

# SMART FEATURES







#### **Superior Energy Production**

Module efficiency up to 19.9% 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.

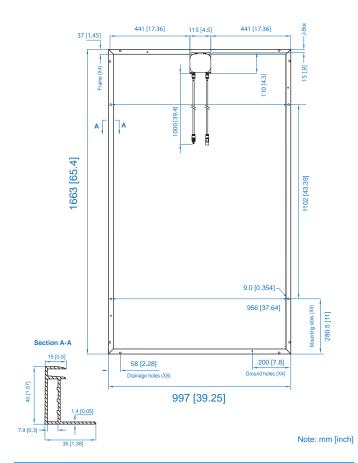


#### **Industry Leading Warranty**

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







Mechanical Char	

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
Module Dimensions	997 x 1663 x 40 <sub>mm</sub> [39.25 x 65.4 x 1.57]
Encapsulant	TPO (Hydrophobic)
Front Load (Snow) Expected	5400 Pa / 112.8 Psf
Rear Load (Wind) Expected	3800 Pa / 79.4 Psf
Collection Pathways	18 Micro-wires
Glass Thickness	3.2mm [.125] Anti-reflective Tempered Solar Glass (94% Transmittance)





Electrical Characteristics STC	STU- HJTB- W-310	STU- HJTB- W-315	STU- HJTB- W-320	STU- HJTB- W-325
Average Power	310W	315W	320W	325W
Module Efficiency (%)	19.0%	19.3%	19.6%	19.9%
Voltage at Max power (Vmp)	36.7V	37.0V	37.3V	37.6V
Current at Max power (Imp)	8.5A	8.5A	8.6A	8.7A
Open Circuit Voltage (Voc)	43.6V	44.0V	44.3V	44.7V
Short Circuit Current (Isc)	9.1A	9.2A	9.2A	9.3A
Operating Module Temperature	-40°C→85°C			
Maximum System Voltage	1000V DC ( IEC + UL )			
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%				

NOCT	310W   315W   320W   325W
Max. Power at NOCT (Pmax)	237.3W 241.2W 245.0W 248.8W
Voltage Max. Power (Vmp)	34.7V 35.0V 35.2V 35.5V
Current Max. Power (Imp)	6.8A 6.9A 7.0A 7.0A
Open Circuit Voltage (Voc)*	41.5V 41.8V 42.2V 42.5V
Short Circuit Current (Isc)*	7.3A 7.4A 7.4A 7.5A

NOCT: 800 W/m2 Irradiance, 20 °C ambient temperature , AM=1.5, wind speed 1 m/s 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				308.75w
PTC Percentage of STC	94.8%	94.9%	94.9%	95%

#### **Certifications & Warranty**

Safety	UL1703
Modules Fire Performance	Type 2 (UL1703)
Product Warranty	15 Years
Performance Warranty of Pmax	30 Years Linear*

<sup>\* 1</sup>st year 97%, 30th year 80%. Details of these warraties can be found at www.solartechuniversal.com, under "Downloads"

Shipping Configurations	$GP^{^\dagger}$	нс	Trailer
Container Length	20'	40'	53'
Pallets Per Container	12	24	36
Modules Per Pallet	20	25	25
Modules Per Container	240	600	900

† Extended lead time required. International transport only.