

STP300 - 60/Wfh STP295 - 60/Wfh STP290 - 60/Wfh

300 Watt POLY HALF CELL SOLAR MODULE



Features



High power output Compared to normal module, the power output can increase 5W-10W



Suntech current sorting process

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



lower hot spots

Reduce the hot spots and minimize panel degradation



Extended load tests

More power output in weak

light condition, such as haze, cloudy, and morning

Excellent weak light

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

Special Cell Design

The unique cell design leads to

Meanwhile, it can reduce losses

of mismatch and cell wear, and

reduced electrodes resistance

and smaller current, thus

enables higher fill factor.

increase total reflection.

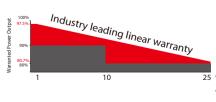
Reliable quality leads to a better sustainability even in harsh environment like desert, farm and coastline



Trust Suntech to Deliver Reliable Performance Over Time

- World-class manufacturer of crystalline silicon photovoltaic modules
- Unrivaled manufacturing capacity and world-class technology
- Rigorous guality control meeting the highest international standards: ISO 9001: 2008, ISO 14001: 2004 and ISO17025: 2005
- Regular independently checked production process from international accredited institute/company
- Long-term reliability tests
- 2 x 100% EL inspection ensuring defect-free

Industry-leading Warranty based on nominal power



- 97.5% in the first year, thereafter, for years two (2) through twenty-five (25), 0.7% maximum decrease from MODULE's nominal power output per year, ending with the 80.7% in the 25th year after the defined WARRANTY STARTING DATE.***
- 15-year product warranty 25-year linear performance warranty

* 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

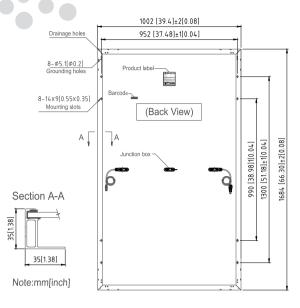


IP68 Rated Junction Box

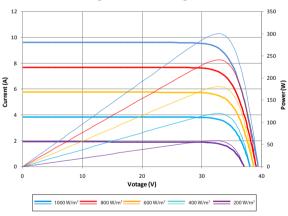
The Suntech IP68 rated junction box ensures an outstanding waterproof level, supports installations in all orientations and reduces stress on the cables. High reliable performance, low resistance connectors ensure maximum output for the highest energy production.

Wuxi Suntech Power Co., Ltd.

STP300 - 60/Wfh STP295 - 60/Wfh STP290 - 60/Wfh



Current-Voltage & Power-Voltage Curve (300)



Dealer information

Electrical Characteristics

| STC | STP300-60/ Wfh | STP295-60/ Wfh | STP290-60/ Wfh | | | |
|---------------------------------|-------------------|-------------------|-------------------|--|--|--|
| Maximum Power at STC (Pmax) | 300 W | 295 W | 290 W | | | |
| Optimum Operating Voltage (Vmp) | 32.7 V | 32.5 V | 32.3 V | | | |
| Optimum Operating Current (Imp) | 9.18 A | 9.08 A | 8.99 A | | | |
| Open Circuit Voltage (Voc) | 39.4 V | 39.2 V | 39.0 V | | | |
| Short Circuit Current (Isc) | 9.62 A | 9.55 A | 9.47 A | | | |
| Module Efficiency | 17.8% | 17.5% | 17.2% | | | |
| Operating Module Temperature | -40 °C to +85 °C | | | | | |
| Maximum System Voltage | 1000 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 +/- 3% and tolerances of Voc and Isc are all within +/- 5%.

| NMOT | STP300-60/ Wfh | STP295-60/ Wfh | STP290-60/ Wfh |
|---------------------------------|-------------------|-------------------|-------------------|
| Maximum Power at NMOT (Pmax) | 224.1 W | 221.5 W | 216.8 W |
| Optimum Operating Voltage (Vmp) | 30.3 V | 30.2 V | 29.8 V |
| Optimum Operating Current (Imp) | 7.40 A | 7.34 A | 7.27 A |
| Open Circuit Voltage (Voc) | 36.6 V | 36.6 V | 36.3 V |
| Short Circuit Current (Isc) | 7.79 A | 7.73 A | 7.67 A |

NMOT: Irradiance 800 W/m2, ambient temperature 20 °C, AM=1.5, wind speed 1 m/s;

Temperature Characteristics

| Nominal Module Operating Temperature (NMOT) | 42 ± 2°C |
|---|------------|
| Temperature Coefficient of Pmax | -0.38%/°C |
| Temperature Coefficient of Voc | -0.321%/°C |
| Temperature Coefficient of Isc | 0.050%/°C |

Mechanical Characteristics

| Solar Cell | Polycrystalline silicon 6 inches |
|-------------------|---|
| No. of Cells | 120 (6 × 20) |
| Dimensions | 1684 × 1002 × 35mm (66.3× 39.4 × 1.4 inches) |
| Weight | 19.0 kgs (41.9 lbs.) |
| Front Glass | 3.2 mm (0.13 inches) tempered glass |
| Frame | Anodized aluminium alloy |
| Junction Box | IP68 rated (3 bypass diodes) |
| Output Cables | 4.0 mm ² , Portrait: (-)350 mm and (+) 160 mm in length Landscape: (-)1200 mm and (+)1200 mm in length or customized length |
| Connectors | Gunuine MC4, Cable01 |
| 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 |

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.





HIPro Series

120-CELL HALF CUT MONOCRYSTALLINE SOLAR MODULE

325-345 Watt

STPXXXS - A60/Wnh STPXXXS - A60/Wfh



Features



High power output Compared to normal module, the power output can increase 5W-10W

Excellent weak light

cloudy, and morning

Extended load tests

loads (3800 Pascal) *

More power output in weak

light condition, such as haze,

Module certified to withstand

rear side maximum static test

front side maximum static

test load (5400 Pascal) and

performance



High PID resistant

Advanced cell technology and qualified materials lead to high resistance to PID



Lower operating temperature

Lower operating temperature and temperature coefficient increases the power output



Withstanding harsh environment

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

Certifications and standards: IEC 61215, IEC 61730, conformity to CE

3800 Pa



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
- $2 \times 100\%$ EL inspection ensuring defect-free modules

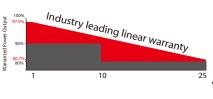
Special Cell Design

The unique cell design leads to reduced electrodes resistance and smaller current, thus enables higher fill factor. Meanwhile, it can reduce losses of mismatch and cell wear, and increase total reflection.



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Industry-leading Warranty based on nominal power



• 97.5% in the first year, thereafter, for years two (2) through twenty-five (25), 0.7% maximum decrease from MODULE's nominal power output per year, ending with the 80.7% in the 25th year after the defined WARRANTY STARTING DATE.*** 12-year product warranty as common,15-year for alternative • 25-year linear performance

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.

IP68 Rated Junction Box

* 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



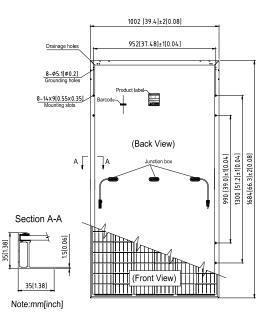
Electrical Characteristics

| STC | STPXXXS-A60/Wnh & STPXXXS-A60/Wfh | | | | |
|---------------------------------|-----------------------------------|---------|---------|---------|---------|
| Maximum Power at STC (Pmax) | 345 W | 340 W | 335 W | 330 W | 325 W |
| Optimum Operating Voltage (Vmp) | 35.3 V | 35.1 V | 34.9 V | 34.7 V | 34.5 V |
| Optimum Operating Current (Imp) | 9.78 A | 9.68 A | 9.60 A | 9.52 A | 9.43 A |
| Open Circuit Voltage (Voc) | 41.3 V | 41.1 V | 40.9 V | 40.7 V | 40.5 V |
| Short Circuit Current (Isc) | 10.37 A | 10.29 A | 10.21 A | 10.13 A | 10.04 A |
| Module Efficiency | 20.4% | 20.1% | 19.8% | 19.5% | 19.2% |
| Operating Module Temperature | -40 ℃ to +85 ℃ | | | | |
| 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 $^\circ$ C, AM=1.5; Tolerance of Pmax is within +/- 3% and tolerances of Voc and Isc are within +/- 5%.

| NMOT | STPXXXS-A60/Wnh & STPXXXS-A60/Wfh | | | | |
|---------------------------------|-----------------------------------|---------|---------|---------|---------|
| Maximum Power at NMOT (Pmax) | 259.3 W | 255.5 W | 252.1 W | 248.6 W | 244.9 W |
| Optimum Operating Voltage (Vmp) | 32.5 V | 32.3 V | 32.1 V | 31.9 V | 31.7 V |
| Optimum Operating Current (Imp) | 7.98 A | 7.92 A | 7.85 A | 7.79 A | 7.72 A |
| Open Circuit Voltage (Voc) | 38.7 V | 38.5 V | 38.3 V | 38.1 V | 37.9 V |
| Short Circuit Current (lsc) | 8.37 A | 8.31 A | 8.24 A | 8.18 A | 8.11 A |

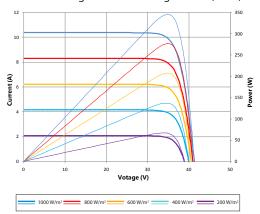
NMOT: Irradiance 800 W/m², ambient temperature 20 °C, AM=1.5, wind speed 1 m/s.



Temperature Characteristics

| Nominal Module Operating Temperature (NMOT) | 42 ± 2 °C |
|---|------------|
| Temperature Coefficient of Pmax | -0.37%/°C |
| Temperature Coefficient of Voc | -0.304%/°C |
| Temperature Coefficient of Isc | 0.050%/°C |

Current-Voltage & Power-Voltage Curve (345S)



Mechanical Characteristics

| Solar Cell | Monocrystalline silicon 158.75 mm |
|---------------|--|
| No. of Cells | 120 (6 × 20) |
| Dimensions | 1684 × 1002 × 35 mm (66.3 × 39.4 × 1.4 inches) |
| Weight | 19.0 kgs (41.9 lbs.) |
| Front Glass | 3.2 mm (0.13 inches) tempered glass |
| Frame | Anodized aluminium alloy |
| Junction Box | IP68 rated (3 bypass diodes) |
| Output Cables | 4.0 mm2 (0.006 inches2), symmetrical lengths (-) 1200 mm (47.2 inches) , (+) 1200 mm (47.2 inches) |
| Connectors | Genuine MC4 |

Packing Configuration

| Container | 20' GP | 40′ HC |
|--------------------------|-------------|-----------|
| Pieces per pallet | 30 | 30 |
| Pallets per container | 6 | 26 |
| Pieces per container | 180 | 780 |
| Packaging box dimensions | 1736 × 1109 | × 1166 mm |
| Packaging box weight | 605 | i kg |



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.

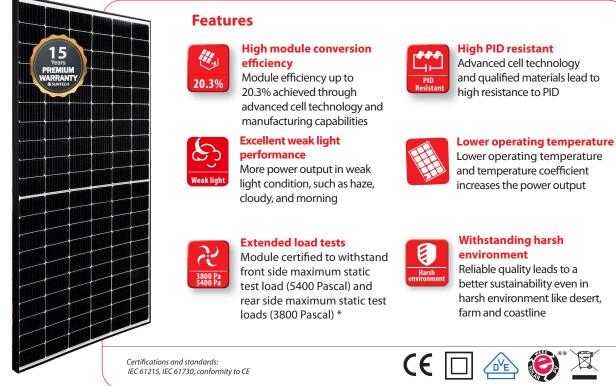


HIPower Series

120-CELL HALF CUT MONOCRYSTALLINE SOLAR MODULE

350-370 Watt

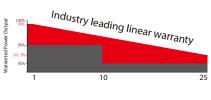
STPXXXS - B60/Wnhm



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
- $2 \times 100\%$ EL inspection ensuring defect-free modules

Industry-leading Warranty based on nominal power



- 98% in the first year, thereafter, for years two (2) through twenty-five (25), 0.55% maximum decrease from MODULE's nominal power output per year, ending with the 84.8% in the 25th year after the defined WARRANTY STARTING DATE.***
- 15-year product warranty
- 25-year linear performance warranty



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.

IP68 Rated Junction Box

harsh environment like desert,



Special Cell Design



The unique cell design leads to reduced electrodes resistance and smaller current, thus enables higher fill factor. Meanwhile, it can reduce losses of mismatch and cell wear, and increase total reflection.

*** Please refer to Suntech Product Warranty for details. made in China & Vietnam.

* Please refer to Suntech Standard Module Installation Manual for details. **WEEE only for EU market.



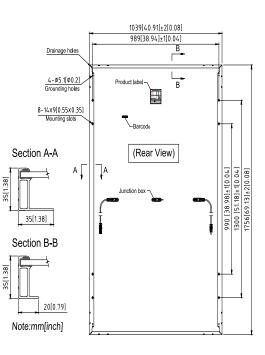
Electrical Characteristics

| STC | STPXXXS-B60/Wnhm | | | | |
|---------------------------------|------------------|--------|--------|--------|---------|
| Maximum Power at STC (Pmax) | 370W | 365W | 360W | 355W | 350 W |
| Optimum Operating Voltage (Vmp) | 34.3V | 34.1V | 33.9V | 33.7V | 33.5 V |
| Optimum Operating Current (Imp) | 10.79A | 10.71A | 10.62A | 10.54A | 10.46 A |
| Open Circuit Voltage (Voc) | 40.9V | 40.7V | 40.5V | 40.3V | 40.1 V |
| Short Circuit Current (Isc) | 11.49A | 11.42A | 11.35A | 11.28A | 11.21 A |
| Module Efficiency | 20.3% | 20.0% | 19.7% | 19.5% | 19.2% |
| Operating Module Temperature | -40 ℃ to +85 ℃ | | | | |
| Maximum System Voltage | 1000 V DC (IEC) | | | | |
| Maximum Series Fuse Rating | 20 A | | | | |
| Power Tolerance | | | 0/+5 % | | |

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

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

NMOT: Irradiance 800 W/m², ambient temperature 20 °C, AM=1.5, wind speed 1 m/s.



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 |

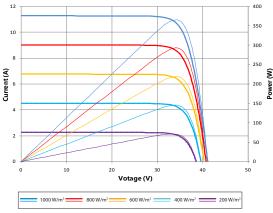
Mechanical Characteristics

| Solar Cell | Monocrystalline silicon 166 mm |
|-------------------|--|
| No. of Cells | 120 (6 × 20) |
| Dimensions | 1756 × 1039 × 35 mm (69.1 × 40.9 × 1.4 inches) |
| Weight | 20.3 kgs (44.8 lbs.) |
| Front Glass | 3.2 mm (0.13 inches) tempered glass |
| Frame | Anodized aluminium alloy |
| Junction Box | IP68 rated (3 bypass diodes) |
| Output Cables | 4.0 mm ² , Portrait: (-)350 mm and (+)160 mm in length Landscape: (-)1200 mm and (+)1200 mm in length or customized length |
| Connectors | Genuine MC4, TL-Cable01 |
| Fire Class Rating | C in accordance with UL 790 |

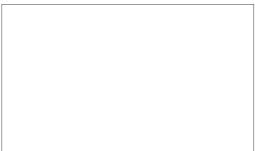
Packing Configuration

| 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 | |

Current-Voltage & Power-Voltage Curve (370S)



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.