

Ultra T 1.0

HALF-CELL N-TYPE TOPCon
SILVER FRAME BIFACIAL DOUBLE-GLASS MODULE
TYPE: STPXXS-C72/Nsh+



580-600W POWER OUTPUT **23.2%** MAX EFFICIENCY



Multi busbar technology

Superior optical utilization and current collection capability, effectively improving product power and reliability



High power output

Low power attenuation, stable power generation throughout long-term operation, and consistent high-power output



Double-sided power generation

The gain of double-sided power generation increases up to max. 25% with the light on the back side, and significantly reduce LCOE



Extended wind and snow load tests

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

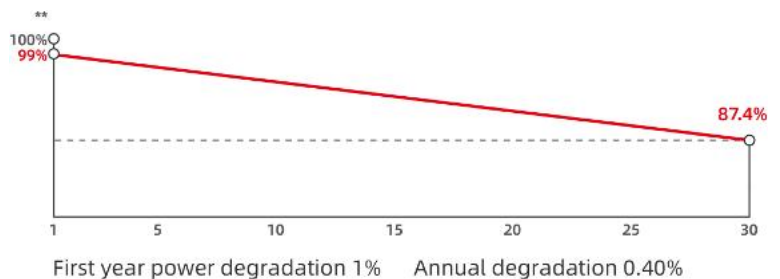


ISO 14001
ISO 45001
ISO 9001
SA 8000
IEC TS 62941
IEC 61730-2 (UL790)

Environment Management System
Occupational Health and Safety
Quality Management System
Social Responsibility Standards
Guideline for Module Design
Fire Class C



30 years of linear warranty
15 years of product warranty



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

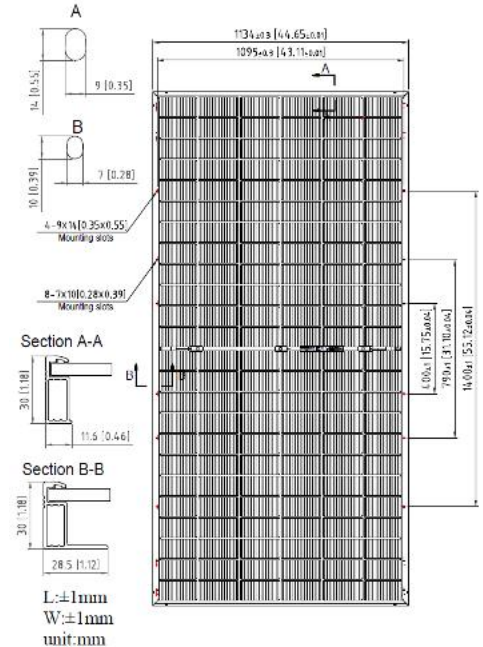
** Linear Power Output Warranty: Front-side performance only. Please refer to Suntech Limited Warranty for details.

*** WEEE only for EU market.

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

Mechanical Characteristics

Solar Cell	N-type monocrystalline silicon
No. of Cells	144 (6 × 24)
Dimensions	2278 × 1134 × 30 mm (89.7 × 44.6 × 1.2 inches)
Weight	32.0 kg (70.5 lbs.)
Front \ Back Glass	2.0 + 2.0 mm (0.079 + 0.079 inches) semi-tempered glass
Output Cables	4.0 mm ² , (-) 350 mm and (+) 160 mm in length or customized length
Junction Box	IP68 rated (3 bypass diodes)
Operating Module Temperature	-40 °C - +70 °C (T98th)
Maximum System Voltage	1500 V DC (IEC)
Connectors	Wuxi Suntech STP-XC4-4 (Default) Stäubli PV-KST4-EVO2A/xy, PV-KBT4- EVO2A/xy (Optional)
Maximum Series Fuse Rating	25 A
Power Tolerance	0 ~ + 3%
Frame	Anodized aluminum alloy frame
Packing Configuration	36 pieces per pallet 720 pieces per container / 40'HC 2310 × 1120 × 1255 mm per pallet 1202 kg per pallet



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

Electrical Characteristics (STC)

Module Type	S0P600S-07200 sh+	S0P595S-07200 sh+	S0P590S-07200 sh+	S0P585S-07200 sh+	S0P580S-07200 sh+
Maximum Power (Pmax/W)	600	595	590	585	580
Optimum Operating Voltage (Vmp/V)	43.13	43.02	42.91	42.79	42.68
Optimum Operating Current (Imp/A)	13.91	13.83	13.75	13.67	13.59
Open Circuit Voltage (Voc/V)	51.94	51.81	51.68	51.55	51.42
Short Circuit Current (Isc/A)	14.64	14.56	14.48	14.40	14.32
Short Circuit Current at BSI (Isc/A)	18.15	18.05	17.96	17.86	17.76
Module Efficiency (%)	23.2	23.0	22.8	22.6	22.5

STC: Irradiance 1000 W/m², module temperature 25 °C, AM=1.5; BSI: Front irradiance 1000 W/m², rear irradiance 300 W/m², module temperature 25 °C, AM=1.5; Measuring tolerance of Pmax, Voc, Isc is within +/- 3%;

Electrical Characteristics (BNPI)

Module Type	S0P600S-07200 sh+	S0P595S-07200 sh+	S0P590S-07200 sh+	S0P585S-07200 sh+	S0P580S-07200 sh+
Maximum Power (Pmax/W)	664	659	654	648	643
Short Circuit Current (Isc/A)	16.22	16.13	16.04	15.96	15.87
Open Circuit Voltage (Voc/V)	52.22	52.09	51.96	51.83	51.70

BNPI: Irradiance frontside 1000 W/m², backside 135 W/m², module temperature 25 °C, AM=1.5; Bifaciality coefficient (±5%): φPmax=80%, φVoc=99%, φIsc=80%.

Bifacial Gain with 5%

Module Type	S0P600S-07200 sh+	S0P595S-07200 sh+	S0P590S-07200 sh+	S0P585S-07200 sh+	S0P580S-07200 sh+
Maximum Power (Pmax/W)	630	625	620	614	609
Optimum Operating Voltage (Vmp/V)	43.13	43.02	42.91	42.79	42.68
Optimum Operating Current (Imp/A)	14.61	14.52	14.44	14.35	14.27
Short Circuit Current (Isc/A)	15.37	15.29	15.20	15.12	15.04
Open Circuit Voltage (Voc/V)	51.94	51.81	51.68	51.55	51.42

The bifacial gain is the additional gain from the back side of PV. It depends on the mounting method, orientation, tilt angle of the PV module and the albedo of the ground.

Temperature Characteristics

Temperature Coefficient of Pmax	-0.29%/°C
Temperature Coefficient of Voc	-0.25%/°C
Temperature Coefficient of Isc	0.046%/°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 (585W)

