





HALF-CELL N-Type TOPCon FULL-BLACK MONOFACIAL MODULE

TYPE: STPXXXS - C54/Nshb

420-440W 22.5%

POWER OUTPUT

MAX EFFICIENCY

IEC 61730-2 (UL790) fire class C

Conventional Suntech Module



Multi busbar technology
Superior optical utilization and current collection capability, effectively improving product power and reliability



Aesthetic appearance design

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



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 (3800 Pascal) and snow loads (6000 Pascal)*













ISO 9001 Quality Management System SA 8000 Social Responsibility Standards IEC TS 62941Guideline for Module Design



100%

ISO 14001

ISO 45001







Environment Management System

Occupational Health and Safety



15

First year power degradation 1% Annual degradation 0.40%

30 years of linear warranty

25 years of product warranty



^{**} Please refer to Suntech Limited Warranty for details. Please refer to Suntech Standard Module Installation Manual for details

^{***} WEEE only for EU market.

^{****} Suntech reserves the right to the final.

^{*****} The holder of this certification is Wuxi Suntech Power Co., Ltd.





Mechanical Characteristics

Solar Cell	N-type Monocrystalline silicon 182 mm		1134 [44.65]±2[0.08]	
No. of Cells	108 (6 × 18)	_	1093 [43.03]±1[0.04]	-
Dimensions	1722 × 1134 × 30 mm (67.8 × 44.6 × 1.2 inches)	Drainage holes		<u></u>
Weight	21.0 kgs (46.3 lbs.)	4-\$5.1[\$0.2]	Product label —	fl i
Front Glass	3.2 mm (0.126 inches) fully tempered glass	- Grounding holes - 8-14x9[0.55x0.35]		1
Output Cables	4.0 mm², (-) 350 mm (+) 160 mm in length or customized length	8-14X9(0.55X0.35) Mounting slots	Barcode	
Junction Box	IP68 rated (3 bypass diodes)	_	(Rear View)	7778
Operating Module Temperature	-40 °C to +85 °C	A	Junction box	990 [38.98]±1[0.04] 1300 [51.18]±1[0.04] 1722[67.80]±2[0.08]
Maximum System Voltage	1500 V DC (IEC)	_	6 3	51.18]:
Connectors	MC4-EVO2 Stäubli	_	P	990 [3 1300 [
Maximum Series Fuse Rating	25 A	Section A-A		
Power Tolerance	0/+5 W			
Frame	Anodized aluminum alloy frame	30[1.18]	1	
Packing Configuration	36 Pieces per pallet 936 Pieces per container /40'HC 1755×1120×1255 794kg	Note:mm[inch]		

Electrical Characteristics

Module Type	STP440S-	C54/Nshb	STP435S-	C54/Nshb	STP430S-	C54/Nshb	STP425S-	C54/Nshb	STP420S-	C54/Nshb
Testing Condition	STC	NMOT								
Maximum Power (Pmax/W)	440	336.4	435	332.5	430	328.7	425	325.0	420	321.1
Optimum Operating Voltage (Vmp/V)	32.69	30.5	32.51	30.3	32.33	30.2	32.15	30.0	31.96	29.9
Optimum Operating Current (Imp/A)	13.46	11.03	13.38	10.96	13.30	10.89	13.22	10.82	13.14	10.75
Open Circuit Voltage (Voc/V)	38.98	37.0	38.85	36.9	38.72	36.8	38.59	36.6	38.46	36.5
Short Circuit Current (Isc/A)	14.41	11.62	14.33	11.55	14.25	11.49	14.17	11.42	14.09	11.36
Module Efficiency (%)	22	2.5	22	2.3	22	2.0	2	1.8	2	1.5

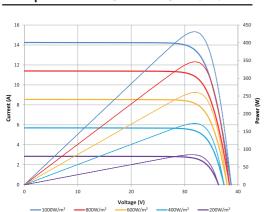
STC: Irradiance 1000 W/m², module temperature 25 °C, AM=1.5; NMOT: Irradiance 800 W/m², ambient temperature 20 °C, AM=1.5, wind speed 1 m/s; Tolerance of Pmax is within +/- 3%;

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 (430W)



Information bar

