

**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



#### Excellent weak light performance

More power output in weak light condition, such as haze, cloudy, and morning



#### lower hot spots

Reduce the hot spots and minimize panel degradation



#### Extended load tests

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

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



### Trust Suntech to Deliver Reliable Performance Over Time

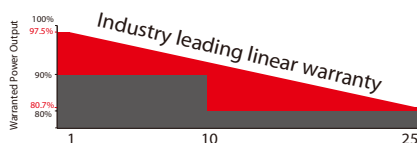
- World-class manufacturer of crystalline silicon photovoltaic modules
- Unrivaled manufacturing capacity and world-class technology
- Rigorous quality control meeting the highest international standards: ISO 9001: 2008, ISO 14001: 2004 and ISO17025: 2005
- Regular independently checked production process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

### 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.

### 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

### IP68 Rated Junction Box



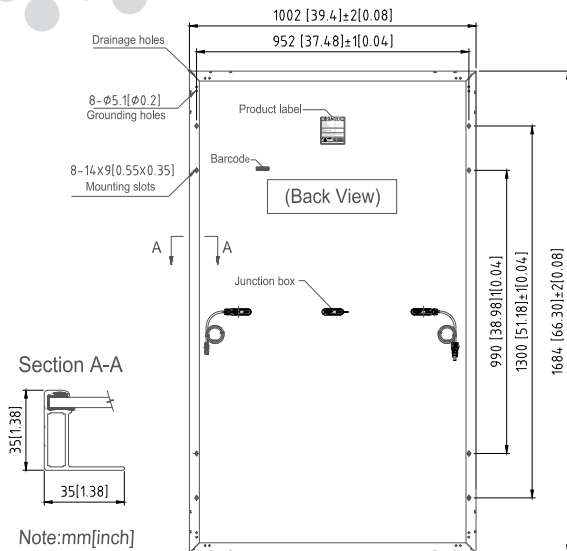
The Suntech IP68 rated junction box ensures an outstanding waterproof level, supports installations in all orientations and reduces stress on the cables. High reliable performance, low resistance connectors ensure maximum output for the highest energy production.

\* 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

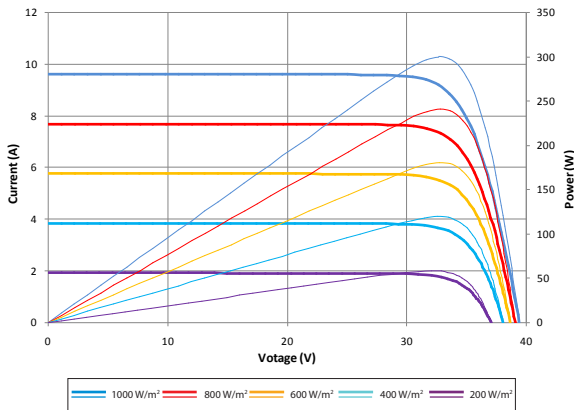
# STP300 - 60/Wfh

# STP295 - 60/Wfh

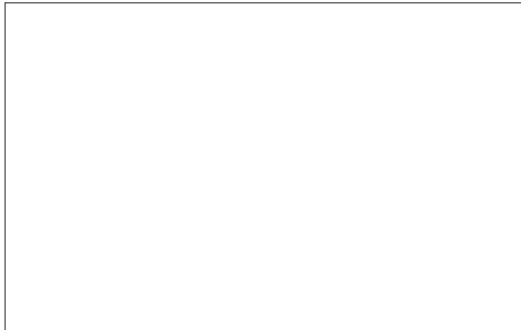
# STP290 - 60/Wfh



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/m<sup>2</sup>, 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/m<sup>2</sup>, 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 <sup>2</sup> , Portrait: (-)350 mm and (+) 160 mm in length Landscape: (-)1200 mm and (+)1200 mm in length or customized length
Connectors	Genuine 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



#### High PID resistant

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



#### Excellent weak light performance

More power output in weak light condition, such as haze, cloudy, and morning



#### Lower operating temperature

Lower operating temperature and temperature coefficient increases the power output



#### Extended load tests

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

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



### Trust Suntech to Deliver Reliable Performance Over Time

- World-class manufacturer of crystalline silicon photovoltaic modules
- Unrivalled 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

### 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.

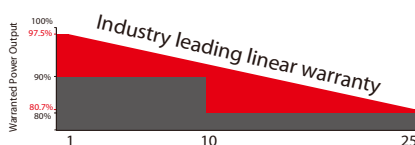


5 BB



9 BB

### 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

### 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

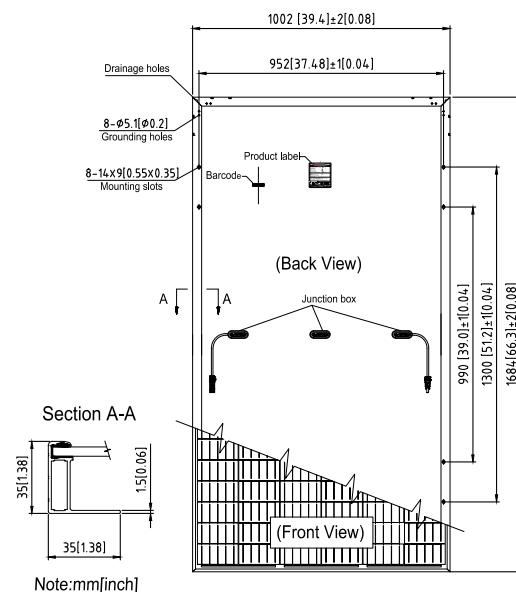
## Electrical Characteristics

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 °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/m<sup>2</sup>, module temperature 25 °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 (Isc)	8.37 A	8.31 A	8.24 A	8.18 A	8.11 A

NMOT: Irradiance 800 W/m<sup>2</sup>, 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

## Mechanical Characteristics

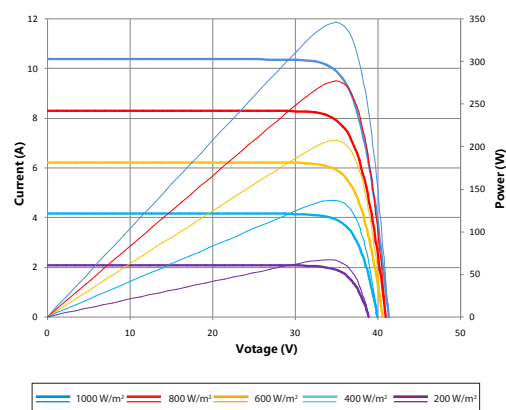
Solar Cell	Monocrystalline silicon 158.75 mm
No. of Cells	120 (6 × 20)
Dimensions	1684 × 1002 × 35 mm (66.3 × 39.4 × 1.4 inches)
Weight	19.0 kgs (41.9 lbs.)
Front Glass	3.2 mm (0.13 inches) tempered glass
Frame	Anodized aluminium alloy
Junction Box	IP68 rated (3 bypass diodes)
Output Cables	4.0 mm <sup>2</sup> (0.006 inches <sup>2</sup> ), symmetrical lengths (-) 1200 mm (47.2 inches), (+) 1200 mm (47.2 inches)
Connectors	Genuine MC4

## Packing Configuration

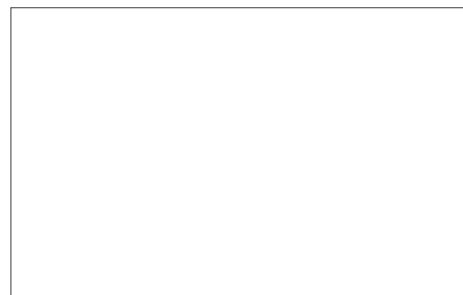
Container	20' GP	40' HC
Pieces per pallet	30	30
Pallets per container	6	26
Pieces per container	180	780
Packaging box dimensions	1736 × 1109 × 1166 mm	
Packaging box weight	605 kg	

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.

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



## Dealer information



# HiPower Series

120-CELL HALF CUT MONOCRYSTALLINE  
SOLAR MODULE

## 350-370 Watt

STPXXXS - B60/Wnhm



### Features



#### High module conversion efficiency

Module efficiency up to 20.3% achieved through advanced cell technology and manufacturing capabilities



#### High PID resistant

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



#### Excellent weak light performance

More power output in weak light condition, such as haze, cloudy, and morning



#### Lower operating temperature

Lower operating temperature and temperature coefficient increases the power output



#### Extended load tests

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

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



### Trust Suntech to Deliver Reliable Performance Over Time

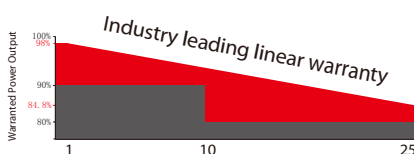
- World-class manufacturer of crystalline silicon photovoltaic modules
- Unrivaled manufacturing capacity and world-class technology
- Rigorous quality control meeting the highest international standards: ISO 9001, ISO 14001 and ISO17025
- Regular independently checked production process from international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

### Special Cell Design



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

### 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

### 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.



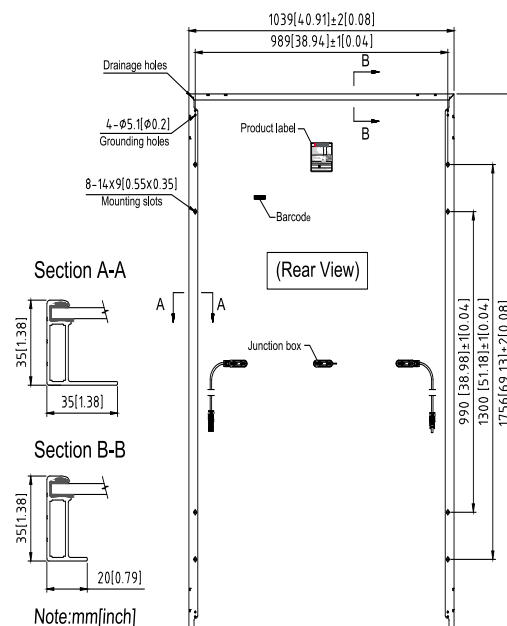
## Electrical Characteristics

STC	STPXXXS-B60/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 °C to +85 °C				
Maximum System Voltage	1000 V DC (IEC)				
Maximum Series Fuse Rating	20 A				
Power Tolerance	0/+5 %				

STC: Irradiance 1000 W/m<sup>2</sup>, 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/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/m<sup>2</sup>, 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

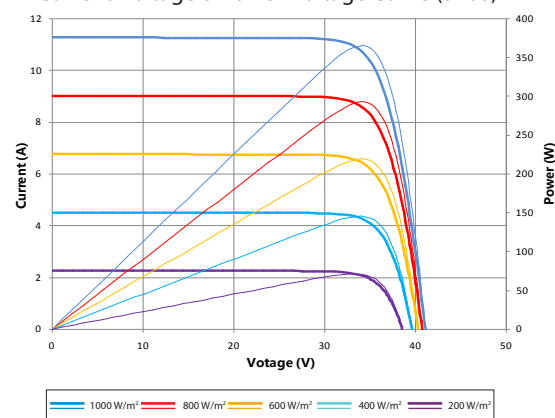
Solar Cell	Monocrystalline silicon 166 mm
No. of Cells	120 (6 × 20)
Dimensions	1756 × 1039 × 35 mm (69.1 × 40.9 × 1.4 inches)
Weight	20.3 kgs (44.8 lbs.)
Front Glass	3.2 mm (0.13 inches) tempered glass
Frame	Anodized aluminium alloy
Junction Box	IP68 rated (3 bypass diodes)
Output Cables	4.0 mm <sup>2</sup> , 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	

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.

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



## Dealer information

