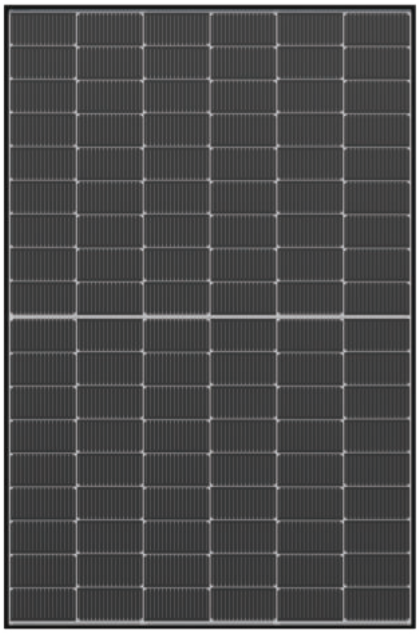
SUNTECH

Ultra V Pro mini

HALF-CELL N-Type TOPCon MONOFACIAL MODULE

TYPE: STPXXXS - C54/Nshm



425-445W
POWER OUTPUT

22.8%
MAX EFFICIENCY

High module conversion efficiency
Module efficiency up to **22.8%** 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

Extended wind and snow load tests
Module certified to withstand extreme wind (**2400** Pascal) and snow loads (**5400** Pascal)*

EUPD RESEARCH TOP BRAND PV MODULES 2024 (POLAND) · 2024 (MIDDLE EAST, NORTH AFRICA) · 2024 (ITALY) · 2024 (AUSTRALIA) · 2024 (CZECH REPUBLIC)

TOP PERFORMER 2024 kiwa PVEL PV MODULE RELIABILITY SCORECARD

Tier 1 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 · TÜV · DVE · *** · Munich RE

30 years of linear warranty
25 years of product warranty

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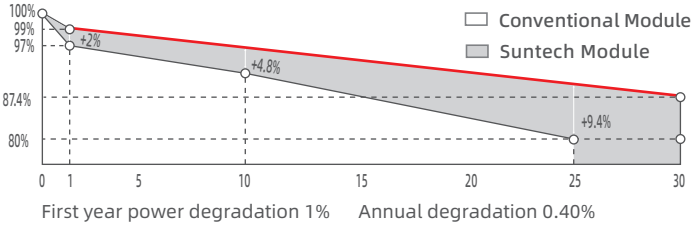


First year power degradation 1% Annual degradation 0.40%

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

*** WEEE only for EU market.

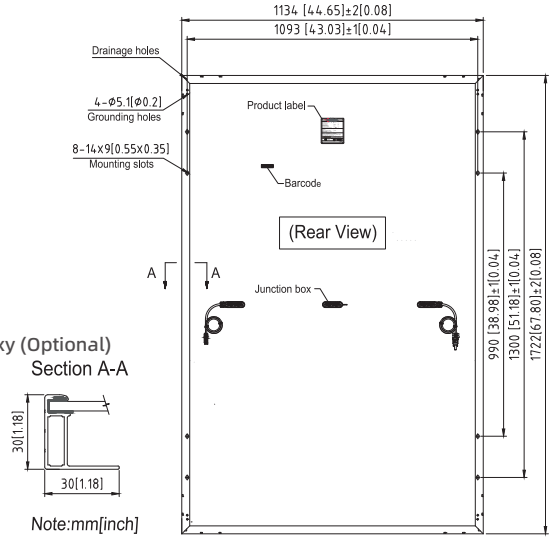
** Please refer to Suntech Limited Warranty for details.

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

Ultra V Pro STPXXXS - C54/Nshm 425-445W

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 kg (46.3 lbs.)
Front Glass	3.2 mm (0.126 inches) fully tempered glass
Output Cables	4.0 mm², (-) 1400mm (+) 1400 mm in length 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	Wuxi Suntech STP-XC4-4 (Default)/ Staubli PV-KST4-EVO2A/xy (Optional)
Maximum Series Fuse Rating	25 A
Power Tolerance	0/+5 W
Frame	Anodized aluminum alloy frame
Packing Configuration	36 Pieces per pallet 936 Pieces per container /40'HC 1755×1120×1255mm 794kg



Electrical Characteristics

Module Type	STP445S-C54/Nshm		STP440S-C54/Nshm		STP435S-C54/Nshm		STP430S-C54/Nshm		STP425S-C54/Nshm	
Testing Condition	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT
Maximum Power (Pmax/W)	445	341	440	337	435	333	430	329	425	326
Optimum Operating Voltage (Vmp/V)	32.87	30.70	32.69	30.50	32.51	30.40	32.33	30.20	32.15	30.10
Optimum Operating Current (Imp/A)	13.54	11.11	13.46	11.04	13.38	10.96	13.30	10.89	13.22	10.82
Open Circuit Voltage (Voc/V)	39.11	37.10	38.98	37.00	38.85	36.90	38.72	36.80	38.59	36.70
Short Circuit Current(Isc/A)	14.49	11.68	14.41	11.62	14.33	11.55	14.25	11.49	14.17	11.42
Module Efficiency(%)	22.8		22.5		22.3		22.0		21.8	

STC: Irradiance 1000 W/m², module temperature 25 °C, AM=1.5; NMOT: Irradiance 800 W/m², ambient temperature 20 °C, AM=1.5, wind speed 1 m/s; Measuring tolerance of Pmax, Voc, Isc is within +/- 3%;

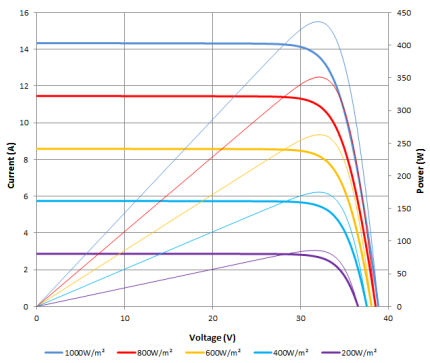
Temperature Characteristics

Nominal Module Operating Temperature (NMOT)	42 ± 2 °C
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 Curve (445W)



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