



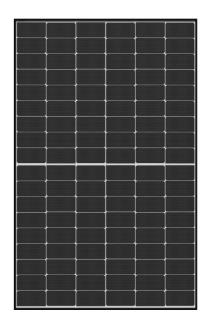
# HALF-CELL MONOFACIAL MODULE

TYPE: STPXXXS - C54/Umhm

**POWER OUTPUT** 

**MAX EFFICIENCY** 

395-415W 21.3%



## **Features**



#### High module conversion efficiency

Module efficiency up to 21.3% achieved through advanced cell technology and manufacturing process



## Lower operating temperature

Lower operating temperature and temperature coefficient increases the power output



## Suntech current sorting process

Up to **2%** power loss caused by current mismatch could be diminished by current sorting technique to maximize system power output



#### Extended wind and snow load tests

Module certified to withstand extreme wind (3800 Pascal) and snow loads (6000 Pascal)  $^{\ast}$ 



## Excellent weak light performance

More power output in weak light condition, such as cloudy, morning and sunset



## Withstanding harsh environment

Reliable quality leads to a better sustainability even in harsh environment like desert, farm and coastline

## Industry-leading Warranty \*\*



## Certifications and Standards

CE 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
IEC TS 62941 Guideline for Module Design
Qualification and Type Approval





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

<sup>\*\*</sup> Please refer to Suntech Limited Warranty for details

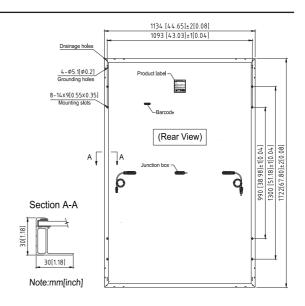
<sup>\*\*\*</sup> WEEE only for EU market.





## **Mechanical Characteristics**

Solar Cell	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 kgs (46.3 lbs.)
Front Glass	3.2 mm (0.126 inches) fully tempered glass
Output Cables	4.0 mm², (-) 350 mm (+) 160 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)
Maximum Series Fuse Rating	25 A
Power Tolerance	0/+5 W



## **Electrical Characteristics**

Module Type	STP <b>415</b> S-0	C54/Umhm	STP <b>410</b> S-0	C54/Umhm	STP <b>405</b> S-0	C54/Umhm	STP <b>400</b> S-0	C54/Umhm	STP <b>395</b> S-0	C54/Umhm
Testing Condition	STC	NMOT								
Maximum Power (Pmax/W)	415	313.8	410	309.6	405	306.0	400	302.3	395	298.6
Optimum Operating Voltage (Vmp/V)	31.81	29.3	31.59	29.2	31.38	29.0	31.18	28.8	30.98	28.6
Optimum Operating Current (Imp/A)	13.05	10.71	12.98	10.62	12.91	10.56	12.83	10.50	12.76	10.44
Open Circuit Voltage (Voc/V)	37.67	35.4	37.45	35.2	37.24	35.0	37.04	34.8	36.84	34.6
Short Circuit Current (Isc/A)	13.95	11.25	13.88	11.16	13.81	11.10	13.73	11.04	13.66	10.98
Module Efficiency (%)	2	1.3	2	1.0	2	0.7	20	0.5	20	0.2

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 ℃
Temperature Coefficient of Pmax	-0.34%/°C
Temperature Coefficient of Voc	-0.26%/°C
Temperature Coefficient of Isc	0.050%/℃

# **Packing Configuration**

Container	40 ′ HC
Pieces per pallet	36
Pallets per container	26
Pieces per container	936
Packaging box dimensions	1755×1120×1255 mm
Packaging box weight	794 kg

# Graphs

