

# Ultra V Pro

HALF-CELL N-Type TOPCon  
Glass-Glass BIFACIAL MODULE  
TYPE: STPXXXS-H66-Nsh+

**605-625W 23.1%**  
POWER OUTPUT MAX EFFICIENCY



### High power output

Zero LID, ultra-low LeTID, better anti-PID performance, low power attenuation, high power output



### Low risk of hidden cracks

The fine non-destructive cell cutting process avoids the damage of cutting surface effectively and reduces the risk of hidden cracks and hot spots on modules



### Withstand harsh environments

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



### Superior load-bearing capability

Module certified to withstand **5400 Pa** front side max static test load and **2400 Pa** rear side max static test load \*

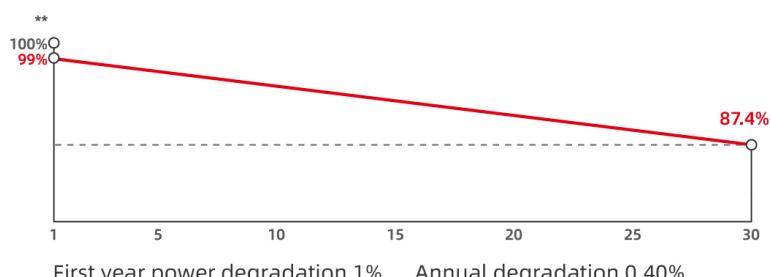


**30** years of linear warranty

**15** years of product warranty

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



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

\*\* WEEE only for EU market.

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

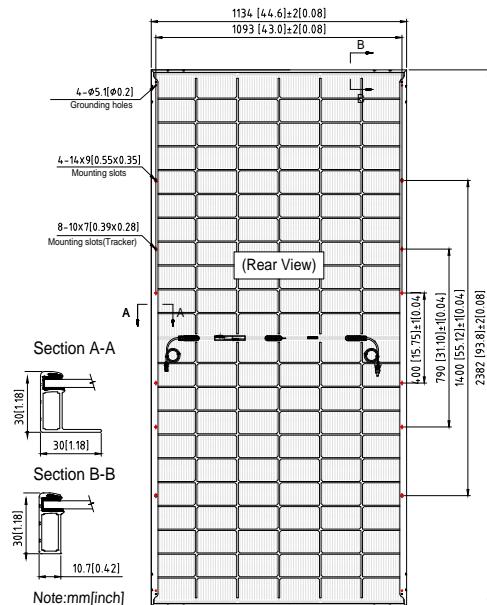
\*\*\* Suntech reserves the right to the final.

# Ultra V Pro STPXXXS-H66-Nsh+ 605-625W

## Mechanical Characteristics

|                              |  |
|------------------------------|--|
| Solar Cell                   | N-type monocrystalline silicon   |
| No. of Cells                 | 132 (6 × 22)   |
| Dimensions                   | 2382 × 1134 × 30 mm (93.8 × 44.6 × 1.2 inches)   |
| Weight                       | 32.5 kg (71.65 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 (+) 160 mm in length<br>or customized length                         |
| Junction Box                 | IP68 rated (3 bypass diodes)   |
| Operating Module Temperature | -40 °C to +70°C (T98th)  |
| 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   | 35 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>2396×1120×1255mm per pallet 1230kg per pallet |

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



## Electrical Characteristics (STC)

| Module Type                       | STP625S-H66-Nsh+ | STP620S-H66-Nsh+ | STP615S-H66-Nsh+ | STP610S-H66-Nsh+ | STP605S-H66-Nsh+ |
|-----------------------------------|------------------|------------------|------------------|------------------|------------------|
| Maximum Power (Pmax/W)            | 625              | 620              | 615              | 610              | 605              |
| Optimum Operating Voltage (Vmp/V) | 40.98            | 40.82            | 40.65            | 40.48            | 40.31            |
| Optimum Operating Current (Imp/A) | 15.25            | 15.19            | 15.13            | 15.07            | 15.01            |
| Open Circuit Voltage (Voc/V)      | 49.30            | 49.10            | 48.90            | 48.70            | 48.50            |
| Short Circuit Current (Isc/A)     | 16.13            | 16.07            | 16.01            | 15.95            | 15.89            |
| Module Efficiency (%)             | 23.1             | 23.0             | 22.8             | 22.6             | 22.4             |

STC: Irradiance 1000 W/m<sup>2</sup>, module temperature 25 °C, AM=1.5; Measuring tolerance of Pmax, Voc, Isc is within +/- 3%;

## Electrical Characteristics (BNPI)

|                                   | 693   | 687   | 681   | 676   | 670   |
|-----------------------------------|-------|-------|-------|-------|-------|
| Optimum Operating Voltage (Vmp/V) | 40.90 | 40.70 | 40.50 | 40.30 | 40.10 |
| Optimum Operating Current (Imp/A) | 16.95 | 16.88 | 16.82 | 16.78 | 16.71 |
| Open Circuit Voltage (Voc/V)      | 49.57 | 49.37 | 49.16 | 48.96 | 48.76 |
| Short Circuit Current (Isc/A)     | 17.87 | 17.81 | 17.74 | 17.67 | 17.61 |

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 ( $\pm 5\%$ ):  $\phi_{Pmax}=80\%$ ,  $\phi_{Voc}=99\%$ ,  $\phi_{Isc}=80\%$ .

## Bifacial Gain with 5%

|                                   | 656   | 651   | 646   | 641   | 635   |
|-----------------------------------|-------|-------|-------|-------|-------|
| Optimum Operating Voltage (Vmp/V) | 40.98 | 40.82 | 40.65 | 40.48 | 40.31 |
| Optimum Operating Current (Imp/A) | 16.01 | 15.95 | 15.89 | 15.82 | 15.76 |
| Open Circuit Voltage (Voc/V)      | 49.30 | 49.10 | 48.90 | 48.70 | 48.50 |
| Short Circuit Current (Isc/A)     | 16.94 | 16.87 | 16.81 | 16.75 | 16.68 |

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 (615W)

