

# Ultra X

## HALF-CELL MONOFACIAL MODULE

TYPE: STPXXXS - D60/Wmh



POWER OUTPUT

**580-600W**

MAX EFFICIENCY

**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

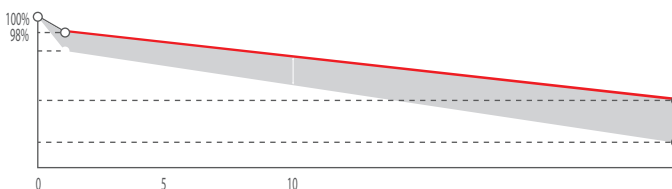
More power output in weak light condition, such as cloudy, morning and sunset



#### 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: 0.55%

Product warranty: 12 years

linear warranty: 25 years

### Certifications and Standards

Social Responsibility Standards  
Quality Management System  
Environment Management System

Guideline for module design  
qualification and type approval



Munich RE \*\*\*\*

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

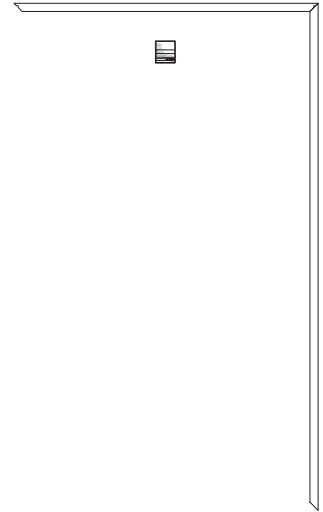
\*\*\* WEEE only for EU market.  
\*\*\*\* Suntech reserves the right to the final interpretation of the warranty by Munich Re.



## STPXXXS - D60/Wmh 580-600W

### Mechanical Characteristics

Solar Cell	Monocrystalline silicon 210 mm
No. of Cells	144 (6 × 24)
Dimensions	2172 × 1303 × 35 mm (85.5 × 51.3 × 1.4 inches)
Weight	31.5 kgs (69.4 lbs.)
Front Glass	3.2 mm (0.126 inches) fully tempered glass
Output Cables	4.0 mm <sup>2</sup> , (-) 350 mm (+) 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



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

### Electrical Characteristics

Module Type	STP600S-D60/Wmh		STP595S-D60/Wmh		STP590S-D60/Wmh		STP585S-D60/Wmh		STP580S-D60/Wmh	
	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT
Testing Condition	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	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	14.70	18.22	14.66	18.18	14.63	18.13	14.59
Module Efficiency (%)	21.2		21.0		20.8		20.7		20.5	

STC: Irradiance 1000 W/m<sup>2</sup>, module temperature 25 °C, AM=1.5; NMOT: Irradiance 800 W/m<sup>2</sup>, ambient temperature 20 °C, AM=1.5, wind speed 1 m/s; Tolerance of Pmax is within +/- 3%;

### 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 Curve (600S)

