

1300 997 772



# Solar

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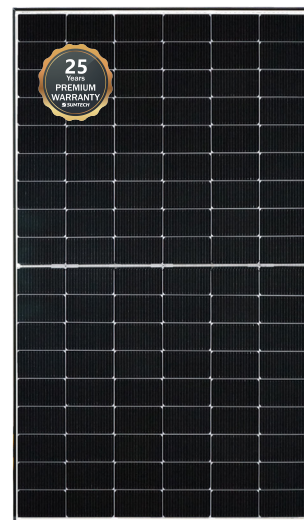
# SUNTECH

# Imperium

## Ultra V Pro mini

### HALF-CELL N-Type TOPCon MONOFACIAL MODULE

TYPE: STPXXXS - C54/Nshm



POWER OUTPUT                      MAX EFFICIENCY

# 415W                      22.0%

### 25 Yr Full Product & Output Warranty

#### Features



**High module conversion efficiency**  
Module efficiency up to **22.0%** 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) \*

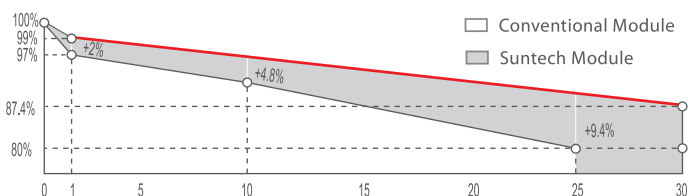


**Excellent weak light performance**  
More power output in weak light condition, such as cloudy, morning and sunset



**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: 1%
- ◆ Annual degradation: 0.40%
- ◆ Product warranty: 25years
- ◆ linear warranty: 25 years

#### 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



Munich RE \*\*\*\*

\* Please refer to Suntech Standard Module Installation Manual for details.  
\*\* Please refer to Suntech Limited Warranty for details.

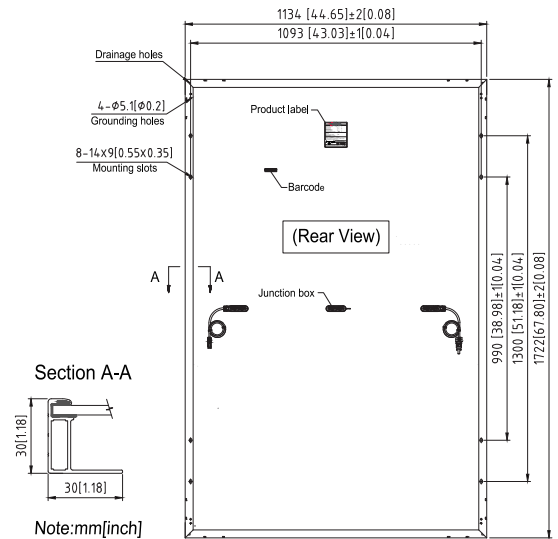
\*\*\*\* Suntech reserves the right to the final interpretation of the warranty by Munich Re.

\*\*\* WEEE only for EU market.  
made in China

# Ultra V Pro STPXXXS - C54/NshM 415w

## 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	21.0 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	Genuine MC4 EVO2, Suntech STP-XC4
Fire Class Rating	C in accordance with UL 790
Maximum Series Fuse Rating	25 A
Power Tolerance	0/+5 W



## Electrical Characteristics

Module Type	STP430S-C54/NshM		STP425S-C54/NshM		STP420S-C54/NshM		STP415S-C54/NshM		STP410S-C54/NshM	
	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT
Maximum Power (P <sub>max</sub> /W)	430	328.7	425	325.0	420	321.1	415	317.3	410	313.5
Optimum Operating Voltage (V <sub>mp</sub> /V)	32.33	30.2	32.15	30.0	31.96	29.9	31.78	29.7	31.59	29.6
Optimum Operating Current (I <sub>mp</sub> /A)	13.30	10.89	13.22	10.82	13.14	10.75	13.06	10.68	12.98	10.60
Open Circuit Voltage (V <sub>oc</sub> /V)	38.72	36.8	38.59	36.6	38.46	36.5	38.33	36.4	38.20	36.3
Short Circuit Current (I <sub>sc</sub> /A)	14.25	11.49	14.17	11.42	14.09	11.36	14.01	11.30	13.93	11.23
Module Efficiency (%)	22.0		21.8		21.5		21.3		21.0	

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; Tolerances of P<sub>max</sub>, V<sub>oc</sub> and I<sub>sc</sub> are within +/- 3%.

## Temperature Characteristics

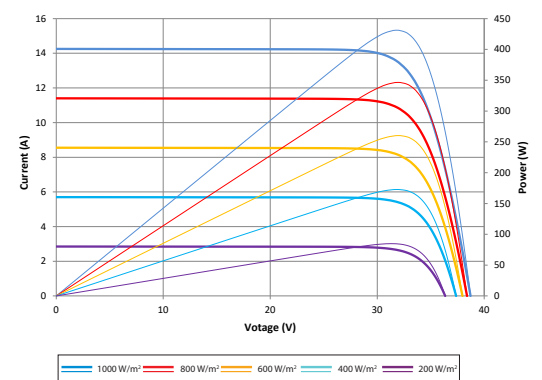
Nominal Module Operating Temperature (NMOT)	42 ± 2 °C
Temperature Coefficient of P <sub>max</sub>	-0.30%/°C
Temperature Coefficient of V <sub>oc</sub>	-0.25%/°C
Temperature Coefficient of I <sub>sc</sub>	0.046%/°C

## 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

Current-Voltage & Power-Voltage Curve (430S)



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.