.6%	15.1%	15.7%

Operating Temperature -40° C to $+85^{\circ}$ C

Maximum System Voltage 1000V DC

Power Tolerance 0/+3%

STC:Irradiance 1000W/m², Module temperature 25°C, AM=1.5