

Ultra-V Series

108 HALF-CELL MONOFACIAL MODULE

390-410W

STPXXS - C54/Umh



Features



High module conversion efficiency

Module efficiency up to 21.0% achieved through advanced cell technology and manufacturing process



High PID resistant

Advanced cell technology and qualified materials lead to high resistance to PID



Excellent weak light performance

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



Lower operating temperature

Lower operating temperature and temperature coefficient increases the power output



Extended load tests

Module certified to withstand front side maximum static test load (5400 Pascal) and rear side maximum static test loads (2400 Pascal) *



Withstanding harsh environment

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

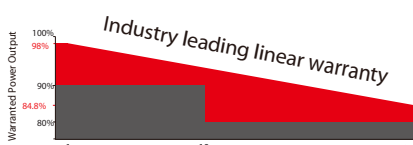
Certifications and standards:
IEC 61215, IEC 61730, conformity to CE



Trust Suntech to Deliver Reliable Performance Over Time

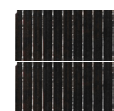
- World-class manufacturer of crystalline silicon photovoltaic modules
- Unrivaled manufacturing capacity and world-class technology
- Rigorous quality control meeting the highest international standards: ISO 9001, ISO 14001 and ISO17025
- Regular independently checked production process from international accredited institute/company
- Tested for harsh environments (salt mist, ammonia corrosion and sand blowing testing: IEC 61701, IEC 62716, DIN EN 60068-2-68)*****
- Long-term reliability tests
- 2 x 100% EL inspection ensuring defect-free modules

Industry-leading Warranty based on nominal power



- 98% in the first year, thereafter, for years two (2) through twenty-five (25), 0.55% maximum decrease from MODULE's nominal power output per year, ending with the 84.8% in the 25th year after the defined WARRANTY STARTING DATE.*****
- 12-year product warranty
- 25-year linear performance warranty

Special Cell Design



MBB technology decreases the distance between bus bars and finger grid line which is benefit to power increase. Half-cell aims to eliminate the cell gap to increase module efficiency.

IP68 Rated Junction Box



The Suntech IP68 rated junction box ensures an outstanding waterproof level, supports installations in all orientations and reduces stress on the cables. High reliable performance, low resistance connectors ensure maximum output for the highest energy production.

* Please refer to Suntech Standard Module Installation Manual for details. ** Suntech reserves the right to the final interpretation of the warranty by Munich Re.

WEEE only for EU market. * Please refer to Suntech Product Near-coast Installation Manual for details.

***** Please refer to Suntech Product Warranty for details.

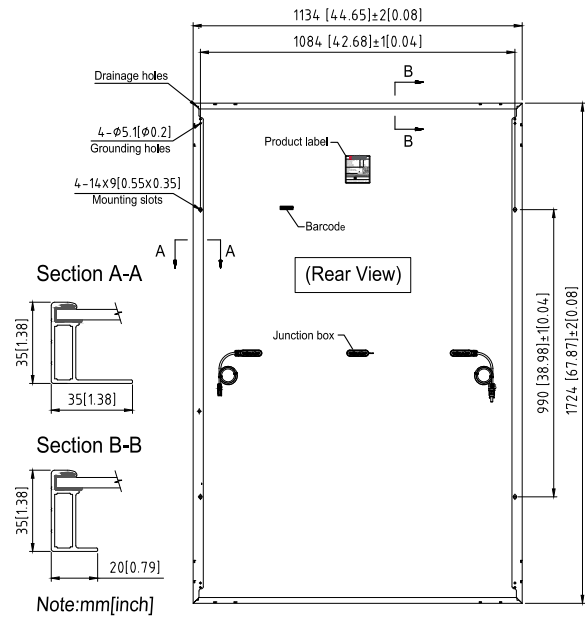
Electrical Characteristics

STC	STPXXXS-C54/Umh				
Maximum Power at STC (Pmax)	410W	405W	400W	395W	390W
Optimum Operating Voltage (Vmp)	31.59V	31.38V	31.18V	30.98V	30.76V
Optimum Operating Current (Imp)	12.98A	12.91A	12.83A	12.76A	12.69A
Open Circuit Voltage (Voc)	37.45V	37.24V	37.04V	36.84V	36.62V
Short Circuit Current (Isc)	13.88A	13.81A	13.73A	13.66A	13.59A
Module Efficiency	21.0%	20.7%	20.5%	20.2%	19.9%
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				

STC: Irradiance 1000 W/m², module temperature 25 °C, AM=1.5;
Tolerance of Pmax is within +/- 3%.

NMOT	STPXXXS-C54/Umh																
Maximum Power at NMOT (Pmax)	309.6W	306.0W	302.3W	298.6W	294.9W												
Optimum Operating Voltage (Vmp)	29.2V	29.0V	28.8V	28.6V	28.4V												
Optimum Operating Current (Imp)	10.62A	10.56A	10.50A	10.44A	10.38A </tr <tr> <td>Open Circuit Voltage (Voc)</td> <td>35.2V</td> <td>35.0V</td> <td>34.8V</td> <td>34.6V</td> <td>34.4V</td> </tr> <tr> <td>Short Circuit Current (Isc)</td> <td>11.16A</td> <td>11.10A</td> <td>11.04A</td> <td>10.98A</td> <td>10.93A</td> </tr>	Open Circuit Voltage (Voc)	35.2V	35.0V	34.8V	34.6V	34.4V	Short Circuit Current (Isc)	11.16A	11.10A	11.04A	10.98A	10.93A
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NMOT: Irradiance 800 W/m², ambient temperature 20 °C, AM=1.5, wind speed 1 m/s.



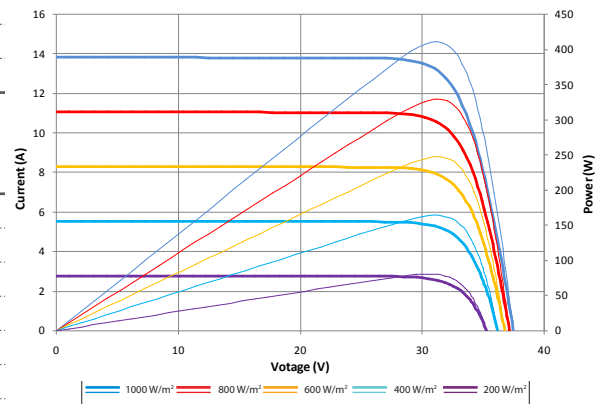
Temperature Characteristics

Nominal Module Operating Temperature (NMOT)	42 ± 2 °C
Temperature Coefficient of Pmax	-0.36%/°C
Temperature Coefficient of Voc	-0.304%/°C
Temperature Coefficient of Isc	0.050%/°C

Mechanical Characteristics

Solar Cell	Monocrystalline silicon 182 mm
No. of Cells	108 (6 × 18)
Dimensions	1724 × 1134 × 35 mm (67.9 × 44.6 × 1.4 inches)
Weight	22.1 kgs (48.7 lbs.)
Front Glass	3.2 mm (0.126 inches)
Frame	Anodized aluminium alloy
Junction Box	IP68 rated (3 bypass diodes)
Output Cables	4.0 mm ² , Portrait: (-)350 mm and (+)160 mm in length Landscape: (-)1400 mm and (+)1400 mm in length or customized length
Connectors	MC4 EVO2, Cable 01S

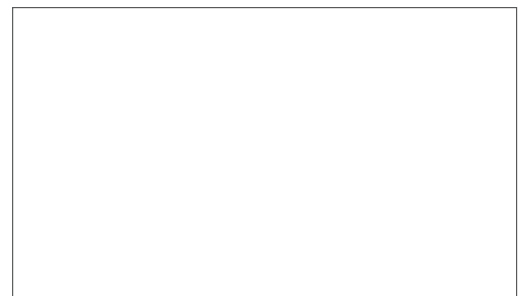
Current-Voltage & Power-Voltage Curve (410S)



Packing Configuration

Container	20' GP	40' HC
Pieces per pallet	31	31
Pallets per container	6	26
Pieces per container	186	806
Packaging box dimensions	1755×1130×1245 mm	
Packaging box weight	735 kg	

Dealer information



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.