

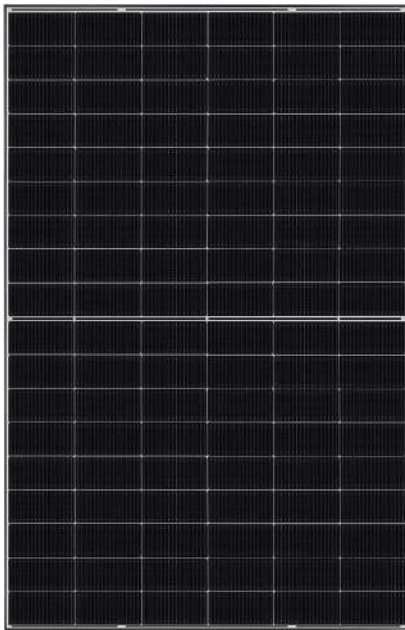
# Ultra T 2.0

HALF-CELL N-TYPE TOPCon

BLACK FRAME MONOFACIAL DOUBLE-GLASS MODULE

TYPE: STPXXXS-H54-Nkh+

**500-520W** **23.4%**  
POWER OUTPUT MAX EFFICIENCY



### High module conversion efficiency

Module efficiency up to **23.4%** achieved through advanced cell technology and manufacturing process



### Multi busbar 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



### 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 \*



ISO 14001

ISO 45001

ISO 9001

SA 8000

IEC TS 62941

IEC 61730-2 (UL790)

Environment Management System

Occupational Health and Safety

Quality Management System

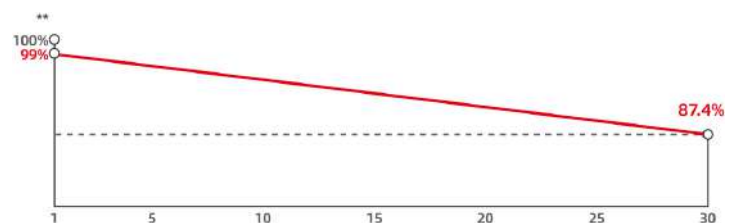
Social Responsibility Standards

Guideline for Module Design

Fire Class C



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



First year power degradation 1% Annual degradation 0.40%

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

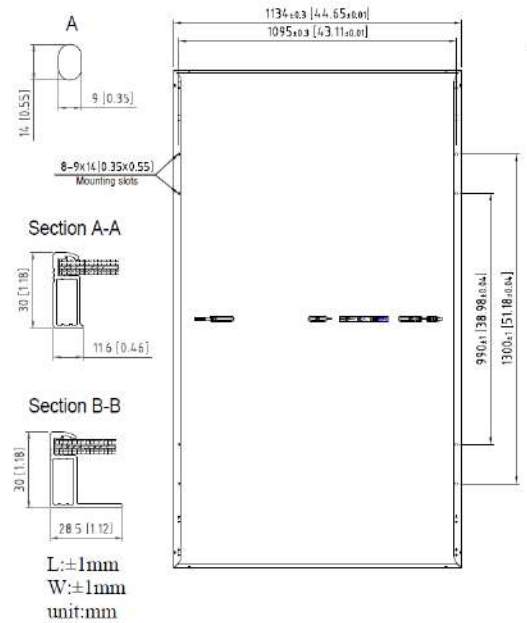
\*\*\* WEEE only for EU market.

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

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

### Mechanical Characteristics

Solar Cell	N-type monocrystalline silicon
No. of Cells	108 (6 × 18)
Dimensions	1961 × 1134 × 30 mm (77.2 × 44.6 × 1.2 inches)
Weight	23.5 kg (51.81lb.)
Front/Back Glass	1.6 + 1.6 mm (0.063 + 0.063 inches) semi-tempered glass
Output Cables	4.0 mm <sup>2</sup> , (-) 1400 mm (+) 1400 mm in length 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) Stäubli PV-KST4-EVO2A/xy, PV-KBT4- EVO2A/xy (Optional)
Maximum Series Fuse Rating	35 A
Power Tolerance	0 ~ + 3%
Frame	Anodized aluminum alloy frame
Packing Configuration	36 pieces per pallet 864 pieces per container / 40'HC 1987 × 1120 × 1255 mm per pallet 893 kg per pallet



### Electrical Characteristics (STC)

Module Type	STP520S-H54-Nkh+	STP515S-H54-Nkh+	STP510S-H54-Nkh+	STP505S-H54-Nkh+	STP500S-H54-Nkh+
Maximum Power (Pmax/W)	520	515	510	505	500
Optimum Operating Voltage (Vmp/V)	34.83	34.62	34.39	34.17	33.95
Optimum Operating Current (Imp/A)	14.93	14.88	14.83	14.78	14.73
Open Circuit Voltage (Voc/V)	41.06	40.89	40.72	40.55	40.38
Short Circuit Current (Isc/A)	15.83	15.78	15.73	15.68	15.63
Module Efficiency (%)	23.4	23.2	22.9	22.7	22.5

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

### 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 (505W)

