

# Ultra V mini

## HALF-CELL MONOFACIAL MODULE

TYPE: STPXXXS - C54/Uhm



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) \*

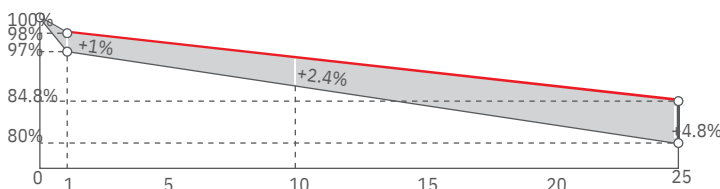


**Excellent weak light performance**  
 More power output in weak light condition, such as cloudy, morning and sunset



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

### Industry-leading Warranty \*\*



- ◆ First year power degradation: 2%
- ◆ Annual degradation: 0.55%
- ◆ Product warranty: 15 years
- ◆ linear warranty: 25 years

### Certifications and Standards

CE IEC 61730 IEC 61215  
 SA 8000  
 ISO 9001  
 ISO 14001  
 ISO 45001 Occupational Health and Safety IEC TS 62941

Social Responsibility Standards  
 Quality Management System  
 Environment Management System

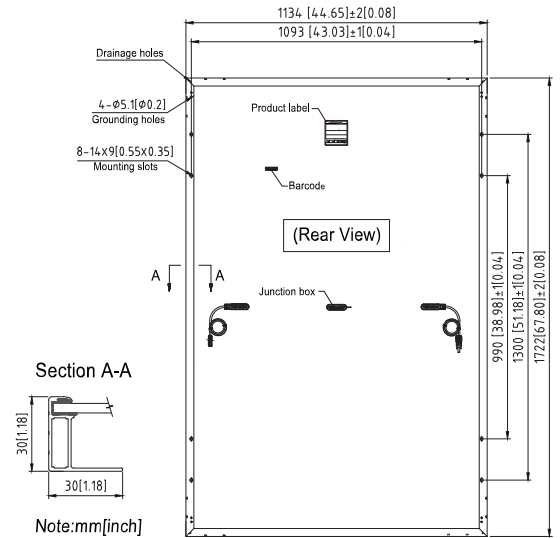
Guideline for module design qualification and type approval



\* 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 interpretation of the warranty by Munich Re.

## 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 mm <sup>2</sup> , (-) 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	MC4 EVO2
Maximum Series Fuse Rating	25 A
Power Tolerance	0/+5 W



## Electrical Characteristics

Module Type	STP415S-C54/Umhm	STP410S-C54/Umhm	STP405S-C54/Umhm	STP400S-C54/Umhm	STP395S-C54/Umhm
Testing Condition	STC NMOT	STC NMOT	STC NMOT	STC NMOT	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 (%)	21.3	21.0	20.7	20.5	20.2

STC: Irradiance 1000 W/m<sup>2</sup>, module temperature 25 °C, AM=1.5; NMOT: Irradiance 800 W/m<sup>2</sup>, ambient temperature 20 °C, AM=1.5, wind speed 1 m/s; Tolerance of Pmax is within +/- 3%;

## Temperature Characteristics

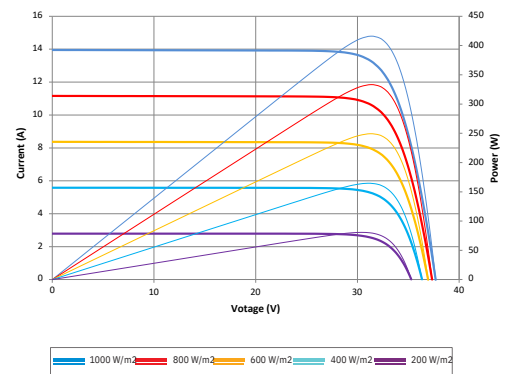
Nominal Module Operating Temperature (NMOT)	42 ± 2 °C
Temperature Coefficient of Pmax	-0.34%/°C
Temperature Coefficient of Voc	-0.26%/°C
Temperature Coefficient of Isc	0.050%/°C

## Packing Configuration

Container	40' HC
Pieces per pallet	36
Pallets per container	26
Pieces per container	936
Packaging box dimensions	1755×1130×1255 mm
Packaging box weight	794 kg

## Graphs

Current-Voltage & Power-Voltage Curve (415S)



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.