

Ultra V Plus

HALF-CELL BIFACIAL MODULE

TYPE: STPXXXS - C78/Pmh+

575-595W **21.3%**
POWER OUTPUT MAX EFFICIENCY



Compatible with mainstream trackers

the module design is highly compatible with power plant tracking systems, which offers a cost-effective solution for large power plants



High power output

zero LID, ultra-low LeTID, better anti-PID performance, low power attenuation, high power output



Double-sided power generation

The gain of double-sided power generation increases up to max. 25% with the light on the back side, and significantly reduce LCOE



Extended wind and snow load tests

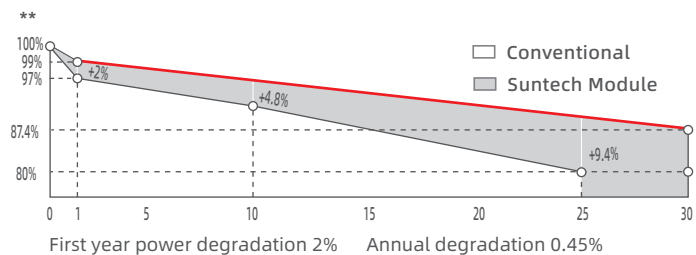
Module certified to withstand extreme wind (2400 Pascal) and snow loads (5400 Pascal)*



ISO 14001 Environment Management System IEC 61730-2 (UL790) fire class C
 ISO 45001 Occupational Health and Safety
 ISO 9001 Quality Management System
 SA 8000 Social Responsibility Standards
 IEC TS 62941 Guideline for Module Design



30 years of linear warranty
15 years of product warranty



* Please refer to Suntech Standard Module Installation Manual for details.

** Please refer to Suntech Limited Warranty for details.

*** WEEE only for EU market.

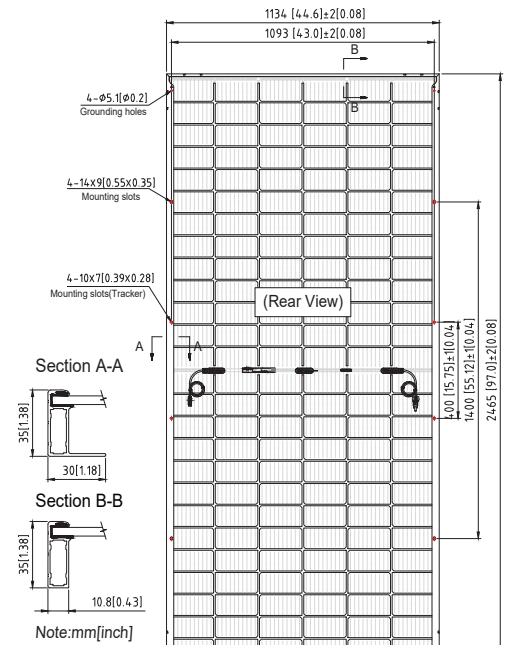
**** Suntech reserves the right to the final.

*****The Holder of this certification is Wuxi Suntech Power Co.,Ltd

Ultra V STPXXXS - C78/Pmh+ 575-595W

Mechanical Characteristics

Solar Cell	Monocrystalline silicon 182 mm
No. of Cells	156 (6 × 26)
Dimensions	2465 × 1134 × 35 mm (97 × 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
Output Cables	4.0 mm ² , (-) 350 mm and (+) 160 mm in length or customized length
Junction Box	IP68 rated (3 bypass diodes)
Operating Module Temperature	-40 °C to +85 °C
Maximum System Voltage	1500 V DC (IEC)
Connectors	STP-XC4 (Wuxi Suntech)
Maximum Series Fuse Rating	25 A
Power Tolerance	0/+5 W
Refer. Bifaciality Factor	(70 ± 5)%
Frame	Anodized aluminum alloy frame
Packing Configuration	31 Pieces per pallet 496 Pieces per container /40'HC 2495×1120×1255 1145kg



For tracker installation, please turn to Suntech for mechanical load information.

Electrical Characteristics

Module Type	STP595S-C78/Pmh+		STP590S-C78/Pmh+		STP585S-C78/Pmh+		STP580S-C78/Pmh+		STP575S-C78/Pmh+	
	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT
Maximum Power (Pmax/W)	595	451.4	590	447.8	585	444.1	580	440.4	575	436.6
Optimum Operating Voltage (Vmp/V)	45.53	42.1	45.36	42	45.18	41.8	45.00	41.6	44.82	41.5
Optimum Operating Current (Imp/A)	13.07	10.72	13.01	10.67	12.95	10.63	12.89	10.58	12.83	10.53
Open Circuit Voltage (Voc/V)	53.96	50.9	53.79	50.7	53.61	50.5	53.44	50.4	53.26	50.2
Short Circuit Current (Isc/A)	13.97	11.27	13.91	11.22	13.85	11.17	13.79	11.13	13.73	11.08
Module Efficiency (%)	21.3		21.1		20.9		20.7		20.6	

STC: Irradiance 1000 W/m², module temperature 25 °C, AM=1.5; NMOT: Irradiance 800 W/m², ambient temperature 20 °C, AM=1.5, wind speed 1 m/s; Tolerance of Pmax is within +/- 3%;

Different Rearside Power Gain Reference to 580S Front

Rearside Power Gain	5%	15%	25%
Maximum Power at STC (Pmax)	609	667.0	725.0
Optimum Operating Voltage (Vmp/V)	45.0	45.0	45.1
Optimum Operating Current (Imp/A)	13.53	14.82	16.11
Open Circuit Voltage (Voc/V)	53.4	53.4	53.5
Short Circuit Current (Isc/A)	14.48	15.86	17.24
Module Efficiency (%)	22.0	24.1	26.2

Temperature Characteristics

Nominal Module Operating Temperature (NMOT)	42 ± 2 °C
Temperature Coefficient of Pmax	-0.34%/°C
Temperature Coefficient of Voc	-0.26%/°C
Temperature Coefficient of Isc	0.050%/°C

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.

Graphs Current-Voltage & Power-Voltage (595S)

