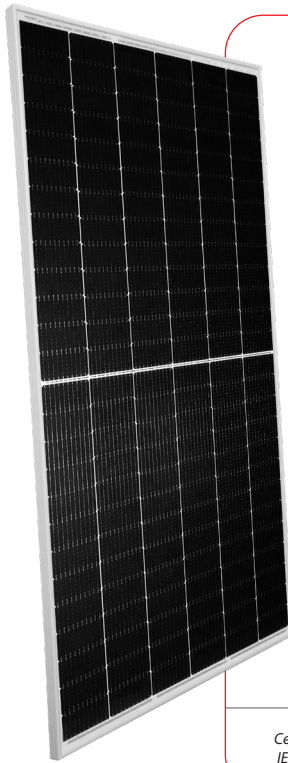


# Ultra V Plus

156 HALF-CELL BIFACIAL MODULE

# 570-590W

STPXXXS - C78/Pmh+



## Features



### High module conversion efficiency

Module efficiency up to 21.3 % achieved through advanced cell technology and manufacturing process



### Suntech current sorting process

Up to 2 % power loss caused by current mismatch could be diminished by current sorting technique to maximize system power output



### Excellent weak light performance

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



### Lower operating temperature

Lower operating temperature and temperature coefficient increases the power output



### Extended wind and snow load tests

Module certified to withstand extreme wind (2400 Pascal) and snow loads (5400 Pascal) \*



### Withstanding harsh environment

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

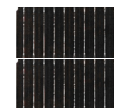
Certifications and standards:  
IEC 61215, IEC 61730, conformity to CE



## Trust Suntech to Deliver Reliable Performance Over Time

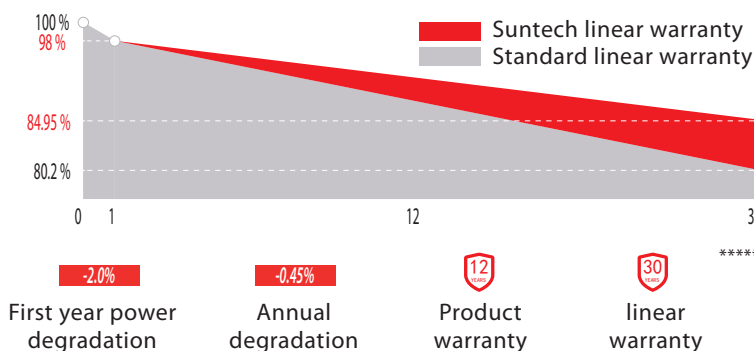
- World-class manufacturer of crystalline silicon photovoltaic modules
- Rigorous quality control meeting the highest international standards: ISO 9001, ISO 14001 and ISO17025
- Regular independently checked production process from international accredited institute/company
- Tested for harsh environments (IEC 61701, IEC 62716, DIN EN 60068-2-68) \*\*\*\*\*
- Long-term reliability tests
- 2 x 100% EL inspection ensuring defect-free modules

## Half-Cell +Bifacial



MBB technology decreases the distance between bus bars and finger grid line which is benefit to power increase. Half-cell aims to eliminate the cell gap to increase module efficiency.

## Industry-leading Warranty based on nominal power



## 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.

\* Please refer to Suntech Standard Module Installation Manual for details. \*\* Suntech reserves the right to the final interpretation of the warranty by Munich Re. \*\*\* WEEE only for EU market. \*\*\*\* Please refer to Suntech Product Near-coast Installation Guide for details. \*\*\*\*\* Please refer to Suntech Limited Warranty for details.

## Electrical Characteristics



STC	STPXXXS-C78/Pmh+				
Maximum Power at STC (Pmax)	590W	585W	580W	575W	570W
Optimum Operating Voltage (Vmp)	45.36V	45.18V	45.00V	44.82V	44.64V
Optimum Operating Current (Imp)	13.01A	12.95A	12.89A	12.83A	12.77A
Open Circuit Voltage (Voc)	53.79V	53.61V	53.44V	53.26V	53.08V
Short Circuit Current (Isc)	13.91A	13.85A	13.79A	13.73A	13.67A
Module Efficiency	21.3%	21.1%	21.0%	20.8%	20.6%
Operating Module Temperature	-40 °C to +85 °C				
Maximum System Voltage	1500 V DC (IEC)				
Maximum Series Fuse Rating	25 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%;  
For tracker installation, please turn to Suntech for mechanical load information.

NMOT	STPXXXS-C78/Pmh+				
Maximum Power at NMOT (Pmax)	445.4W	441.7W	438.W	434.3W	430.5W
Optimum Operating Voltage (Vmp)	41.9V	41.7V	41.6V	41.4V	41.2V
Optimum Operating Current (Imp)	10.63A	10.58A	10.54A	10.49A	10.44A
Open Circuit Voltage (Voc)	50.5V	50.4V	50.2V	50.0V	49.9V
Short Circuit Current (Isc)	11.18A	11.13A	11.09A	11.04A	10.99A

NMOT: Irradiance 800 W/m<sup>2</sup>, ambient temperature 20 °C, AM=1.5, wind speed 1 m/s.

Electrical Characteristics with Different Rearside Power Gain (Reference to 580 W Front)			
Rearside Power Gain	5%	15%	25%
Maximum Power at STC (Pmax)	609W	667W	725W
Optimum Operating Voltage (Vmp)	45.0V	45.0V	45.1V
Optimum Operating Current (Imp)	13.53A	14.82A	16.11A
Open Circuit Voltage (Voc)	53.4V	53.4V	53.5V
Short Circuit Current (Isc)	14.48A	15.86A	17.24A
Module Efficiency	22.0%	24.1%	26.2%

## 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

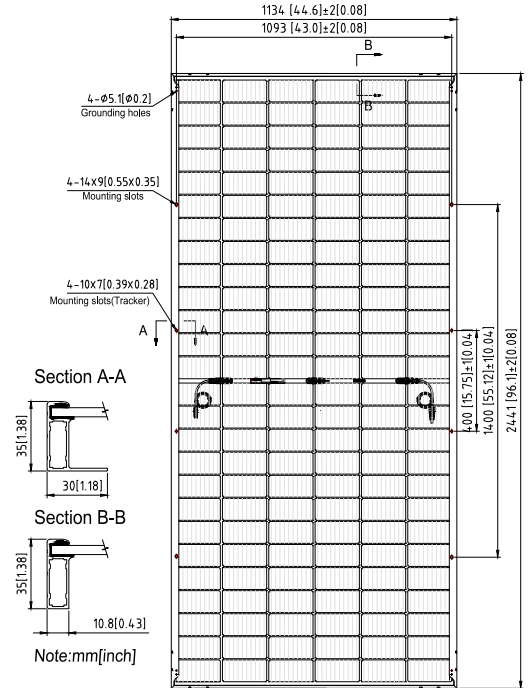
## Mechanical Characteristics

Solar Cell	Monocrystalline silicon 182 mm
No. of Cells	156 (6 × 26)
Dimensions	2441 × 1134 × 35 mm (96.1×44.6 × 1.4 inches)
Weight	34.9 kgs (76.9 lbs.)
Front and Back Glass	2.0+2.0 mm (0.079+0.079inches) semi-tempered glass
Frame	Anodized aluminium alloy
Junction Box	IP68 rated (3 bypass diodes)
Output Cables	4.0 mm <sup>2</sup> , (-) 350 mm and (+) 160 mm in length or customized length
Connectors	MC4 EVO2, Cable 01S
Refer. Bifaciality Factor	(70 ± 5)%

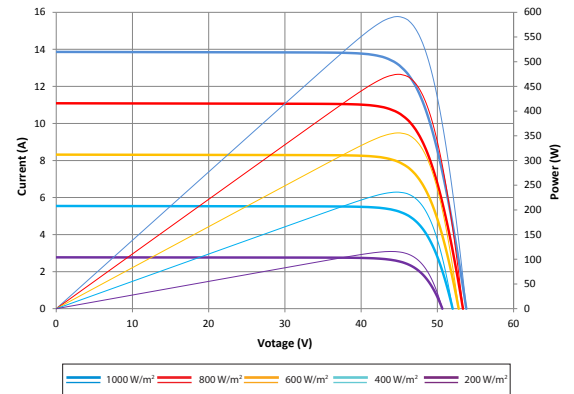
## Packing Configuration

Container	40' HC
Pieces per pallet	31
Pallets per container	18
Pieces per container	558
Packaging box dimensions	2470×1130×1245 mm
Packaging box weight	1147 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 (590S)



## Dealer information

