

# Ultra V

HALF-CELL BIFACIAL MODULE

TYPE: STPXXXS-C72/Pmh+

**545-565W** **21.9%**  
POWER OUTPUT MAX EFFICIENCY



### 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



### Anti-PID guarantee

Through the optimization of cell technology and material, the decay caused by PID phenomenon is reduced



### 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

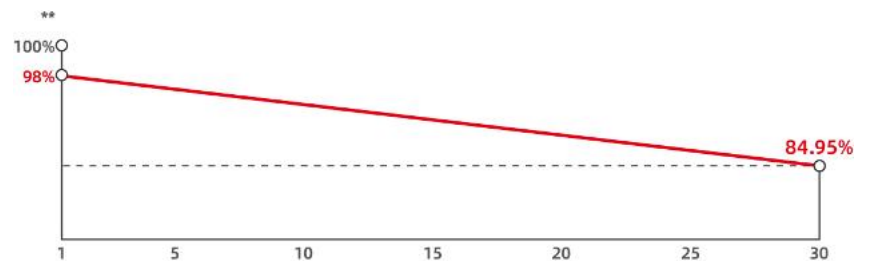
Module certified to withstand extreme wind (2400 Pascal) and snow loads (5400 Pascal)\*



ISO 14001 Environment Management System IEC 61730-2 (UL790) fire class C  
ISO 45001 Occupational Health and Safety  
ISO 9001 Quality Management System  
SA 8000 Social Responsibility Standards  
IEC TS 62941 Guideline for Module Design



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



First year power degradation 2% Annual degradation 0.45%

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

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

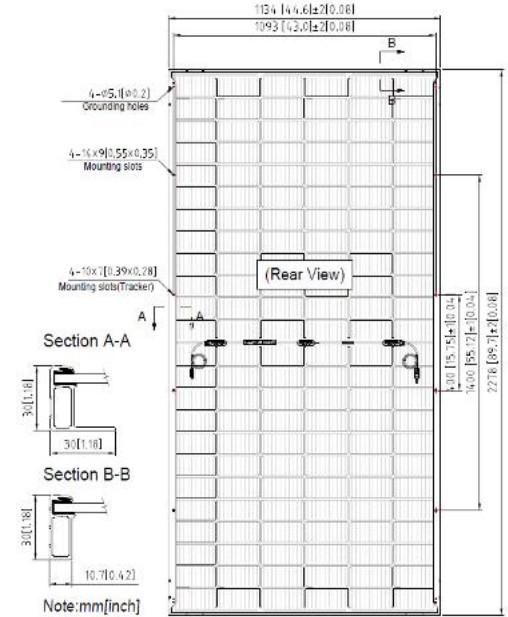
\*\*\* WEEE only for EU market.

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

# Ultra V STPXXXS-C72/Pmh+ 545-565W

## Mechanical Characteristics

|                              |  |
|------------------------------|--|
| Solar Cell                   | 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> ,<br>(-) 350 mm and (+) 160 mm in length<br>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)/<br>Staubli PV-KST4-EVO2A/xy (Optional)             |
| Maximum Series Fuse Rating   | 25 A   |
| Power Tolerance              | 0/+5 W   |
| Frame                        | Anodized aluminum alloy frame  |
| Packing Configuration        | 36 Pieces per pallet<br>720 Pieces per container /40'HC<br>2310×1120×1255mm 1202kg   |



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

## Electrical Characteristics

| Module Type                       | STP565S-C72/Pmh+ |       | STP560S-C72/Pmh+ |       | STP555S-C72/Pmh+ |       | STP550S-C72/Pmh+ |       | STP545S-C72/Pmh+ |       |
|-----------------------------------|------------------|-------|------------------|-------|------------------|-------|------------------|-------|------------------|-------|
|                                   | STC              | NMOT  | STC              | NMOT  | STC              | NMOT  | STC              | NMOT  | STC              | NMOT  |
| Maximum Power (Pmax/W)            | 565              | 429   | 560              | 425   | 555              | 421   | 550              | 418   | 545              | 414   |
| Optimum Operating Voltage (Vmp/V) | 42.58            | 39.40 | 42.40            | 39.20 | 42.24            | 39.00 | 42.05            | 38.90 | 41.87            | 38.70 |
| Optimum Operating Current (Imp/A) | 13.27            | 10.90 | 13.21            | 10.85 | 13.14            | 10.80 | 13.08            | 10.75 | 13.02            | 10.71 |
| Open Circuit Voltage (Voc/V)      | 50.41            | 47.50 | 50.23            | 47.40 | 50.07            | 47.20 | 49.88            | 47.00 | 49.69            | 46.90 |
| Short Circuit Current (Isc/A)     | 14.20            | 11.46 | 14.14            | 11.41 | 14.07            | 11.35 | 14.01            | 11.30 | 13.96            | 11.26 |
| Module Efficiency (%)             | 21.9             |       | 21.7             |       | 21.5             |       | 21.3             |       | 21.1             |       |

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

| Parameter                     | STP565S-C72/Pmh+ | STP560S-C72/Pmh+ | STP555S-C72/Pmh+ | STP550S-C72/Pmh+ | STP545S-C72/Pmh+ |
|-------------------------------|------------------|------------------|------------------|------------------|------------------|
| Maximum Power (Pmax/W)        | 618              | 613              | 607              | 602              | 597              |
| Short Circuit Current (Isc/A) | 15.54            | 15.48            | 15.40            | 15.33            | 15.28            |
| Open Circuit Voltage (Voc/V)  | 50.65            | 50.47            | 50.31            | 50.12            | 49.92            |

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=70%, φVoc=99%, φIsc=70%.

## Bifacial Gain with 5%

| Parameter                         | STP565S-C72/Pmh+ | STP560S-C72/Pmh+ | STP555S-C72/Pmh+ | STP550S-C72/Pmh+ | STP545S-C72/Pmh+ |
|-----------------------------------|------------------|------------------|------------------|------------------|------------------|
| Maximum Power (Pmax/W)            | 593              | 588              | 583              | 578              | 572              |
| Optimum Operating Voltage (Vmp/V) | 42.58            | 42.40            | 42.24            | 42.05            | 41.87            |
| Optimum Operating Current (Imp/A) | 13.93            | 13.87            | 13.80            | 13.73            | 13.67            |
| Short Circuit Current (Isc/A)     | 14.91            | 14.85            | 14.77            | 14.71            | 14.66            |
| Open Circuit Voltage (Voc/V)      | 50.41            | 50.23            | 50.07            | 49.88            | 49.69            |

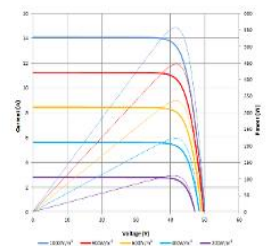
The bifacial gain is the additional gain from the back side of PV. It depends on the mounting method, orientation, tilt angle of the PV module and the albedo of the ground.

## Temperature Characteristics

|   |            |
|---|------------|
| Nominal Module Operating Temperature (NMOT) | 42 ± 2 °C  |
| Temperature Coefficient of Pmax             | -0.34%/°C  |
| Temperature Coefficient of Voc              | -0.26%/°C  |
| Temperature Coefficient of Isc              | +0.050%/°C |

## Graphs

Current-Voltage & Power-Voltage (555W)



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.