

# Ultra V Pro

HALF-CELL N-Type TOPCon 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)\*

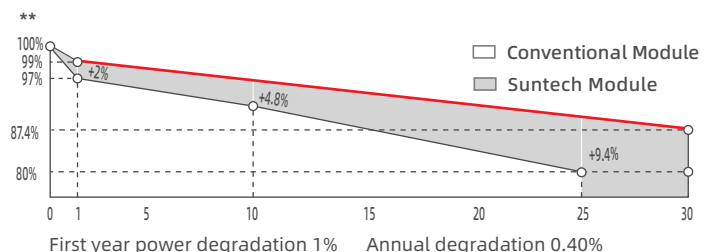


ISO 14001 Environment Management System  
ISO 45001 Occupational Health and Safety  
ISO 9001 Quality Management System  
SA 8000 Social Responsibility Standards  
IEC TS 62941 Guideline for Module Design

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.

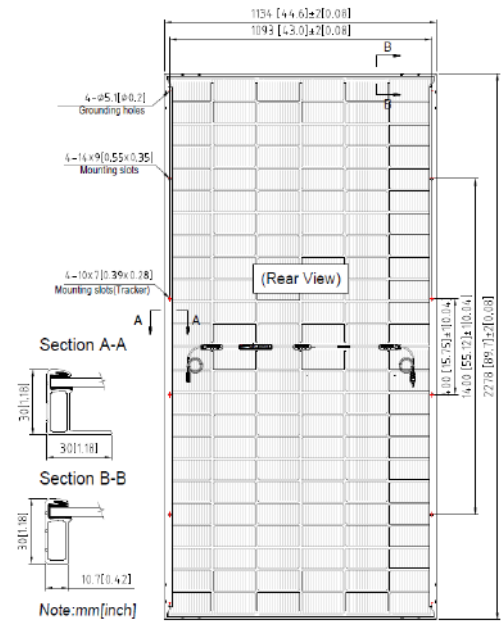
\*\*\*\* Suntech reserves the right to the final.

# Ultra V Pro STPXXXS - C72/Nsh+ 580-600W

## Mechanical Characteristics

Solar Cell	N-type Monocrystalline silicon 182 mm
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+ 0.079inches) 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	Wuxi Suntech STP-XC4-4 (Default)/ Staubli PV-KST4-EV02A/xy (Optional)
Maximum Series Fuse Rating	25 A
Power Tolerance	0/+5 W
Frame	Anodized aluminum alloy frame
Packing Configuration	36 Pieces per pallet 720 Pieces per container /40'HC 2310×1120×1255mm 1202kg

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



## Electrical Characteristics

Module Type	STP600S-C72/Nsh+		STP595S-C72/Nsh+		STP590S-C72/Nsh+		STP585S-C72/Nsh+		STP580S-C72/Nsh+	
	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT
Maximum Power (Pmax/W)	600	458	595	454	590	451	585	447	580	443
Optimum Operating Voltage (Vmp/V)	43.13	40.80	43.02	40.70	42.91	40.60	42.79	40.50	42.68	40.40
Optimum Operating Current (Imp/A)	13.91	11.20	13.83	11.16	13.75	11.10	13.67	11.04	13.59	10.98
Open Circuit Voltage (Voc/V)	51.94	49.40	51.81	49.30	51.68	49.10	51.55	49.00	51.42	48.90
Short Circuit Current (Isc/A)	14.64	11.80	14.56	11.74	14.48	11.67	14.40	11.61	14.32	11.54
Module Efficiency (%)	23.2		23.0		22.8		22.6		22.5	

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 Pmax, Voc, Isc is within +/- 3%;

## Specifications 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/m<sup>2</sup>, backside 135 W/m<sup>2</sup>, module temperature 25 °C, AM=1.5; Bifaciality coefficient (±5%): φPmax=80%, φVoc=99%, φIsc=80%.

## Bifacial Gain with 5%

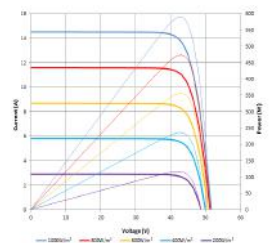
Maximum Power (Pmax/W)	630	625	620	614	609
Optimum Operating Voltage (Vmp/V)	43.13	43.02	42.91	42.79	42.68
Optimum Operating Current (Imp/A)	14.61	14.52	14.44	14.35	14.27
Short Circuit Current (Isc/A)	15.37	15.29	15.20	15.12	15.04
Open Circuit Voltage (Voc/V)	51.94	51.81	51.68	51.55	51.42

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

Nominal Module Operating Temperature (NMOT)	42 ± 2 °C
Temperature Coefficient of Pmax	-0.29%/°C
Temperature Coefficient of Voc	-0.25%/°C
Temperature Coefficient of Isc	+0.046%/°C

## Graphs Current-Voltage & Power-Voltage (585W)



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 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 specification.