



HALF-CELL BIFACIAL MODULE

TYPE: STPXXXS-C78/Pmh+

585-605W 21.6%

POWER OUTPUT

MAX EFFICIENCY

IEC 61701 Salt-mist Certification

IEC 62716 Ammonia Certification IEC 60068-2-68 Dust and Sand

IEC 61730-2 (UL790) Fire Class C



# 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)\*













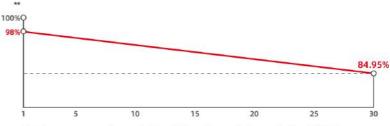


**30** years of linear warranty

**15** years of product warranty

ISO 14001 **Environment Management System** ISO 45001 Occupational Health and Safety ISO 9001 Quality Management System SA 8000 Social Responsibility Standards IEC TS 62941Guideline for Module Design

Munich RE



First year power degradation 2% Annual degradation 0.45%

<sup>\*</sup> Please refer to Suntech Standard Module Installation Manual for details.

<sup>\*\*\*</sup> WEEE only for EU market.

<sup>\*\*</sup> Please refer to Suntech Limited Warranty for details.

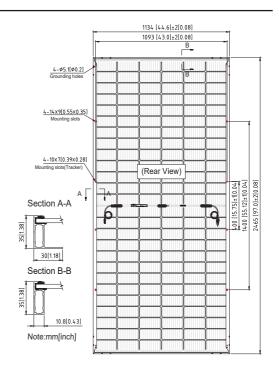
<sup>\*\*\*\*</sup> Suntech reserves the right to the final.





#### **Mechanical Characteristics**

Solar Cell	P-type monocrystalline silicon			
No. of Cells	156 (6 × 26)			
Dimensions	2465 × 1134 × 35 mm (97 × 44.6 × 1.4 inches)			
Weight	35.1 kg (77.4 lbs.)			
Front \ Back Glass	2.0+2.0 mm (0.079+ 0.079inches) semi-tempered glass			
Output Cables	4.0 mm², (-) 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			
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 2495×1120×1255mm per pallet 1145kg per pallet			



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

#### **Electrical Characteristics**

Module Type	STP605S-	C78/Pmh+	STP600S-0	C78/Pmh+	STP595S-	C78/Pmh+	STP590S-	C78/Pmh+	STP585S-0	C78/Pmh+
Testing Condition	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT
Maximum Power (Pmax/W)	605	459	600	455	595	451	590	448	585	444
Optimum Operating Voltage (Vmp/V)	45.87	42.40	45.70	42.30	45.53	42.10	45.36	42.00	45.18	41.80
Optimum Operating Current (Imp/A)	13.19	10.81	13.13	10.76	13.07	10.72	13.01	10.67	12.95	10.63
Open Circuit Voltage (Voc/V)	54.32	51.20	54.14	51.00	53.96	50.90	53.79	50.70	53.61	50.50
Short Circuit Current (Isc/A)	14.09	11.37	14.03	11.32	13.97	11.27	13.91	11.22	13.85	11.17
Module Efficiency (%)	21.	6	21.	5	2	1.3	21	.1	20	0.9

STC: lrradiance 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; Measuring tolerance is within +/- 3%;

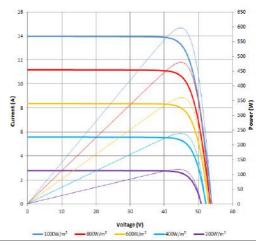
## Different Rearside Power Gain Reference to 595W Front

5%	15%	25%
625	684	744
45.53	45.53	45.63
13.72	15.03	16.34
53.96	53.96	54.06
14.67	16.07	17.46
22.4	24.5	26.6
	625 45.53 13.72 53.96 14.67	625 684 45.53 45.53 13.72 15.03 53.96 53.96 14.67 16.07

# **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

#### Graphs Current-Voltage & Power-Voltage (595W)



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.