



## HALF-CELL N-Type TOPCon BIFACIAL MODULE

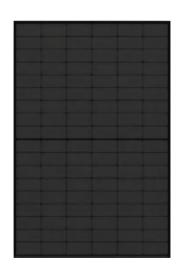
TYPE: STPXXXS - C54/Nshb+

**POWER OUTPUT** 

**MAX EFFICIENCY** 

415-435W

22.3%



#### **Features**



### High module conversion efficiency

Module efficiency up to 22.3 % achieved through advanced cell technology and manufacturing process.



### Lower operating temperature

Lower operating temperature and temperature coefficient increases the power output.



### Zero LID degradation

Zero LID performance with N-type cells which grately enhances module power.



### Extended wind and snow load tests

Module certified to withstand extreme wind (3800 Pascal) and snow loads (6000 Pascal) .\*



#### No grounded

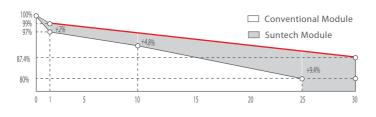
Designed with frame insulation, grounding-free at module end, no risk of electric shock, more suitable for household use.



### Matched for the roof Perfectly

Elegant all-black, outstanding design.

### Industry-leading Warranty \*



- ◆ First year power degradation: 1%
- ◆ 30 years of linear warranty
- ◆ Annual degradation: 0.40%
- 25 years of product warranty

### Certifications and Standards

IEC 61730 IEC 61215 SA 8000 Social Responsibility Standards ISO 9001 Quality Management System ISO 14001 Environment Management System ISO 45001 Occupational Health and Safety





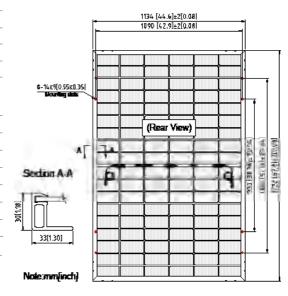
<sup>\*</sup> Please refer to Suntech Standard Module Installation Manual for details \*\* Please refer to Suntech Limited Warranty for details.



# Ultra V Pro STPXXXS - C54/Nshb+ 415-435W

### **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	21.9 kgs (48.3 lbs.)	
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 +85 °C	
Maximum System Voltage	1500 V DC (IEC)	
Connectors	Genuine MC4 EVO2, Suntech STP-XC4-4	
Fire Class Rating	C in accordance with UL 790	
Maximum Series Fuse Rating	25 A	
Power Tolerance	0/+5 W	
Refer. Bifaciality Factor	(80 ± 5)%	
Packing Configuration	Packaging box dimensions (mm): 1755×1120×1255 Packaging box weight (kg): 826 36 Pieces per pallet 936 Pieces per container / 40' HC	



### **Electrical Characteristics**

Module Type	STP <b>435</b> S-0	C54/Nshb+	STP <b>430</b> S-0	C54/Nshb+	STP <b>425</b> S-	C54/Nshb+	STP <b>420</b> S-0	C54/Nshb+	STP <b>415</b> S-	C54/Nshb+
Testing Condition	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT
Maximum Power (Pmax/W)	435	332.5	430	328.7	425	325.0	420	321.1	415	317.3
Optimum Operating Voltage (Vmp/V)	32.51	30.3	32.33	30.2	32.15	30.0	31.96	29.9	31.78	29.7
Optimum Operating Current (Imp/A)	13.38	10.96	13.30	10.89	13.22	10.82	13.14	10.75	13.06	10.68
Open Circuit Voltage (Voc/V)	38.85	36.9	38.72	36.8	38.59	36.6	38.46	36.5	38.33	36.4
Short Circuit Current (Isc/A)	14.33	11.55	14.25	11.49	14.17	11.42	14.09	11.36	14.01	11.30
Module Efficiency (%)	22	2.3	22	2.0	2	1.8	2	1.5	2	1.3

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; Tolerances of Pmax, Voc and Isc are within +/- 3%

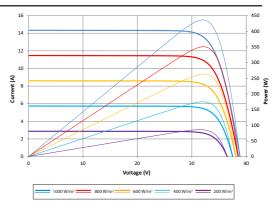
### Different Rearside Power Gain Reference to 4205 Front

Rearside Power Gain	5%	15%	25%
Maximum Power at STC (Pmax)	441.0	483.0	525.0
Optimum Operating Voltage (Vmp/V)	32.0	32.0	32.1
Optimum Operating Current (Imp/A)	13.80	15.11	16.43
Open Circuit Voltage (Voc/V)	38.5	38.5	38.6
Short Circuit Current (Isc/A)	14.79	16.20	17.61
Module Efficiency (%)	22.6	24.7	26.9

### **Temperature Characteristics**

Nominal Module Operating Temperature (NMOT)	42 ± 2 °C
Temperature Coefficient of Pmax	-0.30%/°C
Temperature Coefficient of Voc	-0.25%/°C
Temperature Coefficient of Isc	0.046%/°C

### Graphs Current-Voltage & Power-Voltage (435)



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.