

## 180 Watt 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  $\pm 3\%$  power output tolerance, ensuring return on investment
- Withstands high wind-pressure and snow load (passed IEC 5400Pa mechanical loading test), and extreme temperature variations
- May be customized to meet customer specifications

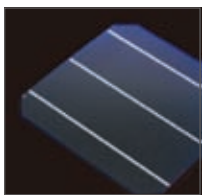
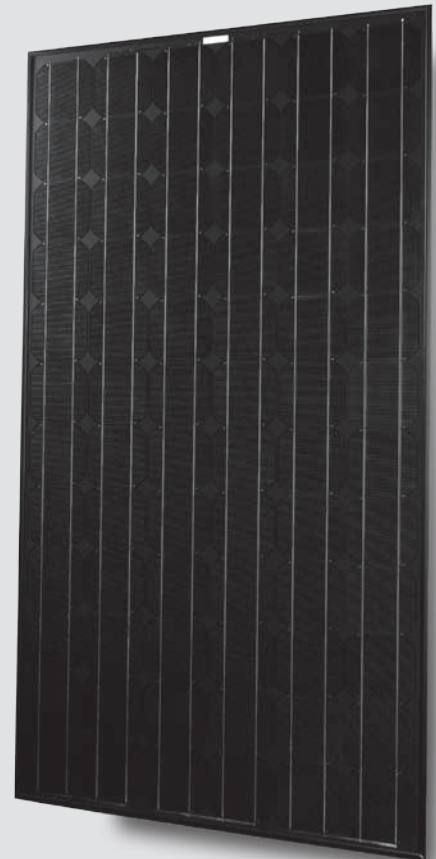
### Quality and Safety

- 25-year power output 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
- IEC61215, IEC61730, conformity to CE

### Recommended Applications

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

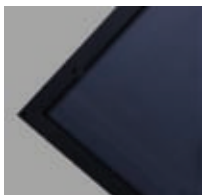
\* Refer to Suntech's warranty document for terms and conditions



Unique Suntech Back Surface Field (BSF) structure and anti-reflective coating increase cell conversion efficiency



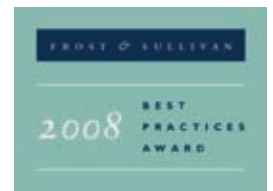
Thermal isolation between the lamination and latest designed J-box improves panel performance stability. The new J-box also provides perfect interconnection between modules and inverters to ensure the fully utilization of module power output (option with MC4 connectors)



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



Advanced cell texturing and passivation processes improve module low light irradiance performance and provide more field power output



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

Solar powering a green future™

### Electrical Characteristics

Characteristics	STP180S-24/Ad	STP175S-24/Ad	STP170S-24/Ad
Open - Circuit Voltage (Voc)	44.8V	44.7V	44.4V
Optimum Operating Voltage (Vmp)	36.0V	35.8V	35.6V
Short - Circuit Current (Isc)	5.29A	5.23A	5.15A
Optimum Operating Current (Imp)	5.0A	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 %

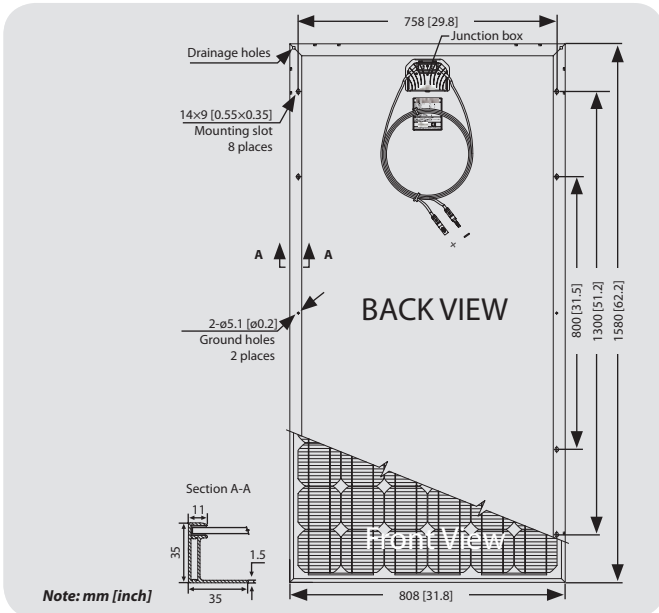
STC: Irradiance 1000W/m<sup>2</sup>, Module temperature 25°C, AM=1.5

### Mechanical Characteristics

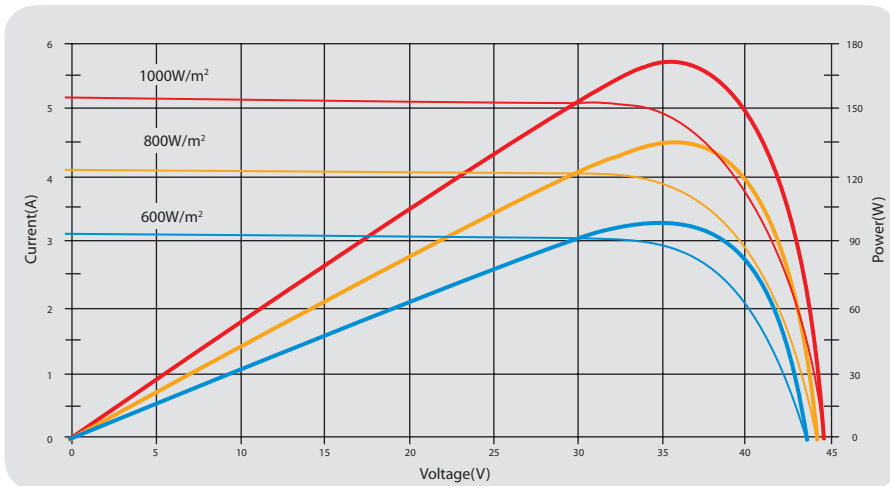
Solar Cell	Mono-crystalline 125×125mm (5inch)
No. of Cells	72 (6×12)
Dimensions	1580×808×35mm (62.2×31.8×1.4inch)
Weight	15.5kg (34.1lbs.)
Front Glass	3.2 mm (0.13inch) tempered glass
Frame	Anodized aluminium alloy
Junction Box	IP67 rated
Output Cables	H+S RADOX® SMART cable 4.0mm <sup>2</sup> (0.006inch <sup>2</sup> ), symmetrical lengths (-) 1000mm (39.4inch) and (+) 1000mm (39.4inch), RADOX® SOLAR integrated twist locking connectors or MC4 connectors

### Temperature Coefficients

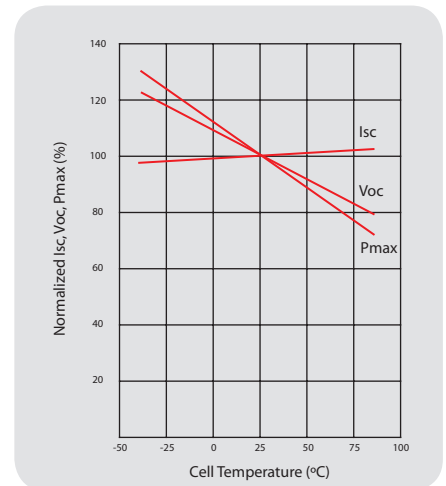
Nominal Operating Cell Temperature (NOCT)	45±2°C
Temperature Coefficient of Pmax	-0.48 %/°C
Temperature Coefficient of Voc	-0.34 %/°C
Temperature Coefficient of Isc	0.037 %/°C



Current-Voltage & Power-Voltage Curve (175W)



Temperature Dependence of Isc, Voc, Pmax



Specifications are subjected to change without further notice