

Ultra V

HALF-CELL BIFACIAL MODULE

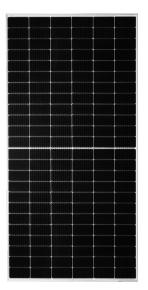
TYPE: STPXXXS - C72/Pmhg

POWER OUTPUT

MAX EFFICIENCY

530-550W

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 (2400 Pascal) and snow loads (5400 Pascal) *



Excellent weak light performance

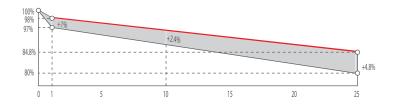
More power output in weak light condition, such as cloudy, morning and sunset



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: 12 years
- ♦ linear warranty: 25 years

Certifications and Standards

IEC 61730 IEC 61215 SA 8000 Social Responsibility Standards ISO 9001 Quality Management System ISO 14001 Environment Management System ISO 45001 Occupational Henlth and Safety IEC TS 62941 Guideline for module design qualification and type approval











^{*} Please refer to Suntech Standard Module Installation Manual for details. ** Please refer to Suntech Limited Warranty for details.

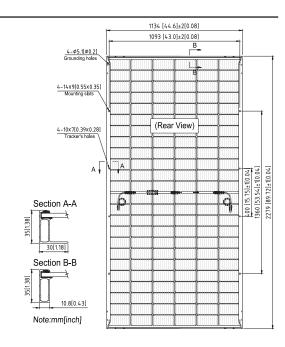




Mechanical Characteristics

Solar Cell	Monocrystalline silicon 166 mm	
No. of Cells	144 (6 × 24)	
Dimensions	2279 × 1134 × 35 mm (89.7 × 44.6 × 1.4 inches)	
Weight	29.1 kgs (64.2 lbs.)	
Front \ Back Glass	3.2 mm (0.126inches) semi-tempered glass	
Output Cables	4.0 mm², (-) 350 mm and (+) 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	
Refer. Bifaciality Factor	(70 ± 5)%	
Packing Configuration	Packaging box dimensions (mm): 2310×1130×1269 Packaging box weight (kg): 965 31 Pieces per pallet 620 Pieces per container / 40 'HC	

For tracker installation, please turn to Suntech for mechanical load information.



Electrical Characteristics

Module Type	STP 550 S-	C72/Pmhg	STP 545 S-	C72/Pmhg	STP 540 S-	C72/Pmhg	STP 535 S-	C72/Pmhg	STP 530 S-	C72/Pmhg
Testing Condition	STC	NMOT								
Maximum Power (Pmax/W)	550	415.0	545	411.5	540	408.0	535	404.3	530	400.6
Optimum Operating Voltage (Vmp/V)	42.05	38.9	41.87	38.7	41.75	38.6	41.57	38.4	41.39	38.2
Optimum Operating Current (Imp/A)	13.08	10.67	13.02	10.63	12.94	10.58	12.87	10.53	12.81	10.47
Open Circuit Voltage (Voc/V)	49.88	46.9	49.69	46.7	49.54	46.5	49.39	46.4	49.24	46.3
Short Circuit Current (Isc/A)	14.01	11.22	13.96	11.18	13.89	11.13	13.83	11.08	13.76	11.02
Module Efficiency (%)	21	1.3	21	1.1	20).9	20).7	20	0.5

 $STC: Irradiance\ 1000\ W/m^2, module\ temperature\ 25\ ^\circ C, AM=1.5; NMOT: Irradiance\ 800\ W/m^2, ambient\ temperature\ 20\ ^\circ C, AM=1.5, wind\ speed\ 1\ m/s; Tolerance\ of\ Pmax\ is\ within\ +/-\ 3\%, ambient\ temperature\ 20\ ^\circ C, AM=1.5; NMOT: Irradiance\ 800\ W/m^2, ambient\ temperature\ 20\ ^\circ C, AM=1.5; Wind\ speed\ 1\ m/s; Tolerance\ of\ Pmax\ is\ within\ +/-\ 3\%, ambient\ temperature\ 20\ ^\circ C, AM=1.5; NMOT: Irradiance\ 800\ W/m^2, ambient\ temperature\ 20\ ^\circ C, AM=1.5; Wind\ speed\ 1\ m/s; Tolerance\ of\ Pmax\ is\ within\ +/-\ 3\%, ambient\ temperature\ 20\ ^\circ C, AM=1.5; NMOT: Irradiance\ 800\ W/m^2, ambient\ temperature\ 20\ ^\circ C, AM=1.5; Wind\ speed\ 1\ m/s; Tolerance\ of\ Pmax\ is\ within\ +/-\ 3\%, ambient\ temperature\ 20\ ^\circ C, AM=1.5; NMOT: Irradiance\ 800\ W/m^2, ambient\ temperature\ 20\ ^\circ C, AM=1.5; Wind\ speed\ 1\ m/s; Tolerance\ 000\ W/m^2, ambient\ 1000\ W/m^2, amb$

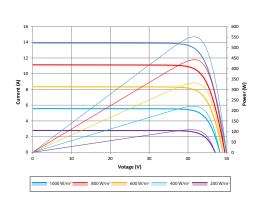
Different Rearside Power Gain Reference to 5405 Front

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Rearside Power Gain	5%	15%	25%
Maximum Power at STC (Pmax)	567	621	675
Optimum Operating Voltage (Vmp/V)	41.8	41.8	41.9
Optimum Operating Current (Imp/A)	13.59	14.88	16.18
Open Circuit Voltage (Voc/V)	49.5	49.5	49.6
Short Circuit Current (Isc/A)	14.58	15.97	17.36
Module Efficiency (%)	21.9	24.0	26.1

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

Graphs Current-Voltage & Power-Voltage (550S)



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.