

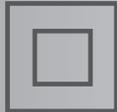
# 60 CELL MONO-CRYSTALLINE PERC SOLAR MODULE WITH SMARTWIRE



SOLARTECH  
UNIVERSAL

EPIQ  
BLACK

300W  
MONO-PERC



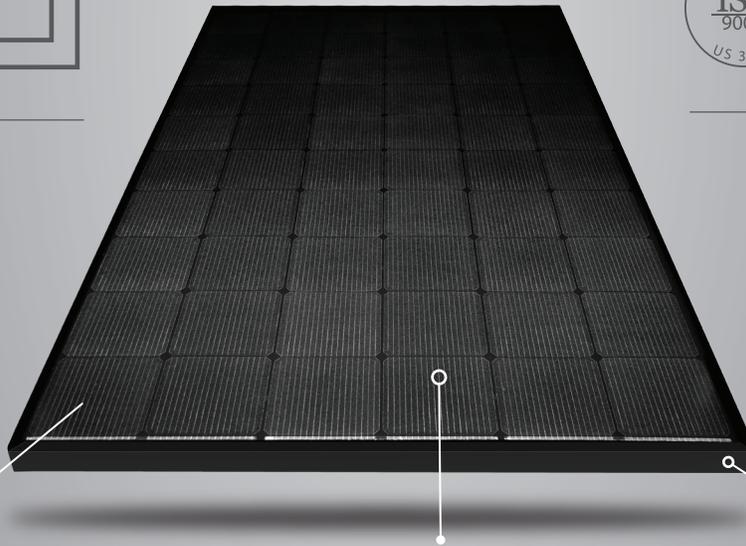
CERTIFICATIONS:

IEC61215  
IEC61730  
UL1703

Conformity to CE



SmartWire Technology lessens the effects of micro-fractures and shading



Mono-crystalline PERC  
Busbar-less cells



Anodized aluminum frame  
(Space Black)

## SMART FEATURES



### Superior Energy Production

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



### Exceptional at low-light Conditions

The round shape of SmartWire produces a light trapping effect and reduces shading on the cell by 25% compared to busbars.



### SmartWire Technology (SWT)

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



### Remarkable Connection Durability

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



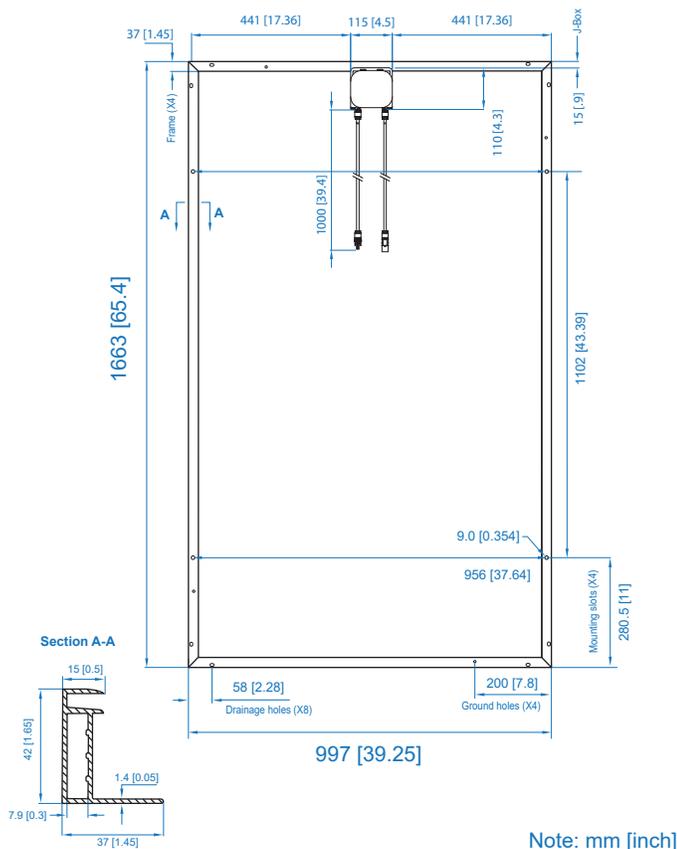
### Advanced PERC Technology

An specialized mono-crystalline cell which improves energy production by adding a special layer to capture more sunlight.



### Industry Leading Warranty

Accomplished with superior materials proven to perform better against potential induced degradation (PID).



### Mechanical Characteristics

Laminate Structure	Glass / TPO / Cells / TPO / Backsheet
Modules Weight	Approx. 18 kg (40lbs)
Cell Type	Mono-crystalline PERC (156.75 mm)
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 42mm [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
Collection Pathways	18 Micro-wires
Glass Thickness	3.2mm [.125] Anti-reflective Tempered Solar Glass (94% Transmittance)



### Electrical Characteristics STC

	STU-PERCB-B-295	STU-PERCB-B-300	STU-PERCB-B-305
Average Power	295W	300W	305W
Max Module Efficiency (%)	18.1%	18.4%	18.7%
Voltage at Max power (Vmp)	33.3V	33.6V	33.9V
Current at Max power (Imp)	8.9A	8.9A	9.0A
Open Circuit Voltage (Voc)	39.8V	40.1V	40.5V
Short Circuit Current (Isc)	9.4A	9.5A	9.5A
Operating Module Temperature	-40°C → 85°C		
Maximum System Voltage	1000V DC ( IEC + UL )		
Maximum Series Fuse Rating	20A		
Power Sorting	-0/+5W		

STC: Irradiance 1000 W/m<sup>2</sup>, module temperature 25 °C, AM=1.5; Best in Class AAA solar simulator (IEC 60904-9) used, power measurement uncertainty is within +/- 3%

### NOCT

	295W	300W	305W
Max. Power at NOCT (Pmax)	211.9W	215.4W	219.0W
Voltage Max. Power (Vmp)	30.3V	30.6V	30.8V
Current Max. Power (Imp)	7.0A	7.1A	7.1A
Open Circuit Voltage (Voc)*	36.7V	37.0V	37.3V
Short Circuit Current (Isc)*	7.4A	7.5A	7.5A

NOCT: 800 W/m<sup>2</sup> 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)	<b>45.02°C</b>
Temperature Coefficient of Pmax	-0.370 %/°C
Temperature Coefficient of Voc	-0.280 %/°C
Temperature Coefficient of Isc	+0.043 %/°C

### Maximum Power at PTC

	273.4W	278.2W	282.9W
Percentage of STC	92.7%	92.7%	92.8%

### 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

\* 1st year 97%, 30th year 80%. Details of these warranties can be found at [www.solartechuniversal.com](http://www.solartechuniversal.com), under "Downloads"

### Shipping Configurations

	GP	HC	Trailer
Container Length	20'	40'	53'
Pallets Per Container	12	24	36
Modules Per Pallet	20	23	23
Modules Per Container	240	552	828