

HIPerforma Series

120-CELL HALF CUT BIFACIAL MONOCRYSTALLINE SOLAR MODULE

350-375 Watt

STPXXXS - B60/Pnh+



Features



High power output

Compared to 158.75 mm module, the power output can increase 25 - 30 W

More power output in weak

light condition, such as haze,



process

reducing mismatch losses up to 2% with modules sorted & packaged by amperage

System output maximized by

Suntech current sorting



Lower operating temperature

Lower operating temperature and temperature coefficient increases the power output



Extended load tests

cloudy, and morning

performance

Module certified to withstand front side maximum static test load (5400 Pascal) and rear side maximum static test loads (3800 Pascal) *



Withstanding harsh environment

Reliable quality leads to a better sustainability even in harsh environment like desert, farm and coastline











Trust Suntech to Deliver Reliable Performance Over Time

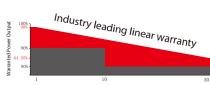
- World-class manufacturer of crystalline silicon photovoltaic modules
- Unrivaled manufacturing capacity and world-class technology
- Rigorous quality control meeting the highest international standards: ISO 9001, ISO 14001 and ISO17025
- Regular independently checked production process from international accredited institute/company
- Long-term reliability tests
- 2 × 100% EL inspection ensuring defect-free modules

9 BB

High efficiency Bifacial cell

By using bifacial cell and double glass technology, the frontside power can reach to 375 W, and the backside power generation can increase up to 25%.

Industry-leading Warranty based on nominal power



- 98% in the first year, thereafter, for years two (2) through thirty (30), 0.45% maximum decrease from MODULE's nominal power output per year, ending with the 84.95% in the 30th year after the defined WARRANTY STARTING DATE.***
- 12-year product warranty
- 30-year linear performance warranty



IP68 Rated Junction Box

The Suntech IP68 rated junction box ensures an outstanding waterproof level, supports installations in all orientations and reduces stress on the cables. High reliable performance, low resistance connectors ensure maximum output for the highest energy production.

^{*} Please refer to Suntech Standard Module Installation Manual for details. **WEEE only for EU market. *** Please refer to Suntech Product Warranty for details. made in China & Vietnam

Electrical Characteristics

| STC | STPXXXS-B60/Pnh+ | | | | | |
|---------------------------------|------------------|---------|---------|---------|---------|---------|
| Maximum Power at STC (Pmax) | 375 W | 370 W | 365 W | 360 W | 355 W | 350 W |
| Optimum Operating Voltage (Vmp) | 34.5 V | 34.3 V | 34.1 V | 33.9 V | 33.7 V | 33.5 V |
| Optimum Operating Current (Imp) | 10.87 A | 10.79 A | 10.71 A | 10.62 A | 10.54 A | 10.46 A |
| Open Circuit Voltage (Voc) | 41.1 V | 40.9 V | 40.7 V | 40.5 V | 40.3 V | 40.1 V |
| Short Circuit Current (Isc) | 11.57 A | 11.49 A | 11.42 A | 11.35 A | 11.28 A | 11.21 A |
| Module Efficiency | 20.5 % | 20.2 % | 20.0 % | 19.7 % | 19.4 % | 19.2 % |
| Operating Module Temperature | -40 °C to +85 °C | | | | | |
| Maximum System Voltage | 1500 V DC (IEC) | | | | | |
| Maximum Series Fuse Rating | 20 A | | | | | |
| Power Tolerance | 0/+5 W | | | | | |

STC: Irradiance 1000 W/m², module temperature 25 °C, AM=1.5; Tolerance of Pmax is within +/- 5% and tolerances of Voc and Isc are within +/- 5%.

| NMOT | STPXXXS-B60/Pnh+ | | | | | |
|---------------------------------|------------------|---------|---------|---------|---------|---------|
| Maximum Power at NMOT (Pmax) | 281.9 W | 278.2 W | 274.3 W | 270.7 W | 266.8 W | 263.3 W |
| Optimum Operating Voltage (Vmp) | 32.2 V | 32.0 V | 31.8 V | 31.6 V | 31.5 V | 31.3 V |
| Optimum Operating Current (Imp) | 8.76 A | 8.69 A | 8.62 A | 8.56 A | 8.48 A | 8.42 A |
| Open Circuit Voltage (Voc) | 38.9 V | 38.7 V | 38.5 V | 38.4 V | 38.2 V | 38.0 V |
| Short Circuit Current (Isc) | 9.24 A | 9.17 A | 9.10 A | 9.04 A | 8.96 A | 8.89 A |



| Electrical Characteristics with Different Rearside Power Gain(Reference to 365 W Front) | | | | | |
|---|---------|---------|---------|--|--|
| Rearside Power Gain | 5 % | 15 % | 25 % | | |
| Maximum Power at STC (Pmax) | 383 W | 420 W | 456 W | | |
| Optimum Operating Voltage (Vmp) | 34.1 V | 34.1 V | 34.2 V | | |
| Optimum Operating Current (Imp) | 11.25 A | 12.32 A | 13.39 A | | |
| Open Circuit Voltage (Voc) | 40.7 V | 40.7 V | 40.8 V | | |
| Short Circuit Current (Isc) | 11.99 A | 13.13 A | 14.28 A | | |
| Module Efficiency | 21.0 % | 23.0 % | 25.0 % | | |

Temperature Characteristics

| Nominal Module Operating Temperature (NMOT) | 42 ± 2 °C |
|--|------------|
| Temperature Coefficient of Pmax | -0.36%/°C |
| Temperature Coefficient of Voc | -0.304%/°C |
| Temperature Coefficient of Isc | 0.050%/°C |

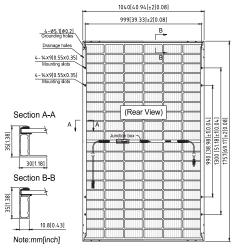
Mechanical Characteristics

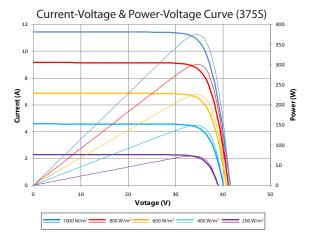
| Solar Cell | Monocrystalline silicon 166 mm | |
|---------------------------|---|--|
| No. of Cells | 120 (6 × 20) | |
| Dimensions | 1757 × 1040 × 35 mm (69.2 × 40.9 × 1.4 inches) | |
| Weight | 23.9 kgs (52.69 lbs.) | |
| Front Glass | 2.0 mm (0.079 inches) semi-tempered glass | |
| Frame | Anodized aluminium alloy | |
| Junction Box | IP68 rated | |
| Output Cables | 4.0 mm², (-)350 mm and (+)160 mm in length or customized length | |
| Connectors | Genuine MC4 EVO2, TL-Cable01S | |
| Refer. Bifaciality Factor | (70 ± 5)% | |
| Fire Class Rating | C in accordance with UL 790 | |

Packing Configuration

| Container | 20' GP | 40′ HC | |
|--------------------------|-----------------------|--------|--|
| Pieces per pallet | 31 | 31 | |
| Pallets per container | 6 | 26 | |
| Pieces per container | 186 | 806 | |
| Packaging box dimensions | 1786 × 1130 × 1203 mm | | |
| Packaging box weight | 679 kg | | |







Dealer information



Information on how to install and operate this product is available in the installation instruction. All values indicated in this data sheet are subject to change without prior announcement. The specifications may vary slightly. All specifications are in accordance with standard EN 50380. Color differences of the modules relative to the figures as well as discolorations of/in the modules which do not impair their proper functioning are possible and do not constitute a deviation from the specification.