

Ultra X

HALF-CELL MONOFACIAL MODULE

TYPE: STPXXXS - D60/Wmh

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

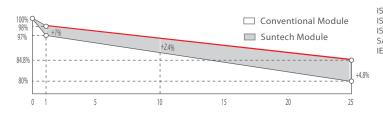
More power output in weak light condition, such as cloudy, morning and sunset



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: 0.55%
- ◆ Product warranty: 12 years
- ♦ linear warranty: 25 years

Certifications and Standards

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

IEC 61701 Salt-mist certification IEC 62716 ammonia certification IEC 60068-2-68 Dust and Sand IEC 61730-2 (UL790) fire class C





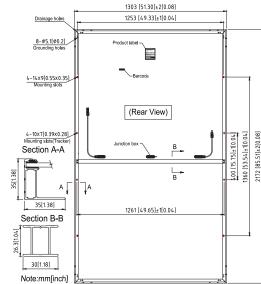
^{*} Please refer to Suntech Standard Module Installation Manual for details. ** Please refer to Suntech Limited Warranty for details.





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 mm², (-) 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	STP 600 S-	D60/Wmh	STP 595 S-	D60/Wmh	STP 590 S-	D60/Wmh	STP 585 S-	D60/Wmh	STP 580 S-	D60/Wmh
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	14.70	18.22	14.66	18.18	14.63	18.13	14.59
Module Efficiency (%)	2	1.2	2	1.0	20	0.8	20	0.7	20).5

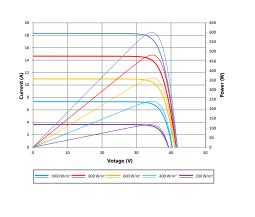
Temperature Characteristics

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%/℃

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		

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



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.