







S M A R T F E A T U R E S



Superior Energy Production

Module efficiency up to 18.7% achieved by utilizing the most advanced technology in the solar industry.



SmartWire Technology (SWT)

The revolutionary process for connecting solar cells that outrivals busbars by spreading the electric current through 18 micro-wires.



Advanced HJT Technology

This cell combines the advantages of N-type crystalline silicon with the excellent absorption and passivation of amorphous silicon.



Exceptional at Low-Light Conditions

The round shape of SmartWire reduces shading by 25% and introduces a light trapping effect.



Remarkable Connection Durability

SWT acts as a protective layer for the solar cell, ensuring reliable contact points for decades of consistent performance.

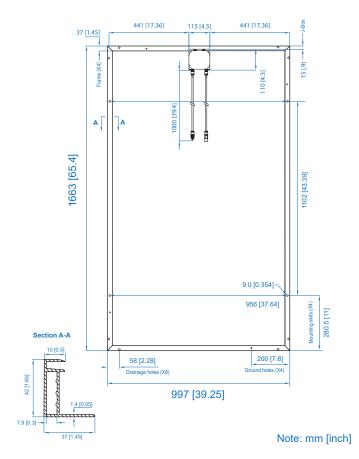


Industry Leading Warranty

HJT cells, based on N-type silicon results in extremely low LID & PID, reducing annual degradation and guaranteeing more power.







Laminate Structure	Glass / TPO / Cells / TPO / Backsheet
Module Weight	Approx. 18 kg (40lbs)
Cell Type	Heterojunction N-Type (156.75mm)
Cell Connection	60 Cells (Serial)
Junction Box	IP65/IP67 with 3 Bypass Diodes
Cables Length	1m [39.4 in]
Connectors Type	MC4 Compatible
Module Dimensions	997 x 1663 x 42 _{mm} [39.25 x 65.4 x 1.65]
Encapsulant	TPO (Hydrophobic)
Front Load (Snow)	5400 Pa / 112.8 Psf
Rear Load (Wind)	3800 Pa / 79.4 Psf

18 Micro-wires





3.2mm [.125] Anti-reflective Tempered Solar Glass (94% Transmittance)

Electrical Characteristics STC	STU- HJTB- W-295	STU- HJTB- W-300	STU- HJTB- W-305		
Average Power	295W	300W	305W		
Module Efficiency (%)	18.1%	18.4%	18.7%		
Voltage at Max power (Vmp)	35.8V	36.1V	36.4V		
Current at Max power (Imp)	8.2A	8.3A	8.4A		
Open Circuit Voltage (Voc)	42.6V	42.9V	43.3V		
Short Circuit Current (Isc)	8.9A	9.0A	9.0A		
Operating Module Temperature	-40°C⇒	-40°C→85°C			
Maximum System Voltage	m System Voltage 1000V DC (IEC				
Maximum Series Fuse Rating	20A				
Power Sorting	-0/+5V	٧			
STC: Irradiance 1000 W/m2, module temperature 25 °C, AM=1.5; Best in Class AAA solar simulator (IEC 60904-9) used, power measurement uncertainty is within +/- 3%					

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NOCT	295W	300W	305W
Max. Power at NOCT (Pmax)	225.8W	229.7W	233.5W
Voltage Max. Power (Vmp)	33.8V	34.1V	34.4V
Current Max. Power (Imp)	6.7A	6.7A	6.8A
Open Circuit Voltage (Voc)*	40.5V	40.8V	41.2V
Short Circuit Current (Isc)* NOCT: 800 W/m2 Irradiance, 20 °C ambient temperat	7.2A ure , AM=1.5, wind sp	7.2A eed 1 m/s	7.3A

Values are based on RETC certified results from a light-soaked module.

Temperature Characteristics

Nominal Operating Cell Temp. (NOCT)	46.06°C
Temperature Coefficient of Pmax	- 0.264%/°C
Temperature Coefficient of Voc	- 0.237%/°C
Temperature Coefficient of Isc	+ 0.035 %/°C

Maximum Power at PTC	279.8W	284.6W	298.5W
Percentage of STC	94.9%	95.0%	95.0%

Certifications & Warranty

Safety and Aging	IEC61215
Mechanical and Structural Safety	IEC61730 / UL1703
Modules Fire Performance	Type 2 (UL1703)
Product Warranty	12 Years
Performance Warranty of Pmax	30 Years Linear

^{* 1}st year 97%, 30th year 80%. Details of these warraties can be found at www.solartechuniversal.com, under "Downloads"

Shipping Configurations	GP	нс	Trailer
Container Length	20′	40′	53′
Pallets Per Container	12	24	36
Modules Per Pallet	20	23	23
Modules Per Container	240	552	828

Collection Pathways

Glass Thickness

Mechanical Characteristics