

# STP185S - 24/Ad STP180S - 24/Ad

## 185 Watt

### MONOCRYSTALLINE SOLAR MODULE

#### Features



14.5%

High module conversion efficiency (up to 14.5%), through superior manufacturing technology



0-5W

Guaranteed 0-5W positive power output tolerance ensures high reliability



<1%

Proprietary Gallium-F22 doping process dramatically reduces initial light-induced degradation to <1%, thus delivering better power and performance over time



Self-clean

Anti-reflective, hydrophobic coating improves light absorption and reduces surface dust



4.0 mm

4.0mm thick tempered glass improves module durability



2400Pa  
5400Pa

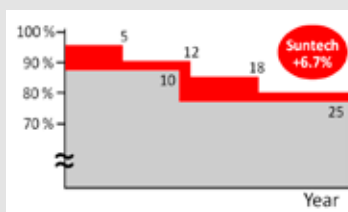
Entire module certified to withstand high wind loads (2400 Pascal) and snow loads (5400 Pascal) \*



#### Trust Suntech to Deliver Reliable Performance Over Time

- World's leading manufacturer of crystalline silicon photovoltaic modules
- Unrivaled manufacturing capacity and world-class technology
- Rigorous quality control meeting the highest international standards : ISO 9001: 2008 and ISO 14001: 2004
- Certification and standards: IEC 61215, IEC 61730, UL 1703, conformity to CE

#### Industry-leading warranty



- 25 year transferrable power output warranty: 5 year/95%, 12 year/90%, 18 year/85%, 25 year/80% \*\*
- Based on nominal power
- Warrants 6.7% more power than the market standard over 25 years
- 5 year material and workmanship warranty



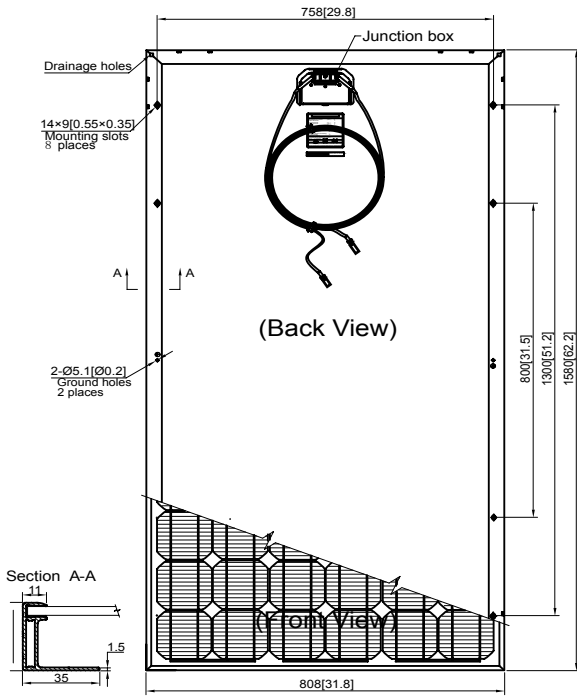
Specially designed on drainage holes and rigid construction prevent frame from deforming or breaking due to freezing weather and other forces



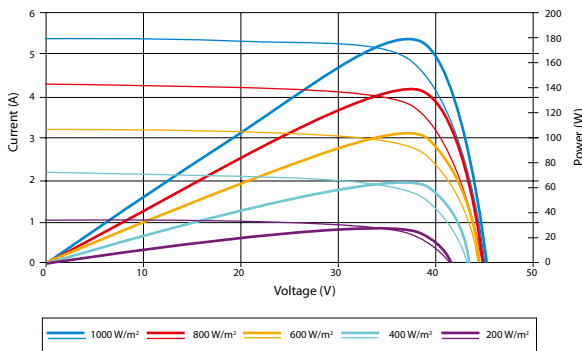
Latest IP67 rated junction box improves module performance stability with enhanced thermal isolation.

\* Please refer to Suntech Standard Module Installation Manual for details.  
\*\* Please refer to Suntech Product Warranty for details.

**STP185S - 24/Ad**  
**STP180S - 24/Ad**



**Current-Voltage & Power-Voltage Curve (180S-24)**



**Temperature Characteristics**

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



Specifications are subject to change without further notification

**Electrical Characteristics**

STC	STP185S-24/Ad	STP180S-24/Ad
Optimum Operating Voltage (Vmp)	36.4 V	36.0 V
Optimum Operating Current (Imp)	5.09 A	5.00 A
Open - Circuit Voltage (Voc)	45.0 V	44.8 V
Short - Circuit Current (Isc)	5.43 A	5.29 A
Maximum Power at STC (Pmax)	185 Wp	180 Wp
Module Efficiency	14.5%	14.1%
Operating Temperature	-40 °C to +85 °C	-40°C to +85°C
Maximum System Voltage	1000 V DC	1000 V DC
Maximum Series Fuse Rating	15 A	15 A
Power Tolerance	0/+5 W	0/+5 W

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

NOCT	STP185S-24/Ad	STP180S-24/Ad
Maximum Power (W)	135 W	131 W
Maximum Power Voltage (V)	33.0 V	32.8 V
Maximum Power Current (A)	4.10 A	4.01 A
Open Circuit Voltage (Voc)	41.0 V	40.6 V
Short Circuit Current (Isc)	4.40 A	4.32 A
Efficiency Reduction (from 1000 W/m <sup>2</sup> to 200 W/m <sup>2</sup> )	<4.5%	<4.5%

NOCT: Irradiance 800 W/m<sup>2</sup>, ambient temperature 20 °C, wind speed 1 m/s

**Mechanical Characteristics**

Solar Cell	Monocrystalline 125 × 125 mm (5 inches)
No. of Cells	72 (6 × 12)
Dimensions	1580 × 808 × 35mm (62.2 × 31.8 × 1.4 inches)
Weight	17.2 kgs (37.9 lbs.)
Front Glass	4.0 mm (0.16 inches) tempered glass
Frame	Anodized aluminium alloy
Junction Box	IP67 rated
Output Cables	H+S RADOX® SMART cable 4.0 mm <sup>2</sup> (0.006 inches <sup>2</sup> ), symmetrical lengths (-) 1000 mm (39.4 inches) and (+) 1000 mm (39.4 inches), RADOX® SOLAR integrated twist locking connectors

**Packing Configuration**

Container	20' GP	40' GP
Pieces per pallet	26	26
Pallet per container	12	28
Pieces per container	312	728