

# 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

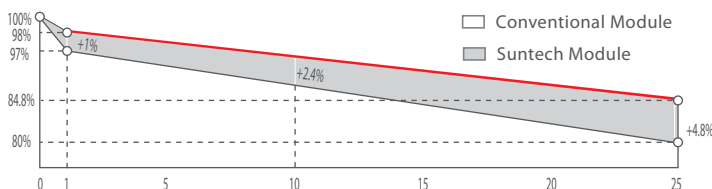
More power output in weak light condition, such as cloudy, morning and sunset



#### 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

- |              |                                 |                     |                         |
|--------------|---------------------------------|---------------------|-------------------------|
| ISO 14001    | Environment Management System   | IEC 61701           | Salt-mist certification |
| ISO 45001    | Occupational Health and Safety  | IEC 62716           | ammonia certification   |
| ISO 9001     | Quality Management System       | IEC 60068-2-68      | Dust and Sand           |
| SA 8000      | Social Responsibility Standards | IEC 61730-2 (UL790) | fire class C            |
| IEC TS 62941 | Guideline for Module Design     |                     |                         |



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

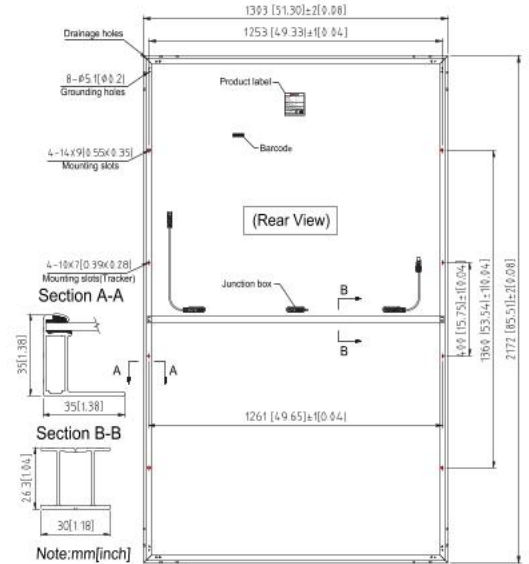
\*\*\* WEEE only for EU market.  
 \*\*\*\* Suntech reserves the right to the final interpretation of the warranty by Munich Re.

# Ultra X STPXXXS - D60/Wmh 580-600W

## 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	31.5 kg (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
Connectors	Wuxi Suntech STP-XC4-4 (Default)/ Staubli PV-KST4-EVO2A/xy (Optional)

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
Maximum Power (P <sub>max</sub> /W)	600	452.5	595	448.9	590	445.0	585	441.4	580	437.5
Optimum Operating Voltage (V <sub>mp</sub> /V)	34.65	32.4	34.45	32.2	34.25	32.0	34.05	31.9	33.85	31.7
Optimum Operating Current (I <sub>mp</sub> /A)	17.32	13.97	17.28	13.94	17.23	13.89	17.19	13.86	17.14	13.81
Open Circuit Voltage (V <sub>oc</sub> /V)	41.85	39.4	41.65	39.2	41.45	39.1	41.25	38.9	41.05	38.7
Short Circuit Current (I <sub>sc</sub> /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; Measuring tolerance of P<sub>max</sub>, V<sub>oc</sub>, I<sub>sc</sub> is within +/- 3%;

## Temperature Characteristics

Nominal Module Operating Temperature (NMOT)	42 ± 2 °C
Temperature Coefficient of P <sub>max</sub>	-0.34%/°C
Temperature Coefficient of V <sub>oc</sub>	-0.26%/°C
Temperature Coefficient of I <sub>sc</sub>	0.050%/°C

## Packing Configuration

Container	40' HC
Pieces per pallet	31
Pallets per container	18
Pieces per container	558
Packaging box dimensions	1325 × 1120 × 2298 mm
Packaging box weight	1015 kg

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 Curve (600S)

