

# STP185S - 24/Ad STP180S - 24/Ad

## 185 Watt

### MONOCRYSTALLINE SOLAR MODULE

#### Features



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



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



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



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



4.0mm thick tempered glass improves module durability



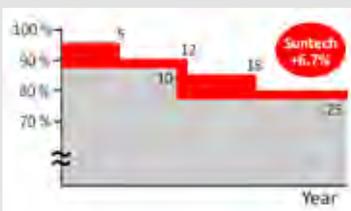
Entire module certified to withstand high wind loads (2400 Pascal) and snow loads (5400 Pascal) \*



#### 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



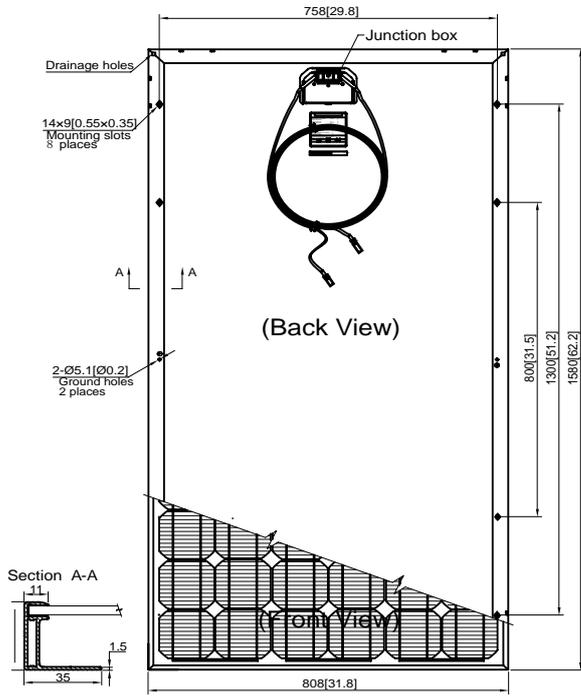
Specially designed on drainage holes and rigid construction prevent frame from deforming or breaking due to freezing weather and other forces



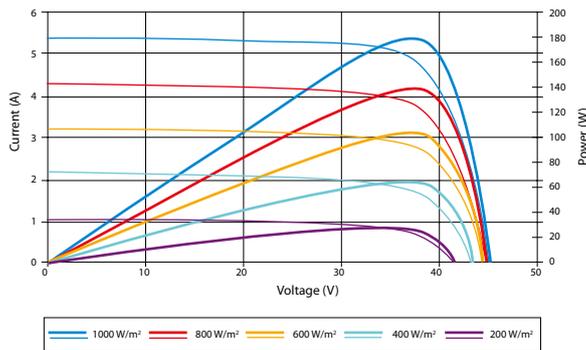
Latest IP67 rated junction box improves module performance stability with enhanced thermal isolation.

\* 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    |