Superior Energy Production
Module efficiency up to 19.3% achieved by utilizing the most advanced technology in the solar industry.

SmartWire Connection Technology (SWCT)
The revolutionary process for connecting solar cells that outtrivals busbars by spreading the electric current through 18 micro-wires.

Advanced PERC Technology
An advanced mono-crystalline cell which improves energy production by adding a special layer to capture more sunlight.

Exceptional at Low-Light Conditions
The round shape of SmartWire Connection Technology (SWCT+) 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
Accomplished with superior materials proven to perform better against potential induced degradation (PID).
Electrical Characteristics STC

<table>
<thead>
<tr>
<th>PERC - Black on White</th>
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</tr>
</thead>
<tbody>
<tr>
<td>300W</td>
<td>305W</td>
<td>310W</td>
<td>315W</td>
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</tbody>
</table>

### Average Power
- 300W
- 305W
- 310W
- 315W

### Max Module Efficiency (%)
- PERC: 18.4%
- PERC: 18.7%
- PERC: 19.0%
- PERC: 19.3%

### Voltage at Max power (Vmp)
- PERC: 33.4V
- PERC: 33.6V
- PERC: 33.9V
- PERC: 34.2V

### Current at Max power (Imp)
- PERC: 9.0A
- PERC: 9.1A
- PERC: 9.1A
- PERC: 9.2A

### Open Circuit Voltage (Voc)
- PERC: 39.9V
- PERC: 40.2V
- PERC: 40.6V
- PERC: 40.9V

### Short Circuit Current (Isc)
- PERC: 9.5A
- PERC: 9.6A
- PERC: 9.7A
- PERC: 9.8A

### Operating Module Temperature
- -40˚C - 85˚C

### Maximum System Voltage
- 1000V DC (UL)

### Maximum Series Fuse
- 20A

### Rating Power Sorting
- -0/+5W

### STC: Irradiance 1000 W/m², module temperature 25 °C, AM=1.5; Best in Class AAA solar simulator used, power measurement uncertainty is within +/- 3%.

### NOCT

<table>
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<tbody>
<tr>
<td>219.2W</td>
<td>222.9W</td>
<td>226.5W</td>
<td>230.2W</td>
</tr>
</tbody>
</table>

### Nominal Operating Cell Temp. (NOCT)
- 45.3°C

### Temperature Coefficient of Pmax
- -0.364% /°C

### Temperature Coefficient of Voc
- -0.281% /°C

### Temperature Coefficient of Isc
- +0.041% /°C

Temperature Characteristics

### Mechanical Characteristics

#### Laminate Structure
- Glass / TPO / Cells / TPO / Backsheet

#### Weight
- Approx. 18 kg [40lbs]

#### Cell Type
- Mono-Crystalline PERC (156.75mm)

#### Cell Connection
- 60 cells (Serial)

#### Junction Box
- IP65/IP67 with 3 Bypass Diodes

#### Cables Length
- 103 [3.94 ft]

#### Connectors Type
- MC4

#### Module Dimensions
- 997 x 1663 x 40mm [39.25 x 65.4 x 1.65]

#### Encapsulant
- (TPO) Hydrophobic

#### Front Load*
- 5500 Pa / 115 Psf

#### Rear Load*
- 5500 Pa / 115 Psf

#### Collection Pathways
- 18 Micro-wires

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

### Certifications & Warranty

#### Safety
- UL1703

#### Modules Fire Performance
- Type 2 (UL1703)

#### Product Warranty
- 15 Years

#### Performance Warranty of Pmax
- 30 Years Linear*

### CEC Testing Results

#### Maximum Power at PTC
- 278.2W
- 282.9W
- 287.9W
- 292.3W

#### PTC Percentage of STC
- 92.7%
- 92.8%
- 92.8%
- 92.9%

### Shipping Configurations

#### Container Length
- GP: 20’
- HC: 40’
- 30’

#### Pallets Per Container
- 12
- 24
- 36

#### Modules Per Pallet
- 20
- 23
- 23

#### Modules Per Container
- 240
- 552
- 828

* Extended lead time required. International transport only.

### Collection Pathways

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

### Mechanical Load Test Report per Solar PTL (IEC 61730)

### Extended Lead Time Required
- International transport only.

### 1st Year 97%, 30th Year 80%

Details of these warranties can be found at www.solartechuniversal.com, under "Downloads"