Superior Energy Production
Module efficiency up to 18.4% achieved by utilizing the most advanced technology in the solar industry.

SmartWire Technology (SWT)
The revolutionary process for connecting solar cells that outperforms 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 reduces the wire 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).

Data is calculated using test results supplied by TUV Rheinland / PTL, SUPSI & internal test 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. Assembled in the US with domestic and imported parts. 03/16/17 R56v2
**Dimensions 997 x 1663 x 42mm**

**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)

**Mechanical Characteristics**

- **Laminate Structure**: Glass / TPO / Cells / TPO / Backsheet
- **Weight**: Approx. 18 kg [40lbs]
- **Cell Type [mm]**: 156.75 x 156.75 Mono-crystalline PERC
- **Cell connection**: 60 cells (serial)
- **Junction Box (Electrical)**: 3 bypass (Tyco) IP65/IP67
- **Connection Cable (Electrical)**: Tyco Solar 4mm² (1m length each)
- **Electrical Connectors**: Tyco PV4
- **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**

- **Average Power**: 290W | 295W | 300W
- **Max Module Efficiency (%)**: 17.8% | 18.1% | 18.4%
- **Voltage at Max power (Vmp)**: 32.0V | 32.3V | 33.4V
- **Current at Max power (Imp)**: 9.0A | 9.1A | 9.3A
- **Open Circuit Voltage (Voc)**: 39.7V | 40.4V | 41.1V
- **Short Circuit Current (Isc)**: 9.6A | 9.7A | 9.8A

**Operating Module Temperature**: -40°C → 85°C

**Maximum System Voltage**: 1000V DC ([IEC + UL])

**Maximum Series Fuse Rating**: 20A

**Power Sorting**: -0/+5W

**Temperature Characteristics**

- **Nominal Operating Cell Temp. (NOCT)**: 45.7°C
- **Temperature Coefficient of Pmax**: -0.4079% /°C
- **Temperature Coefficient of Voc**: -0.2845% /°C
- **Temperature Coefficient of Isc**: +0.0406% /°C

**Warrantied Power Performance**

- **Year 1**: 90%
- **Year 2**: 97%
- **Year 3**: 80%

**Packing Configuration**

- **Equipment**: 20' GP 53' Trailer
- **Modules per pallet**: 29
- **Pallets per unit**: 36
- **Modules per unit**: 240 828

**In Partnership With**

[USA]