

PIONEER² 550W

144 Half-cut Bifacial · Transparent Back Sheet ·
10BB Mono Perc
S4A550-144MH10STT



America's Solar Module™

The best U.S.-built solar solution for quality, performance and reliability. S4A products are manufactured on American soil in accordance with the highest quality standards.



10BB Half-Cut Cell Technology

Efficient circuit design, lower internal current, lower RS loss, GA doped wafer



Significantly Lower Risk of Hot Spot

Special circuit design with much lower hot spot temperature



Anti
PID

Excellent Anti-PID Performance

2X industry standard Anti-PID



Lower LCOE

2% more power generation



IP68 Junction Box

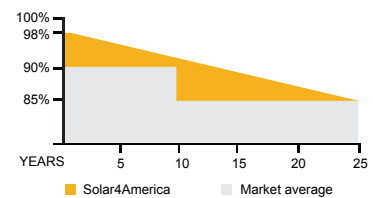
High waterproof level

MODULE EFFICIENCY

21.3%

Linear Power WARRANTY

0.55% year 2-25
Annual Degradation



Solar4America Technology modules are CEC-listed under our parent company name SolarJuice Technology

Solar4America Technology Inc.

WEST COAST FACTORY —
4803 Urbani Ave. McClellan Park, CA 95652

EAST COAST FACTORY —
1160 Clipper Rd. Sumter, SC 29154

*Subject to warranty terms and conditions

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Solar4America Technology Inc. is headquartered in Sacramento, California with module production facilities in Sacramento and Sumter, SC and cell production facilities in Sumter. S4A products offer durability and exceptional performance to our customers at great value. Our state-of-the-art manufacturing facilities use industry-leading automated production equipment to optimize product performance and quality.

ELECTRICAL PARAMETERS

Module Type	S4A530		S4A535		S4A540		S4A545		S4A550	
	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT
Testing Condition										
Maximum Power - Pmax (W)	530	395	535	398	540	402	545	406	550	410
Maximum Power Voltage - Vmpp (V)	41.32	38.6	41.48	38.7	41.64	38.8	41.80	39.0	41.96	39.1
Maximum Power Current - Imp (A)	12.83	10.24	12.90	10.30	12.97	10.36	13.04	10.41	13.11	10.47
Open Circuit Voltage - Voc (V)	49.32	46.4	49.46	46.5	49.60	46.7	49.76	46.8	49.92	47.0
Short Circuit Current - Isc (A)	13.72	11.06	13.79	11.12	13.86	11.17	13.93	11.23	14.00	11.28
Module Efficiency	20.50%		20.70%		20.90%		21.10%		21.30%	

STC: irradiance 1,000 W/m²; Spectra at AM 1.5; module temperature 25°C. Power output tolerance: 0~+5W. Measuring tolerance of power: ±3%
 NMOT: irradiance 800 W/m²; Spectra at AM 1.5; Cell temperature 45°C; Ambient temperature 20°C. Wind speed 1m/s

BIFACIAL REARSIDE POWER GAIN

Electrical characteristics with different rear side power gain for reference to 550W front.

Module	Bifaciality: 70±5%				
Maximum Power	Pmax Gain	Voc/V	Isc/A	Vmp/V	Imp/A
578W	5%	49.92	14.70	41.96	13.77
605W	10%	49.92	15.40	41.96	14.42
633W	15%	49.92	16.10	41.96	15.08
660W	20%	49.92	16.80	41.96	15.73
688W	25%	49.92	17.50	41.96	16.39

Bifacial gain: the additional gain from the rear side compared to the power of the front side at the standard test condition. It depends on mounting (structure, height, tilt angle, etc.) and albedo of the ground.

TEMPERATURE CHARACTERISTICS

NMOT	43°C (±2°C)
Temperature Coefficient of Pmax	-0.35%/°C
Temperature Coefficient of Isc	+0.048%/°C
Temperature Coefficient of Voc	-0.26%/°C

MATERIAL CHARACTERISTICS

Dimensions	89.69 x 44.65 x 1.38in (2278 x 1134 x 35mm)
Weight	61.73lbs (28kg)
Frame	Silver anodized aluminum alloy
Glass	3.2mm anti-reflective coated tempered glass
Back Sheet	Transparent
Solar Cells	144(6 x 24) monocrystalline 182 x 91mm
Junction Box	IP68, 3 bypass diodes
Cable & Connector	Length +15.75in, -7.87in / +55.12in, -55.12in 1x4mm ² / MC4 and MC4 Compatible

MAXIMUM RATINGS

Maximum System Voltage (V)	1500
Series Fuse Rating (A)	30

PACKAGING

Pallet Dimensions	92.52 x 45.67 x 49.61in (2350 x 1160 x 1260mm)
Pallet Quantity	31 Modules
Truck (53') Quantity	651 Modules

SYSTEM DESIGN

Temperature Range	-40°C to +85°C
Ice-Ball Masses & Test Velocities	45mm ±5%, mass 43.9g ±5%, test velocity 30.7m/s ±5%
Mechanical Load Front	5,400 Pa
Mechanical Load Back	2,400 Pa
Safety Protection Class	Class II
Module Fire Performance	Type 1

