

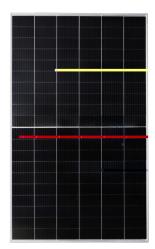
HALF-CELL BIFACIAL MODULE

TYPE: STPXXXS - D60/Pmh+

POWER OUTPUT

MAX EFFICIENCY

580-600W 21.2%



Features



High module conversion e ciency

Module e ciency up to 21.2% achieved through advanced cell technology and manufacturing process



Lower operating temperature

Lower operating temperature and temperature coe cient 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 certi ed 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 **

100% 98%

84.95%

80%

0 5 10 15

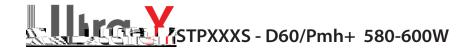
Certi cations and Standards

Social Responsibility Standards Quality Management System Environment Management System

Guideline for module design qualication and type approval







Mechanical Characteristics

Solar Cell	Monocrystalline silicon 210 mm		
No. of Cells	120 (6 × 20)		
Dimensions	2172 × 1303 × 35 mm (85.5 × 51.3 × 1.4 inches)		
Weight	37.1 kgs (81.8 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)		
Maximum Series Fuse Rating	30 A		
Power Tolerance	0/+5 W		
Refer. Bifaciality Factor	(70 ± 5)%		
Packing Con guration	Packaging box dimensions (mm): 1325×1120×2298 Packaging box weight (kg): 1188 31 Pieces per pallet 558 Pieces per container / 40 'HC		

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 E ciency (%)	2	1.2	2	1.0	20	0.8	20	0.7	20).5

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%;

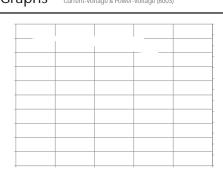
Di erent Rearside Power Gain Reference to 590S Front

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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 E ciency (%)	21.9	24.0	26.1

Temperature Characteristics

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

Graphs Current-Voltage & Power-Voltage (600S)



1000 W/m² 800 W/m² 600 W/m² 400 W/m² 200 W/m

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 FM 50390. Color disconnections of the modules used to the course of the modules used to the course of the modules used to the modules used to the modules used to the course of the modules used to the course of the modules used to the modules used to the course of the modules used to the course of the modules used to the modu