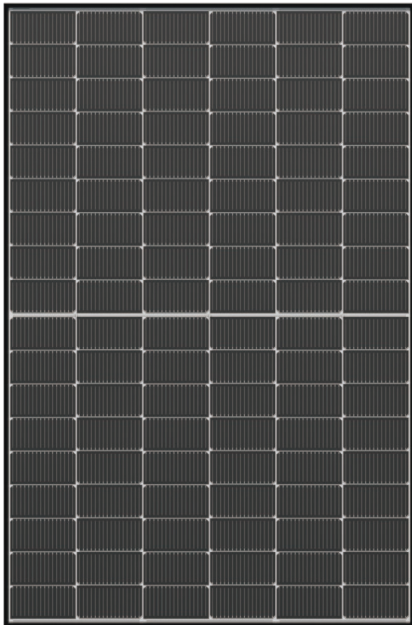


# Ultra V Pro mini

HALF-CELL N-Type TOPCon MONOFACIAL MODULE

TYPE: STPXXXS - C54/Nshm

**420-440W** **22.5%**  
POWER OUTPUT MAX EFFICIENCY



### High module conversion efficiency

Module efficiency up to **22.5%** achieved through advanced cell technology and manufacturing process



### Multi-grid technology

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



### Excellent low light performance

more power output in low light conditions such as cloudy days, mornings and evenings



### Extended wind and snow load tests

Module certified to withstand extreme wind (**3800 Pascal**) and snow loads (**6000 Pascal**)\*

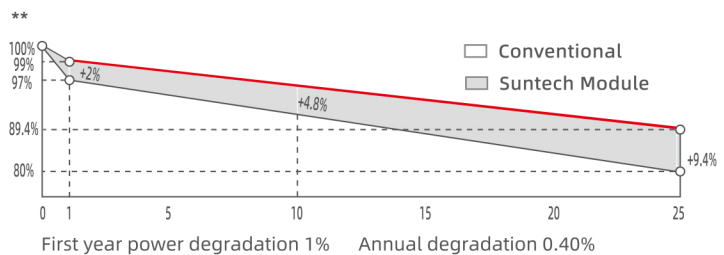


ISO 14001 Environment Management System  
 ISO 45001 Occupational Health and Safety  
 ISO 9001 Quality Management System  
 SA 8000 Social Responsibility Standards  
 IEC TS 62941 Guideline for Module Design

IEC 61701 Salt-mist certification  
 IEC 62716 ammonia certification  
 IEC 60068-2-68 Dust and Sand  
 IEC 61730-2 (UL790) fire class C



**25** years of linear warranty  
**25** years of product warranty



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

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

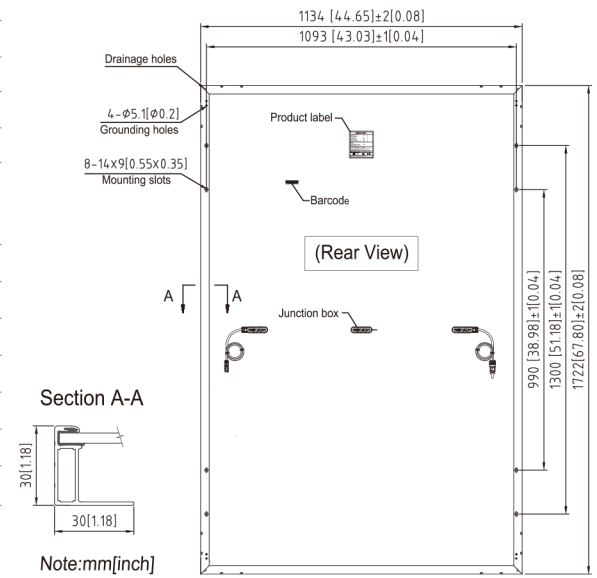
\*\*\* WEEE only for EU market.

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

# Ultra V Pro STPXXXS - C54/NshM 420-440W

## Mechanical Characteristics

|                              |   |
|------------------------------|---|
| Solar Cell                   | N-type Monocrystalline silicon 182 mm   |
| No. of Cells                 | 108 (6 × 18)  |
| Dimensions                   | 1722 × 1134 × 30 mm (67.8 × 44.6 × 1.2 inches)                                    |
| Weight                       | 21.0 kgs (46.3 lbs.)  |
| Front Glass                  | 3.2 mm (0.126 inches) fully 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 +85 °C  |
| Maximum System Voltage       | 1500 V DC (IEC)   |
| Connectors                   | MC4-EVO2  |
| Maximum Series Fuse Rating   | 25 A  |
| Power Tolerance              | ± 3%  |
| Frame                        | Anodized aluminum alloy frame   |
| Packing Configuration        | 36 Pieces per pallet<br>936 Pieces per container / 40' HC<br>1755×1120×1255 794kg |



## Electrical Characteristics

| Module Type                       | STP440S-C54/NshM |       | STP435S-C54/NshM |       | STP430S-C54/NshM |       | STP425S-C54/NshM |       | STP420S-C54/NshM |       |
|-----------------------------------|------------------|-------|------------------|-------|------------------|-------|------------------|-------|------------------|-------|
|                                   | STC              | NMOT  | STC              | NMOT  | STC              | NMOT  | STC              | NMOT  | STC              | NMOT  |
| Testing Condition                 | STC              | NMOT  | STC              | NMOT  | STC              | NMOT  | STC              | NMOT  | STC              | NMOT  |
| Maximum Power (Pmax/W)            | 440              | 336.4 | 435              | 332.5 | 430              | 328.7 | 425              | 324.9 | 420              | 321.0 |
| Optimum Operating Voltage (Vmp/V) | 32.69            | 30.5  | 32.51            | 30.3  | 32.33            | 30.2  | 32.15            | 30.0  | 31.96            | 29.9  |
| Optimum Operating Current (Imp/A) | 13.46            | 11.03 | 13.38            | 10.96 | 13.30            | 10.89 | 13.22            | 10.82 | 13.14            | 10.75 |
| Open Circuit Voltage (Voc/V)      | 38.98            | 37.0  | 38.85            | 36.9  | 38.72            | 36.8  | 38.59            | 36.6  | 38.46            | 36.5  |
| Short Circuit Current (Isc/A)     | 14.41            | 11.62 | 14.33            | 11.55 | 14.25            | 11.49 | 14.17            | 11.42 | 14.09            | 11.36 |
| Module Efficiency (%)             | 22.5%            |       | 22.3%            |       | 22.0%            |       | 21.8%            |       | 21.5%            |       |

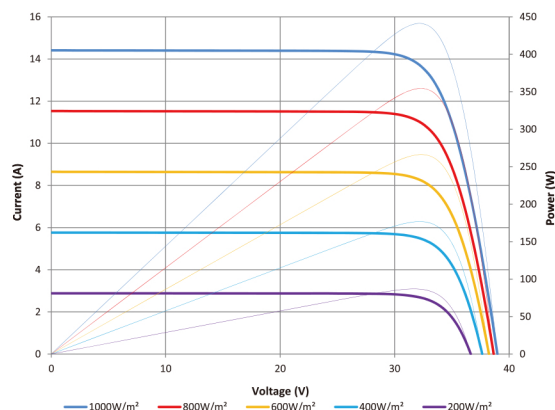
STC: Irradiance 1000 W/m<sup>2</sup>, module temperature 25 °C, AM=1.5; NMOT: Irradiance 800 W/m<sup>2</sup>, ambient temperature 20 °C, AM=1.5, wind speed 1 m/s; Tolerance of Pmax is within +/- 3%;

## Temperature Characteristics

|   |           |
|---|-----------|
| Nominal Module Operating Temperature (NMOT) | 42 ± 2 °C |
| Temperature Coefficient of Pmax             | -0.30%/°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 Curve (440S)



## Information bar

