

180 Watt Maximum Power MONO-CRYSTALLINE SOLAR PANEL

Features

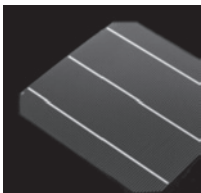
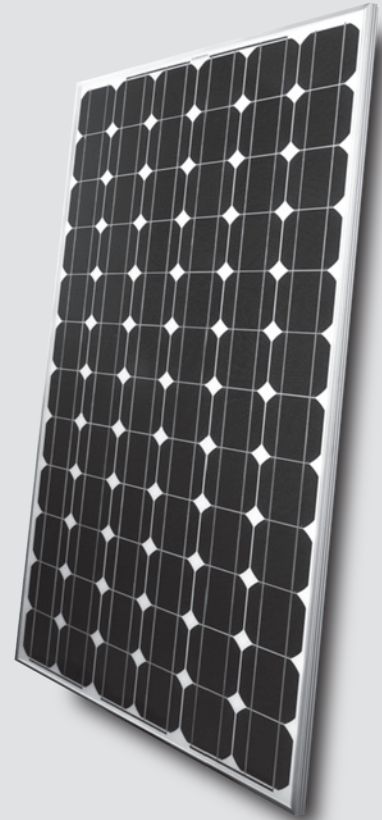
- High conversion efficiency based on leading innovative photovoltaic technologies
- High reliability with guaranteed +/-3% power output tolerance, ensuring return on investment
- Attractive appearance
- Withstands high wind-pressure and snow load, and extreme temperature variations
- Easy to install

Quality and Safety

- 25-year power output transferable warranty
- Rigorous quality control meeting the highest international standards
- ISO 9001:2000 (Quality Management System) and ISO 14001:2004 (Environmental Management System) certified factories manufacturing world class products
- UL listings: UL1703, cULus, Class C fire rating, conformity to CE

Recommended Applications

- Residential roof top systems
- On-grid utility systems
- On-grid commercial systems



Suntech's technology yields improvements to BSF structure and anti-reflective coating to increase conversion efficiency



Unique design on drainage holes and rigid construction prevents frame from deforming or breaking due to freezing weather and other forces



The panel provides more field power output through an advanced cell texturing and isolation process, which improves low irradiance performance



Suntech was named Frost and Sullivan's 2008 Solar Energy Development Company of the Year

Electrical Characteristics

Characteristics	STP180S-24/Ab-1	STP175S-24/Ab-1	STP170S-24/Ab-1	STP165S-24/Ab-1	STP160S-24/Ab-1
Open - Circuit Voltage (Voc)	44.4V	44.2V	43.8V	43.6V	43.2V
Optimum Operating Voltage (Vmp)	35.6V	35.2V	35.2V	34.8V	34.4V
Short - Circuit Current (Isc)	5.4A	5.2A	5.14A	5.04A	5A
Optimum Operating Current (Imp)	5.05A	4.95A	4.83A	4.74A	4.65A
Maximum Power at STC (Pmax)	180Wp	175Wp	170Wp	165Wp	160Wp
Operating Temperature	-40°C to +85°C	-40°C to +85°C	-40°C to +85°C	-40°C to +85°C	-40°C to +85°C
Maximum System Voltage	600V DC	600V DC	600V DC	600V DC	600V DC
Maximum Series Fuse Rating	15 AMPS	15 AMPS	15 AMPS	15 AMPS	15 AMPS
Power Tolerance	±3 %	±3 %	±3 %	±3 %	±3 %

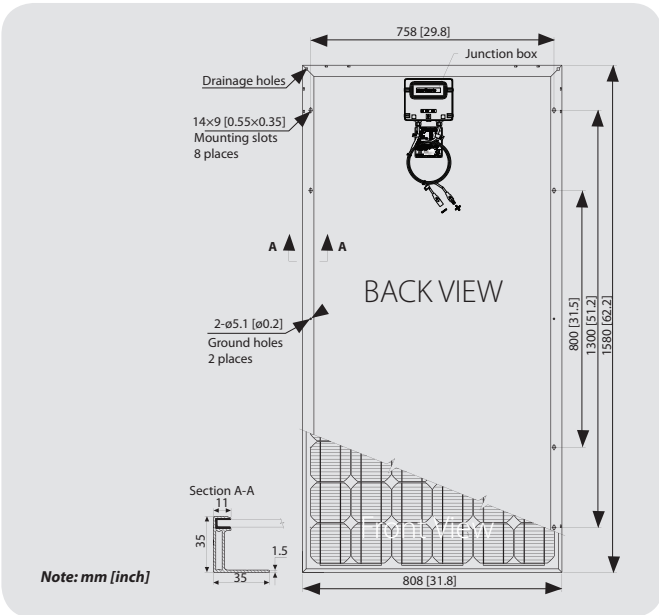
STC: Irradiance 1000W/m², Module temperature 25°C, AM=1.5

Mechanical Characteristics

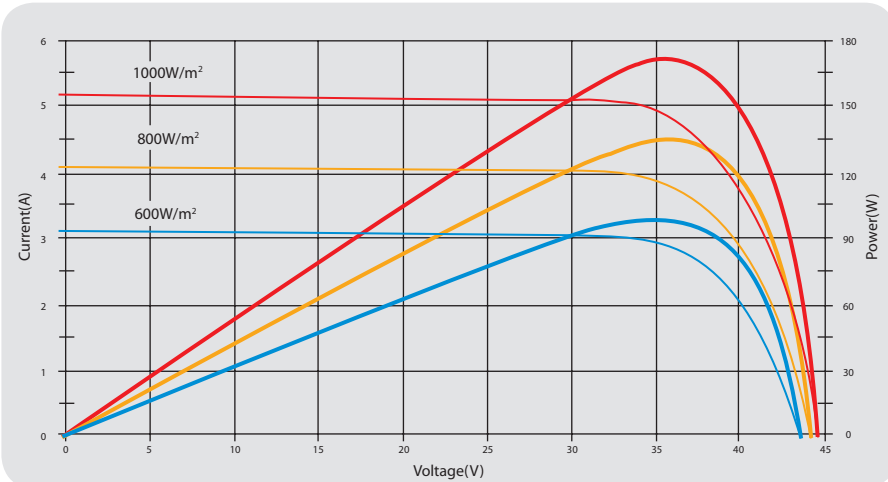
Solar Cell	Mono-crystalline 125×125mm (5inch)
No. of Cells	72 (6×12)
Dimensions	1580×808×35mm (62.2×31.8×1.4inch)
Weight	15.5kg (34.1lbs.)
Front Glass	3.2 mm (0.13inch) tempered glass
Frame	Anodized aluminium alloy
Junction Box	IP65 rated
Output Cables	AIW (12AWG), asymmetrical lengths (-) 1200mm (47.2inch) and (+) 800mm (31.5inch), MC Plug Type IV connectors

Temperature Coefficients

Nominal Operating Cell Temperature (NOCT)	45°C±2°C
Temperature Coefficient of Pmax	-0.48 %/°C
Temperature Coefficient of Voc	-0.34 %/°C
Temperature Coefficient of Isc	0.017 %/°C



Current-Voltage & Power-Voltage Curve (170W)



Temperature Dependence of Isc, Voc, Pmax

