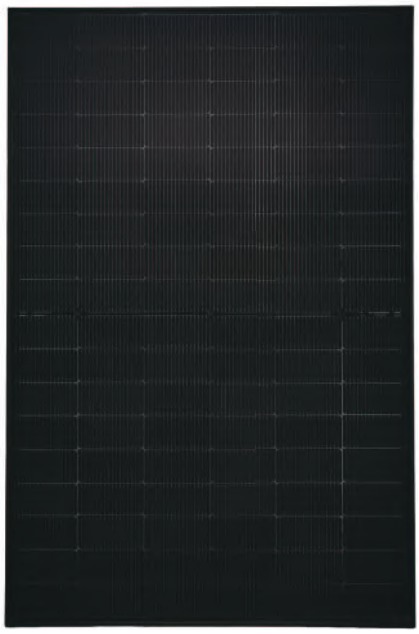
SUNTECH

UltraV Pro mini

HALF-CELL N-Type TOPCon
TRANSPARENT BLACK Glass-Glass BIFACIAL MODULE
TYPE: STPXXXS-C54/Nshtb+



430-450W
POWER OUTPUT

23.0%
MAX EFFICIENCY

Aesthetic appearance design
Elegant design in all-black appearance, harmonious integration 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 temperatures, salt water and ammonia

Superior load-bearing capability
Module certified to withstand **6000 Pa** front side max static test load and **3800 Pa** rear side max static test load *

EUPD RESEARCH TOP BRAND PV MODULES 2024

TOP PERFORMER 2024 kiwa PV MODULE RELIABILITY SCORECARD

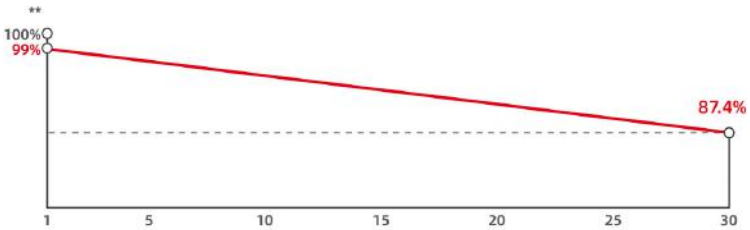
Tier1 Bloomberg NEW ENERGY FINANCE

ISO 14001	Environment Management System	IEC 61701	Salt-mist Certification
ISO 45001	Occupational Health and Safety	IEC 62716	Ammonia Certification
ISO 9001	Quality Management System	IEC 60068-2-68	Dust and Sand
SA 8000	Social Responsibility Standards	IEC 61730-2 (UL790)	Fire Class C
IEC TS 62941	Guideline for Module Design		

CE *** VDE

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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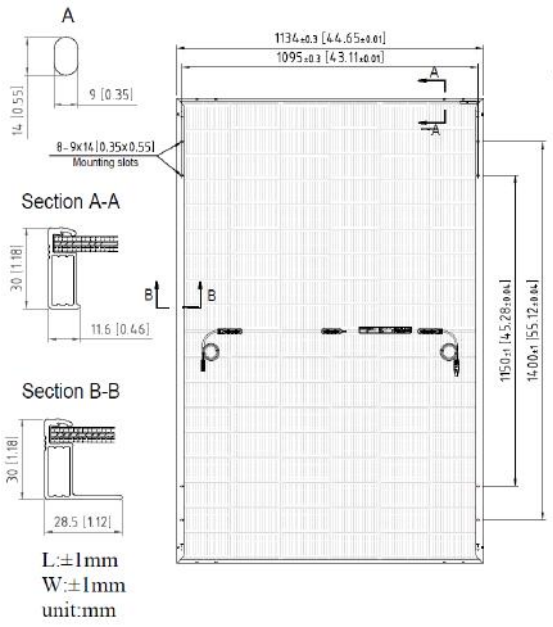
Ultra V Pro STPXXXS-C54/Nshtb+ 430-450W

Mechanical Characteristics

Solar Cell	N-type monocrystalline silicon
No. of Cells	108 (6 × 18)
Dimensions	1722 × 1134 × 30 mm (67.8 × 44.6 × 1.2 inches)
Weight	21.0 kg (46.3 lbs.)
Front/Back Glass	1.6 + 1.6 mm (0.063 + 0.063inches) 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	25 A
Power Tolerance	0 ~ + 3%
Refer. Bifaciality Factor	(80 ± 5)%
Frame	Anodized aluminum alloy frame
Packing Configuration	36 pieces per pallet 936 pieces per container /40'HC 1755×1120×1255 mm per pallet 794 kg per pallet



Electrical Characteristics (STC)

Module Type	STP450S-C54/Nshtb+	STP445S-C54/Nshtb+	STP440S-C54/Nshtb+	STP435S-C54/Nshtb+	STP430S-C54/Nshtb+
Maximum Power (Pmax/W)	450	445	440	435	430
Optimum Operating Voltage (Vmp/V)	33.04	32.87	32.69	32.51	32.33
Optimum Operating Current (Imp/A)	13.62	13.54	13.46	13.38	13.30
Open Circuit Voltage (Voc/V)	39.24	39.11	38.98	38.85	38.72
Short Circuit Current(Isc/A)	14.57	14.49	14.41	14.33	14.25
Module Efficiency(%)	23.0	22.8	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%;

Electrical Characteristics (BNPI)

Maximum Power (Pmax/W)	499	493	488	482	476
Optimum Operating Voltage (Vmp/V)	33.00	32.80	32.60	32.40	32.20
Optimum Operating Current (Imp/A)	15.12	15.03	14.97	14.88	14.78
Open Circuit Voltage (Voc/V)	39.45	39.32	39.19	39.06	38.93
Short Circuit Current(Isc/A)	16.14	16.05	15.97	15.88	15.79

BNPI: Irradiance frontside 1000 W/m2, backside 135 W/m2, module temperature 25 °C, AM=1.5; Bifaciality coefficient (±5%): ϕPmax=80%, ϕVoc=99%, ϕIsc=80%.

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 (435W)