



HALF-CELL BIFACIAL MODULE

TYPE: STPXXXS - D60/Pmh+

POWER OUTPUT

MAX EFFICIENCY

580-600W

21.2%



Features



High module conversion efficiency

Module efficiency up to **21.2%** achieved through advanced cell technology and manufacturing process



Lower operating temperature

Lower operating temperature and temperature coefficient increases the power output



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



Extended wind and snow load tests

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



Excellent weak light performance

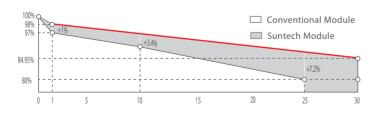
More power output in weak light condition, such as cloudy, morning and sunset



Withstanding harsh environment

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

Industry-leading Warranty **



- ♦ First year power degradation: 2%
- ◆ Annual degradation: 0.45%
- ◆ 30 years of linear warranty
- ◆ 12 years of product warranty

Certifications and Standards

CE IEC 61730 IEC 61215
SA 8000 Social Responsibility Standards
ISO 9001 Quality Management System
ISO 14001 Environment Management System
ISO 45001 Occupational Health and Safety





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





Mechanical Characteristics

Solar Cell	Monocrystalline silicon 210 mm		l=		1.3]±2[0.08]		-
No. of Cells	120 (6 × 20)		-	1262 [4	9.7]±2[0.08]		1
Dimensions	2172 × 1303 × 35 mm (85.5 × 51.3 × 1.4 inches)						1
Weight	37.1 kgs (81.8 lbs.)	4-φ5.1[φ0.2] Grounding holes	1				
Front \ Back Glass	2.0+2.0 mm (0.079+ 0.079inches) semi-tempered glass	4-14×9[0.55×0.35]					
Output Cables	4.0 mm², (-) 350 mm and (+) 160 mm in length or customized length	Mounting slots					
Junction Box	IP68 rated (3 bypass diodes)	4-10x7[0.39x0.28] Mounting slots					
Operating Module Temperature	-40 °C to +85 °C	(Tracker) A	A A	-			71788
Maximum System Voltage	1500 V DC (IEC)	Section A-A]±1[0.0 ;]±1[0.
Connectors	Genuine MC4 EVO2, Suntech STP-XC4-4		6			Ja	400 [15.75]±1[0.04] 1360 [53.54]±1[0.04] 2172 [85.5]±2[0.08]
Fire Class Rating	C in accordance with UL 790	35[138]	•—-	_			1360
Maximum Series Fuse Rating	30 A	<u> </u>					1
Power Tolerance	0/+5 W						
Refer. Bifaciality Factor	(70 ± 5)%		<u> </u>	_			
Packing Configuration	Packaging box dimensions (mm): 1325×1120×2298 Packaging box weight (kg): 1188 31 Pieces per pallet 558 Pieces per container / 40 'HC	10.8(0.43) Note:mm[inch]					

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

Electrical Characteristics

Module Type	STP 600 S-	D60/Pmh+	STP 595 S-	D60/Pmh+	STP 590 S-	D60/Pmh+	STP 585 S-	D60/Pmh+	STP 580 S-	D60/Pmh+
Testing Condition	STC	NMOT								
Maximum Power (Pmax/W)	600	452.5	595	448.9	590	445.0	585	441.4	580	437.5
Optimum Operating Voltage (Vmp/V)	34.65	32.4	34.45	32.2	34.25	32.0	34.05	31.9	33.85	31.7
Optimum Operating Current (Imp/A)	17.32	13.97	17.28	13.94	17.23	13.89	17.19	13.86	17.14	13.81
Open Circuit Voltage (Voc/V)	41.85	39.4	41.65	39.2	41.45	39.1	41.25	38.9	41.05	38.7
Short Circuit Current (Isc/A)	18.31	14.73	18.27	14.7	18.22	14.66	18.18	14.63	18.13	14.59
Module Efficiency (%)	2	1.2	2	1.0	2	0.8	20	0.7	20	0.5

 $STC: Irradiance\ 1000\ W/m^2, module\ temperature\ 25\ ^\circ C,\ AM=1.5;\ NMOT:\ Irradiance\ 800\ W/m^2,\ ambient\ temperature\ 20\ ^\circ C,\ AM=1.5,\ wind\ speed\ 1\ m/s;\ Tolerances\ of\ Pmax\ ,\ Voc\ and\ Isc\ are\ within\ +/-\ 3\%\ .$

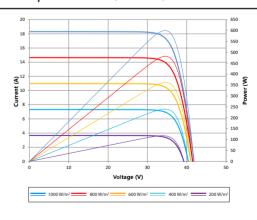
Different Rearside Power Gain Reference to 5905 Front

Rearside Power Gain	5%	15%	25%
Maximum Power at STC (Pmax)	619.5	678.5	737.5
Optimum Operating Voltage (Vmp/V)	34.25	34.25	34.35
Optimum Operating Current (Imp/A)	18.09	19.81	21.54
Open Circuit Voltage (Voc/V)	41.5	41.5	41.6
Short Circuit Current (Isc/A)	19.13	20.95	22.78
Module Efficiency (%)	21.9	24.0	26.1

Temperature Characteristics

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

Graphs



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.