

# Ultra V Pro mini

## HALF-CELL N-Type TOPCon MONOFACIAL MODULE

TYPE: STPXXXS - C54/Nshm



POWER OUTPUT

**410-430W**

MAX EFFICIENCY

**22.0%**

### Features



#### High module conversion efficiency

Module efficiency up to **22.0%** achieved through advanced cell technology and manufacturing process



#### Lower operating temperature

Lower operating temperature and temperature coefficient increases the power output



#### Zero LID degradation

Zero LID with N-type cells which greatly enhances module power.



#### Extended wind and snow load tests

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



#### Excellent weak light performance

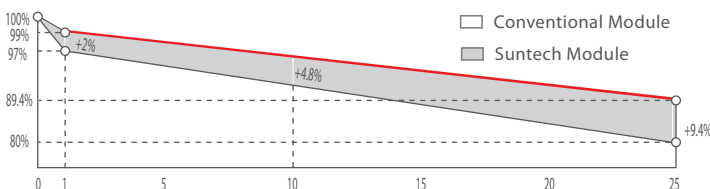
More power output in weak light condition, such as cloudy, morning and sunset



#### Withstanding harsh environment

Reliable quality leads to a better sustainability even in harsh environment like desert, farm and coastline

### Industry-leading Warranty \*\*



- ◆ First year power degradation: 1%
- ◆ Annual degradation: 0.40%
- ◆ Product warranty: 15 years
- ◆ linear warranty: 25 years

### Certifications and Standards

CE IEC 61730 IEC 61215  
 SA 8000 Social Responsibility Standards  
 ISO 9001 Quality Management System  
 ISO 14001 Environment Management System  
 ISO 45001 Occupational Health and Safety  
 IEC TS 62941 Guideline for module design qualification and type approval



**Munich RE** \*\*\*\*

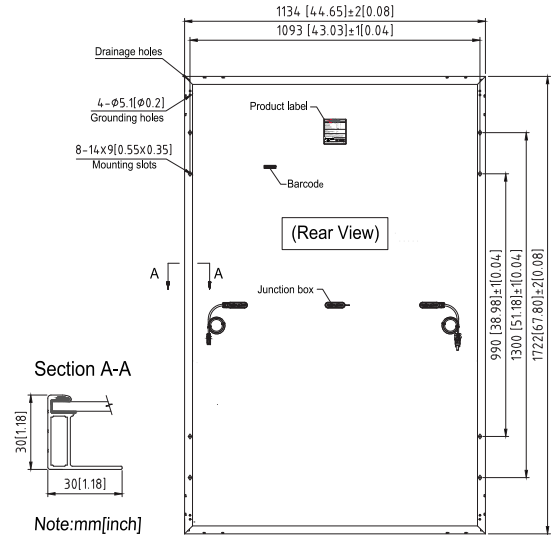
\* Please refer to Suntech Standard Module Installation Manual for details.  
 \*\* Please refer to Suntech Limited Warranty for details.

\*\*\* WEEE only for EU market.  
 \*\*\*\* Suntech reserves the right to the final interpretation of the warranty by Munich Re.

# Ultra V Pro STPXXXS - C54/NshM 410-430W

## Mechanical Characteristics

|                              |  |
|------------------------------|--|
| Solar Cell                   | N-type Monocrystalline silicon 182 mm  |
| No. of Cells                 | 108 (6 × 18)   |
| Dimensions                   | 1722 × 1134 × 30 mm<br>(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>(-) 1400 mm (+) 1400 mm in length<br>or customized length |
| Junction Box                 | IP68 rated<br>(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              | 0/+5 W   |



## Electrical Characteristics

| Module Type                       | STP430S-C54/NshM |       | STP425S-C54/NshM |       | STP420S-C54/NshM |       | STP415S-C54/NshM |       | STP410S-C54/NshM |       |
|-----------------------------------|------------------|-------|------------------|-------|------------------|-------|------------------|-------|------------------|-------|
|                                   | STC              | NMOT  | STC              | NMOT  | STC              | NMOT  | STC              | NMOT  | STC              | NMOT  |
| Maximum Power (Pmax/W)            | 430              | 328.7 | 425              | 325.0 | 420              | 321.1 | 415              | 317.3 | 410              | 313.5 |
| Optimum Operating Voltage (Vmp/V) | 32.33            | 30.2  | 32.15            | 30.0  | 31.96            | 29.9  | 31.78            | 29.7  | 31.59            | 29.6  |
| Optimum Operating Current (Imp/A) | 13.30            | 10.89 | 13.22            | 10.82 | 13.14            | 10.75 | 13.06            | 10.68 | 12.98            | 10.60 |
| Open Circuit Voltage (Voc/V)      | 38.72            | 36.8  | 38.59            | 36.6  | 38.46            | 36.5  | 38.33            | 36.4  | 38.20            | 36.3  |
| Short Circuit Current (Isc/A)     | 14.25            | 11.49 | 14.17            | 11.42 | 14.09            | 11.36 | 14.01            | 11.30 | 13.93            | 11.23 |
| Module Efficiency (%)             | 22.0             |       | 21.8             |       | 21.5             |       | 21.3             |       | 21.0             |       |

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 |

## Packing Configuration

|                          |                   |
|--------------------------|-------------------|
| Container                | 40' HC            |
| Pieces per pallet        | 36                |
| Pallets per container    | 26                |
| Pieces per container     | 936               |
| Packaging box dimensions | 1755×1120×1255 mm |
| Packaging box weight     | 794 kg            |

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 (430S)

