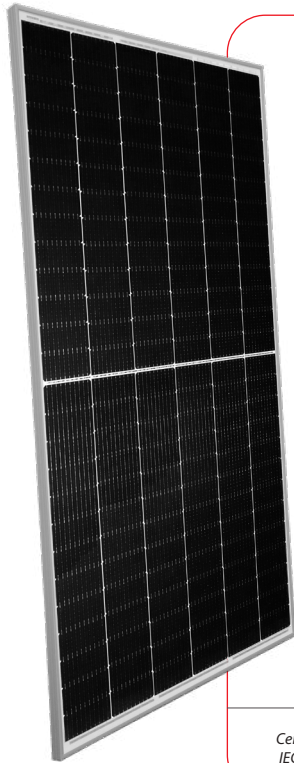


Ultra V Pro Plus

600-620W

156 HALF-CELL N-TOPCon BIFACIAL MODULE

STPXXXS - C78/Nmh+



Features



High module conversion efficiency

Module efficiency up to 22.4% 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

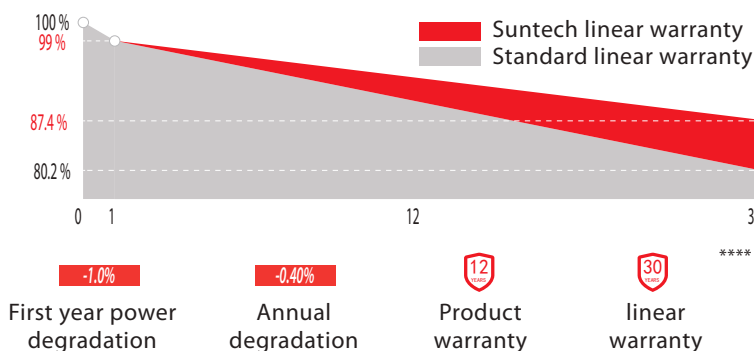
- World-class manufacturer of crystalline silicon photovoltaic modules
- Rigorous quality control meeting the highest international standards: ISO 9001, ISO 14001 and ISO17025
- Regular independently checked production process from international accredited institute/company
- Tested for harsh environments (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



Half-cell and MBB technology design with ultra-thin dielectric film to isolate metal and semiconductor can achieve carrier tunneling effect to ensure carrier conduction and increase power output.

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.

** WEEE only for EU market.

*** Please refer to Suntech Product Near-coast Installation Manual for details.

**** Please refer to Suntech Product Warranty for details.

Electrical Characteristics



STC	STPXXXS-C78/Nmh+				
Maximum Power at STC (Pmax)	620W	615W	610W	605W	600W
Optimum Operating Voltage (Vmp)	46.43V	46.25V	46.07V	45.89V	45.71V
Optimum Operating Current (Imp)	13.36A	13.30A	13.25A	13.19A	13.13A
Open Circuit Voltage (Voc)	54.86V	54.68V	54.50V	54.32V	54.14V
Short Circuit Current (Isc)	14.37A	14.31A	14.25A	14.19A	14.13A
Module Efficiency	22.4%	22.2%	22.0%	21.9%	21.7%
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/m², 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/Nmh+				
Maximum Power at NMOT (Pmax)	473.2W	469.3W	465.6W	461.6W	457.8W
Optimum Operating Voltage (Vmp)	43.0V	42.8V	42.6V	42.4V	42.3V
Optimum Operating Current (Imp)	11.02A	10.97A	10.93A	10.88A	10.83A
Open Circuit Voltage (Voc)	51.9V	51.7V	51.5V	51.4V	51.2V
Short Circuit Current (Isc)	11.59A	11.54A	11.50A	11.45A	11.40A

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

Electrical Characteristics with Different Rearside Power Gain (Reference to 610 W Front)

Rearside Power Gain	5%	15%	25%
Maximum Power at STC (Pmax)	641W	702W	763W
Optimum Operating Voltage (Vmp)	46.1V	46.1V	46.2V
Optimum Operating Current (Imp)	13.91A	15.24A	16.56A
Open Circuit Voltage (Voc)	54.5V	54.5V	54.6V
Short Circuit Current (Isc)	14.96A	16.39A	17.81A
Module Efficiency	23.1%	25.3%	27.5%

Temperature Characteristics

Nominal Module Operating Temperature (NMOT)	42 ± 2 °C
Temperature Coefficient of Pmax	-0.320%/°C
Temperature Coefficient of Voc	-0.260%/°C
Temperature Coefficient of Isc	0.046%/°C

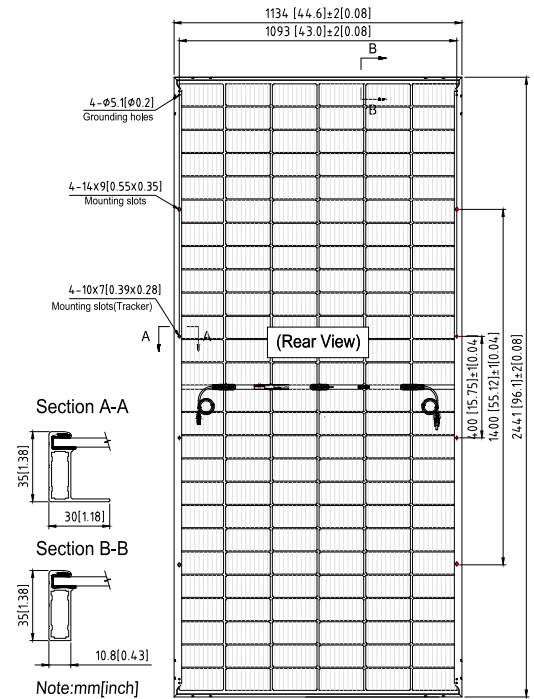
Mechanical Characteristics

Solar Cell	N-type 182 mm
No. of Cells	156 (6 × 26)
Dimensions	2441 × 1134 × 35 mm (96.1 × 44.6 × 1.4 inches)
Weight	35.1 kgs (77.4 lbs.)
Front \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 ² , (-) 350 mm and (+) 160 mm in length or customized length
Connectors	MC4 EVO2, Cable 01S
Refer. Bifaciality Factor	(80 ± 5)%

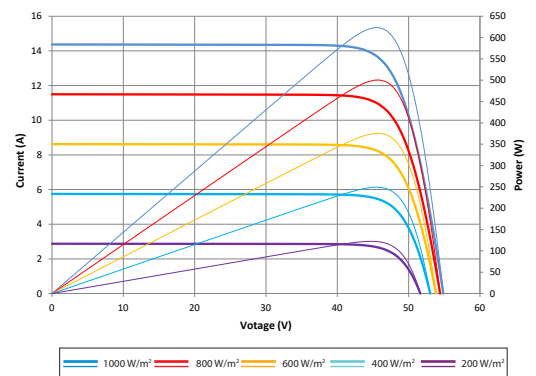
Packing Configuration

Container	40' HC
Pieces per pallet	31
Pallets per container	18
Pieces per container	558
Packaging box dimensions	2470×1130×1269 mm
Packaging box weight	1163 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 (620S)



Dealer information

