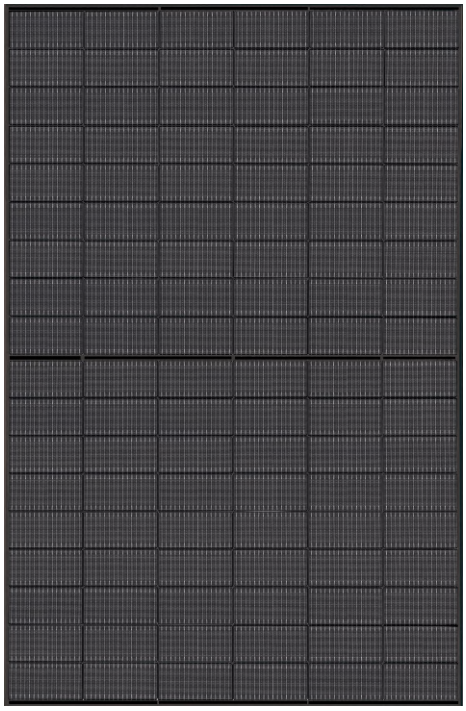
SUNTECH

Ultra V Pro

HALF-CELL N-Type TOPCon
FULL-BLACK Glass-Glass MONOFACIAL MODULE
TYPE: STPXXXS-H54-Nfb+

490-510W
POWER OUTPUT

22.9%
MAX EFFICIENCY



Aesthetic appearance design

Elegant design in all-black appearance, harmonious integra-tion with the components of the building to provide an intense aesthetic experience

Lightweight double glass

Lightweight double glass structure which effectively reduces the rate of module breakage. The ideal module size and weight make handling and installation easier

Withstand harsh environments

Reliable quality that makes module resistant even to high tempera-tures, salt water and ammonia

Superior load-bearing capability

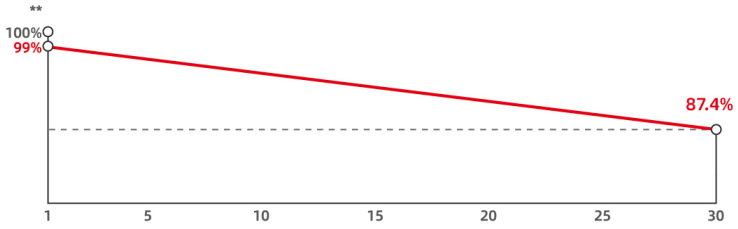
Module certified to withstand **5400 Pa** front side max static test load and **2400 Pa** rear side max static test load.*

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

30 years of linear warranty

25 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.

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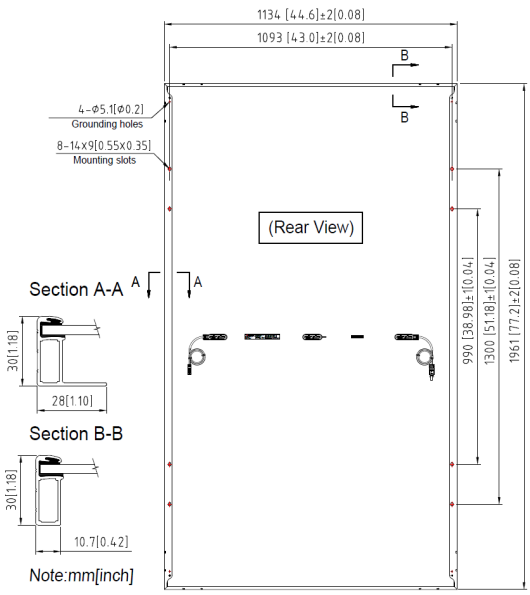
Ultra V Pro STPXXXS-H54-Nfb+ 490-510W

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 mm², (-) 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)/ 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 864 pieces per container /40'HC 1987×1120×1255 mm per pallet 893 kg per pallet

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



Electrical Characteristics (STC)

Module Type	STP510S-H54-Nfb+	STP505S-H54-Nfb+	STP500S-H54-Nfb+	STP495S-H54-Nfb+	STP490S-H54-Nfb+
Maximum Power (Pmax/W)	510	505	500	495	490
Optimum Operating Voltage (Vmp/V)	33.70	33.50	33.30	33.10	32.90
Optimum Operating Current (Imp/A)	15.13	15.07	15.02	14.95	14.89
Open Circuit Voltage (Voc/V)	40.54	40.33	40.12	39.91	39.70
Short Circuit Current (Isc/A)	15.95	15.91	15.87	15.83	15.79
Module Efficiency (%)	22.9	22.7	22.5	22.3	22.0

STC: Irradiance 1000 W/m², 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)