

180 Watt Maximum Power MONO-CRYSTALLINE SOLAR PANEL

Suntech Black Label™ modules are exclusively designed and engineered for homeowners who seek a rooftop solar solution that combines visual aesthetics with excellent efficiency.

Features

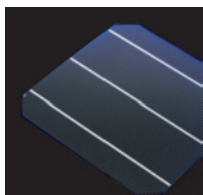
- Aesthetic appearance with excellent efficiency based on leading innovative photovoltaic technologies
- High reliability with guaranteed +/-3% power output tolerance, ensuring return on investment
- Withstands high wind-pressure and snow load, and extreme temperature variations
- May be customized to meet customer specifications

Quality and Safety

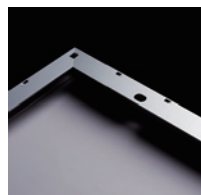
- 25-year power output transferable warranty with PICC insurance
- Rigorous quality control meeting the highest international standards
- ISO 9001:2000 (Quality Management System) and ISO 14001:2004 (Environmental Management System) certified factories manufacturing world class products
- IEC61215, Safety class II, conformity to CE

Recommended Applications

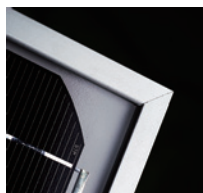
- Residential roof top systems
- On-grid utility systems
- On-grid commercial systems



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/Ac	STP175S-24/Ac	STP170S-24/Ac
Open - Circuit Voltage (Voc)	44.8V	44.7V	44.4V
Optimum Operating Voltage (Vmp)	36V	35.8V	35.6V
Short - Circuit Current (Isc)	5.29A	5.23A	5.15A
Optimum Operating Current (Imp)	5A	4.9A	4.8A
Maximum Power at STC (Pmax)	180Wp	175Wp	170Wp
Operating Temperature	-40°C to +85°C	-40°C to +85°C	-40°C to +85°C
Maximum System Voltage	1000V DC	1000V DC	1000V DC
Maximum Series Fuse Rating	15A	15A	15A
Power Tolerance	±3 %	±3 %	±3 %

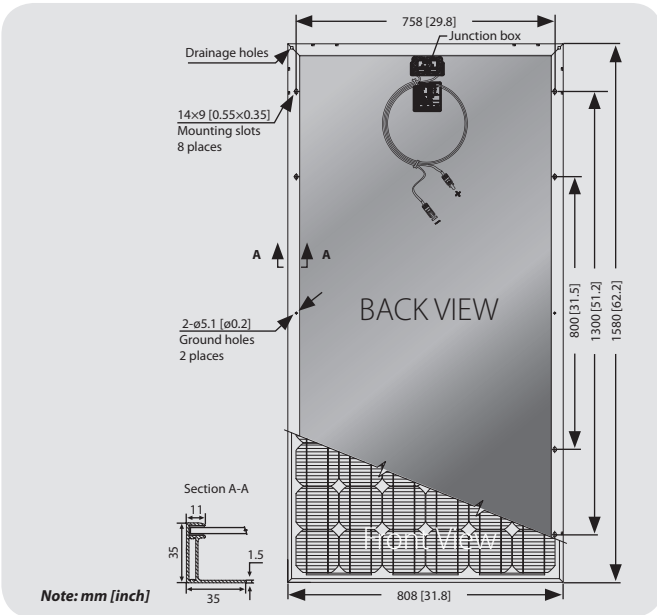
STC: Irradiance 1000W/m², Module temperature 25°C, AM=1.5

Mechanical Characteristics

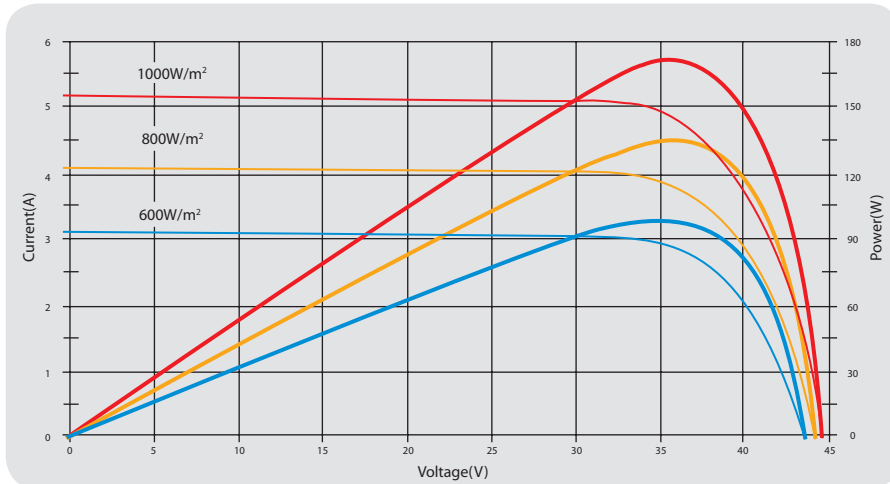
Solar Cell	Mono-crystalline 125×125mm (5inch)
No. of Cells	72 (6×12)
Dimensions	1580×808×35mm (62.2×31.8×1.4inch)
Weight	15.5kg (34.1lbs.)
Front Glass	3.2 mm (0.13inch) tempered glass
Frame	Anodized aluminium alloy
Junction Box	IP65 rated
Output Cables	LAPP 4.0mm ² (0.006inch ²), asymmetrical lengths (-) 1200mm(47.2inch) and (+)800mm(31.5inch), MC Plug Type IV connectors

Temperature Coefficients

Nominal Operating Cell Temperature (NOCT)	45±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 (175W)



Temperature Dependence of Isc, Voc, Pmax

