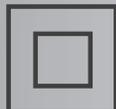


# 60 CELL HETEROJUNCTION SOLAR MODULE WITH SMARTWIRE TECHNOLOGY

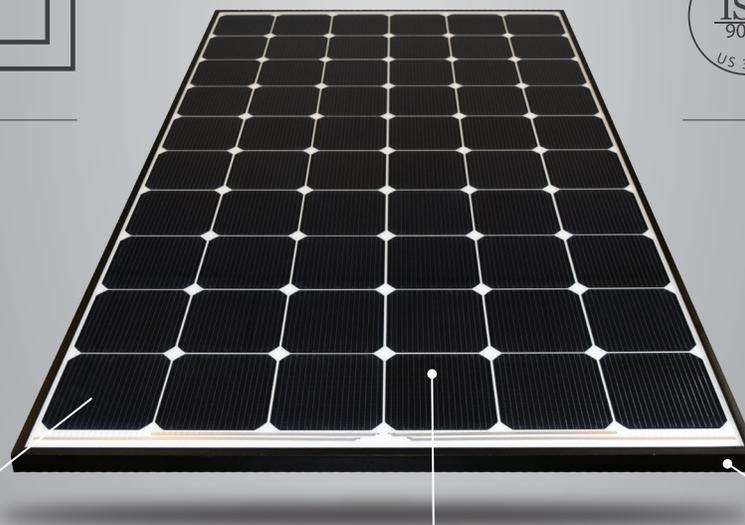


**EPIQ**  
SOLAR PANELS

**315W**  
HJT (N-TYPE)



CERTIFICATIONS:  
IEC61215  
IEC61730  
UL1703  
Conformity to CE



**12**  
Year  
Product  
Warranty

**30**  
Year  
Performance  
Warranty

SmartWire Technology lessens the effects of micro-fractures and shading

Heterojunction Busbar-less cells

Anodized aluminum frame (Space Black or Metallic Silver)

## SMART FEATURES



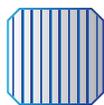
### Superior Energy Production

Module efficiency up to **19.6%** achieved by utilizing the most advanced technology in the solar industry.



### Exceptional at Low-Light Conditions

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



### SmartWire Technology (SWT)

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



### Remarkable Connection Durability

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



### Advanced HJT Technology

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



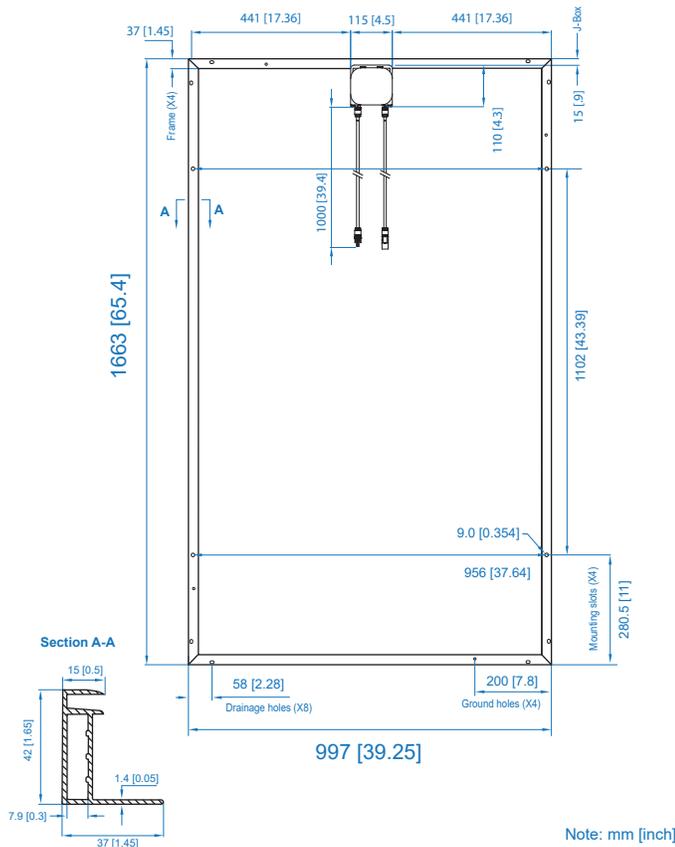
### Industry Leading Warranty

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

Data is based on initial test results as supplied by TUV Rheinland / PTL & RETC & extrapolated for actual production module results. The specification and key features described in this datasheet may change, SolarTech Universal LLC. Reserves the right to make any adjustment to the information described herein at any time without notice.

Made in the US. ≥70% of contents from domestic suppliers. R77v1 05/31/2018





### Mechanical Characteristics

|                     |   |
|---------------------|---|
| 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 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-HJT-B-W-310       | STU-HJT-B-W-315 | STU-HJT-B-W-320 |
|------------------------------|-----------------------|-----------------|-----------------|
| Average Power                | 310W                  | 315W            | 320W            |
| Module Efficiency (%)        | 19.0%                 | 19.3%           | 19.6%           |
| Voltage at Max power (Vmp)   | 36.7V                 | 37.0V           | 37.3V           |
| Current at Max power (Imp)   | 8.5A                  | 8.5A            | 8.6A            |
| Open Circuit Voltage (Voc)   | 43.6V                 | 44.0V           | 44.3V           |
| Short Circuit Current (Isc)  | 9.1A                  | 9.2A            | 9.2A            |
| 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

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

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>46.06°C</b> |
| 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

|                       | 294.3w | 299.1w | 304w  |
|-----------------------|--------|--------|-------|
| PTC Percentage of STC | 94.8%  | 94.9%  | 94.9% |

### 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     |