

# **Ultra V** Pro

HALF-CELL N-Type TOPCon Glass-Glass BIFACIAL MODULE

TYPE: STPXXXS-C72/Nsh+

580-600W 23.2%

POWER OUTPUT

MAX EFFICIENCY



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



# High power output

Zero LID, ultra-low LeTID, better anti-PID performance, low power attenuation, 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)\*















**30** years of linear warranty

**15** years of product warranty

ISO 14001 **Environment Management System** Occupational Health and Safety ISO 45001 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

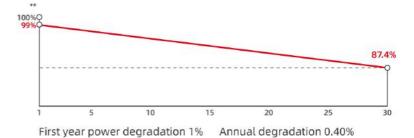












<sup>\*</sup> Please refer to Suntech Standard Module Installation Manual for details.

<sup>\*\*\*</sup> WEEE only for EU market.

<sup>\*\*</sup> Please refer to Suntech Limited Warranty for details.

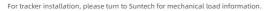
<sup>\*\*\*\*</sup> Suntech reserves the right to the final.

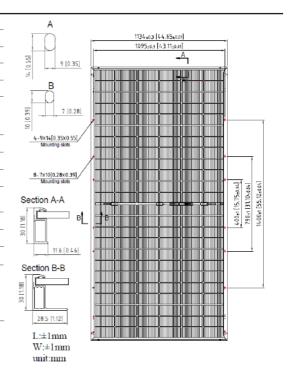




#### **Mechanical Characteristics**

Solar CellN-type monocrystalline siliconNo. of Cells144 (6 × 24)Dimensions2278 × 1134 × 30 mm (89.7 × 44.6 × 1.2 inches)Weight32.0 kg (70.5 lbs.)Front \ Back Glass2.0 + 2.0 mm (0.079 + 0.079 inches) semi-tempered glass0utput Cables(-) 350 mm and (+) 160 mm in length or customized lengthJunction BoxIP68 rated (3 bypass diodes)Operating Module Temperature-40 °C - +70 °C (T98th)Maximum System Voltage1500 V DC (IEC)ConnectorsWuxi Suntech STP-XC4-4 (Default)/ Staubli PV-KST4-EVO2A/xy (Optional)Maximum Series Fuse Rating30 APower Tolerance0 ~ + 3%FrameAnodized aluminum alloy framePacking Configuration36 pieces per pallet 720 pieces per container /40'HC 2310×1120×1255mm per pallet 1202kg per pallet		
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  4.0 mm²,  (-) 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)/ Staubli PV-KST4-EVO2A/xy (Optional)  Maximum Series Fuse Rating  30 A  Power Tolerance  0 ~ + 3%  Frame  Anodized aluminum alloy frame  36 pieces per pallet 720 pieces per container /40'HC	Solar Cell	N-type monocrystalline silicon
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Packing Configuration 720 pieces per container /40'HC	Frame	Anodized aluminum alloy frame
	Packing Configuration	720 pieces per container /40'HC





# **Electrical Characteristics (STC)**

Module Type	STP600S-C72/Nsh+	STP595S-C72/Nsh+	STP590S-C72/Nsh+	STP585S-C72/Nsh+	STP580S-C72/Nsh+	
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	
Module Efficiency (%)	23.2	23.0	22.8	22.6	22.5	

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

# **Electrical Characteristics (BNPI)**

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%):  $\phi$ Pmax=80%,  $\phi$ Voc=99%,  $\phi$ Isc=80%.

### Bifacial Gain with 5%

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%/℃

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)

