

# Ultra V mini

## HALF-CELL MONOFACIAL MODULE

TYPE: STPXXXS - C54/Umhm



POWER OUTPUT

**415W**

MAX EFFICIENCY

**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

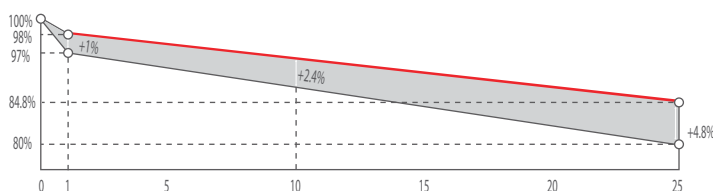
More power output in weak light condition, such as cloudy, morning and sunset



#### 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 Social Responsibility Standards  
ISO 9001 Quality Management System  
ISO 14001 Environment Management System  
ISO 45001 Occupational Health and Safety

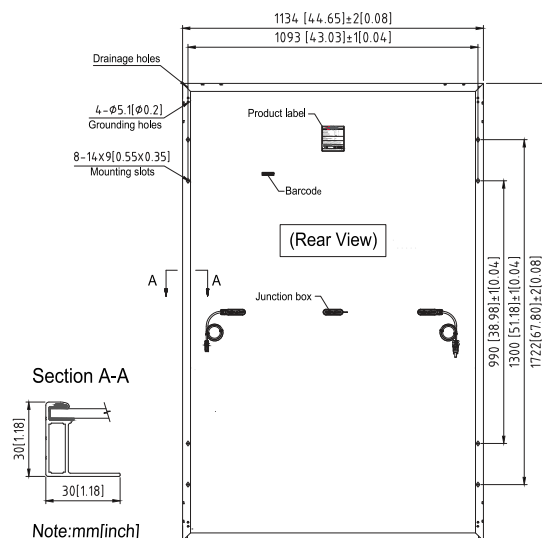


Munich RE 

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



## Electrical Characteristics

Module Type	STP415S-C54/Uhmh	
Testing Condition	STC	NMOT
Maximum Power (P <sub>max</sub> /W)	415	313.8
Optimum Operating Voltage (V <sub>mp</sub> /V)	31.81	29.3
Optimum Operating Current (I <sub>mp</sub> /A)	13.05	10.71
Open Circuit Voltage (V <sub>oc</sub> /V)	37.67	35.4
Short Circuit Current (I <sub>sc</sub> /A)	13.95	11.25
Module Efficiency (%)	21.3	

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

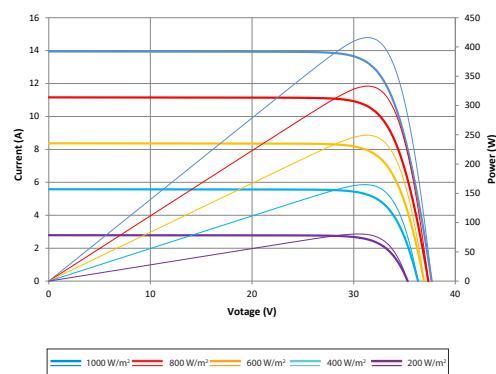
Nominal Module Operating Temperature (NMOT)	42 ± 2 °C
Temperature Coefficient of P <sub>max</sub>	-0.34%/°C
Temperature Coefficient of V <sub>oc</sub>	-0.26%/°C
Temperature Coefficient of I <sub>sc</sub>	0.050%/°C

## Packing Configuration

Container	40 'HC
Pieces per pallet	36
Pallets per container	26
Pieces per container	936
Packaging box dimensions	1755x1130x1255 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.