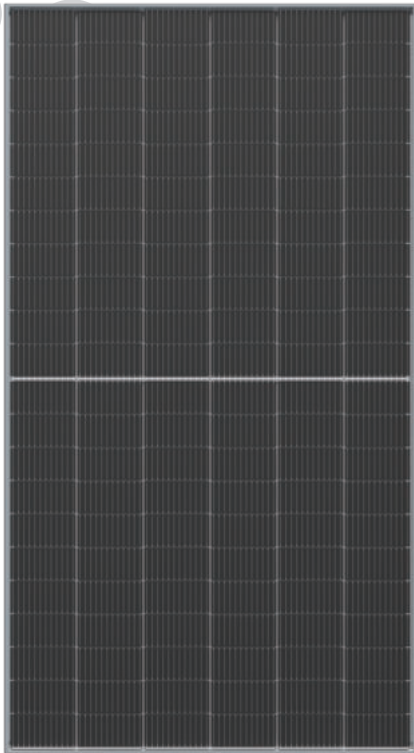


# Ultra X Plus

HALF-CELL BIFACIAL MODULE

TYPE: STPXXXS - D66/Pmh+



**650-670W** **21.6%**  
POWER OUTPUT MAX EFFICIENCY



### Higher value for customers

Effectively reduce system BOS cost, achieve lower LCOE, and improve project profitability



### Compatible with mainstream trackers

The module design is highly compatible with power plant tracking systems, which offers a cost-effective solution for large power plants



### Withstand harsh environments

Reliable quality that makes module resistant even to high temperatures, salt water and ammonia



### Extended wind and snow load tests

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



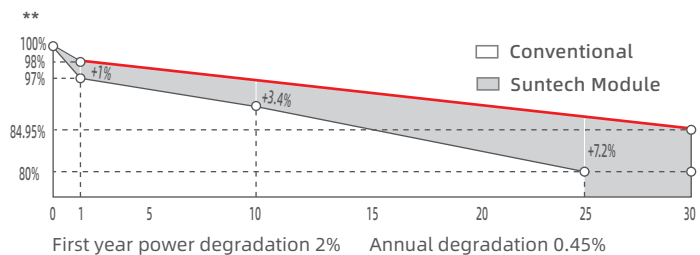
**Tier 1**  
Bloomberg  
NEW ENERGY FINANCE

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



**30** years of linear warranty  
**15** years of product warranty



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

\*\* Please refer to Suntech Limited Warranty for details.

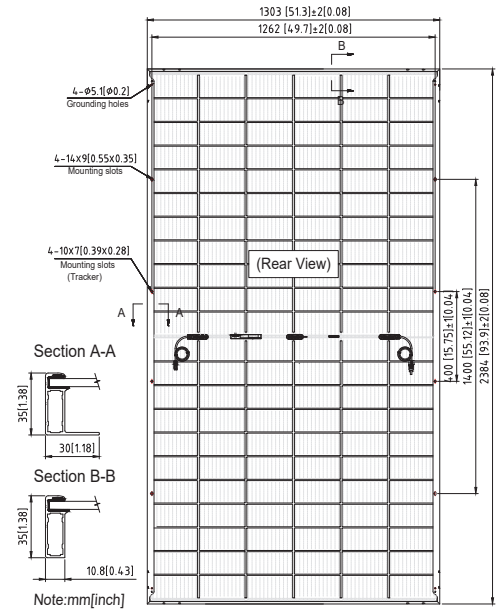
\*\*\* WEEE only for EU market.

\*\*\*\* Suntech reserves the right to the final.

# Ultra X STPXXXS - D66/Pmh+ 650-670W

## Mechanical Characteristics

Solar Cell	Monocrystalline silicon 210 mm
No. of Cells	132 (6 × 22)
Dimensions	2384 × 1303 × 35 mm (93.9 × 51.3 × 1.4 inches)
Weight	37.5 kgs (82.7 lbs.)
Front \ Back Glass	2.0+2.0 mm (0.079+ 0.079inches) semi-tempered glass
Output Cables	4.0 mm <sup>2</sup> , (-) 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)
Connectors	STP-XC4
Maximum Series Fuse Rating	30 A
Power Tolerance	0/+5 W
Refer. Bifaciality Factor	(70 ± 5)%
Frame	Anodized aluminum alloy frame
Packing Configuration	31 Pieces per pallet 558 Pieces per container /40'HC 1325×1120×2510 1196.5kg



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

## Electrical Characteristics

Module Type	STP670S-D66/Pmh+		STP665S-D66/Pmh+		STP660S-D66/Pmh+		STP655S-D66/Pmh+		STP650S-D66/Pmh+	
	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT
Maximum Power (Pmax/W)	670	505.5	665	501.7	660	497.9	655	494.1	650	490.3
Optimum Operating Voltage (Vmp/V)	38.45	35.8	38.25	35.7	38.05	35.6	37.85	35.4	37.65	35.2
Optimum Operating Current (Imp/A)	17.43	14.10	17.39	14.07	17.35	13.99	17.31	13.96	17.27	13.92
Open Circuit Voltage (Voc/V)	46.45	43.7	46.25	43.5	46.05	43.4	45.85	43.2	45.65	43.0
Short Circuit Current (Isc/A)	18.43	14.87	18.39	14.84	18.35	14.76	18.31	14.73	18.27	14.70
Module Efficiency (%)	21.6		21.4		21.2		21.1		20.9	

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%;

## Different Rearside Power Gain Reference to 660W Front

Rearside Power Gain	5%	15%	25%
Maximum Power at STC (Pmax)	693.0	759.0	825.0
Optimum Operating Voltage (Vmp/V)	38.1	38.1	38.2
Optimum Operating Current (Imp/A)	18.22	19.95	21.69
Open Circuit Voltage (Voc/V)	46.1	46.1	46.2
Short Circuit Current (Isc/A)	19.27	21.10	22.94
Module Efficiency (%)	22.3	24.4	26.6

## 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

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 (670W)

