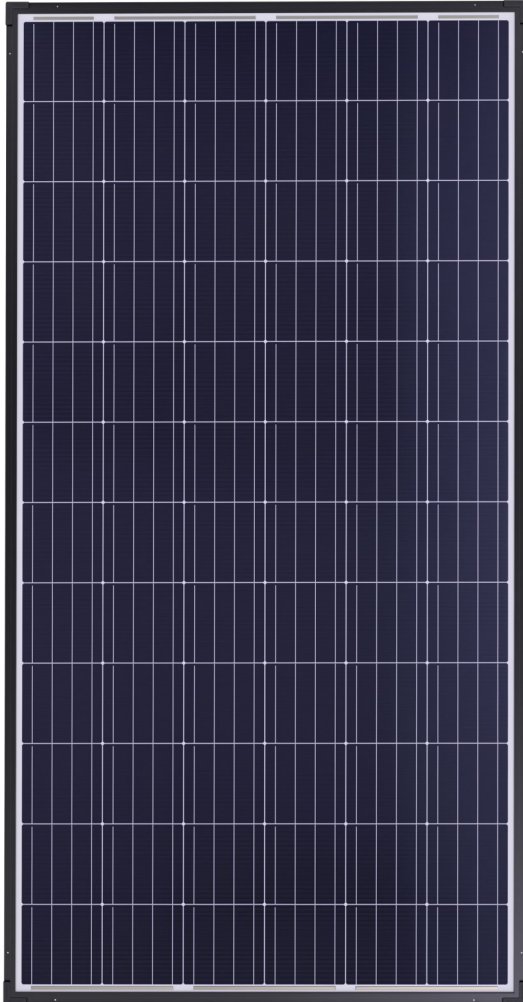


## 320 Watt

# 72 Cell Polycrystalline Module

## Features



**Ultra-light:** Through replacement of the glass and optimization of the frame eArche weighs as 70% less than conventional PV panels.

**Flexible:** eArche combines a unique, patented material with other industry-leading technologies to produce superior flexible crystalline-silicon panel which can be installed on curved surface.

**Aesthetics:** Aesthetically pleasing design with patented materials and sophisticated manufacturing process results in a high-efficiency, attractive panel, with no light pollution, PID-free operation and high levels of safety.

**Easy Installation:** eArche can reduce installation cost by up to 50% through the use of re-engineered components, ease of handling and faster installation.

**Transportation:** eArche's innovative frame and low weight will very significantly reduce the cost of transportation.

**Deployment:** Ultra-light weight, flexibility and customizable size make eArche the best choice to change the way how solar is deployed in the market and bring added value to special applications.

**Durability:** eArche panels are certified to withstand extreme wind (2400 Pascal) and snow loads (5400 Pascal), while special materials and stringent quality control ensure panel longevity.

**315-320 W**

**POWER OUTPUT RANGE**

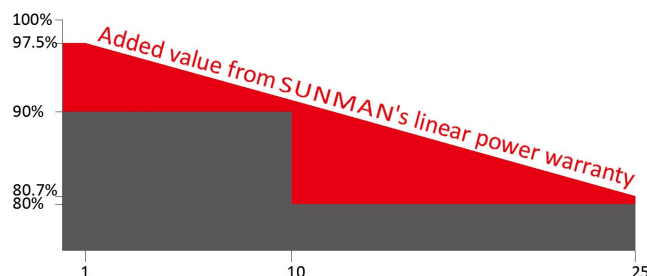
**0-5 W**

**POWER TOLERANCE**

## LINEAR PERFORMANCE WARRANTY

10 Year Product Warranty

25 Year Linear Power Warranty



**Electrical Characteristics**

| STC                                   | SMD320P-6X12                      | SMD315P-6X12 |
|---------------------------------------|-----------------------------------|--------------|
| Maximum Power ( $P_{max}$ )           | 320                               | 315          |
| Maximum Power Voltage ( $V_{mp}$ )    | 38.2                              | 37.9         |
| Maximum Power Current ( $I_{mp}$ )    | 8.38                              | 8.32         |
| Open-circuit Voltage ( $V_{oc}$ )     | 45.9                              | 45.7         |
| Short-circuit Current ( $I_{sc}$ )    | 8.88                              | 8.82         |
| Module Efficiency (%)                 | 15.9                              | 15.6         |
| Operating Temperature ( $^{\circ}C$ ) | -40 $^{\circ}C$ to 85 $^{\circ}C$ |              |
| Maximum System Voltage                | 600 V DC (IEC)                    |              |
| Maximum Series Fuse Rating            | 20 A                              |              |
| Application Class                     | Class A                           |              |
| Power Tolerance                       | 0/+5 W                            |              |

STC: Irradiance 1000W/m<sup>2</sup>, Cell temperature 25 $^{\circ}C$ , AM=1.5.

| NOCT                               | SMD320P-6X12 | SMD315P-6X12 |
|------------------------------------|--------------|--------------|
| Maximum Power ( $P_{max}$ )        | 236          | 232          |
| Maximum Power Voltage ( $V_{mp}$ ) | 34.9         | 34.7         |
| Maximum Power Current ( $I_{mp}$ ) | 6.77         | 6.69         |
| Open-circuit Voltage ( $V_{oc}$ )  | 42.5         | 42.3         |
| Short-circuit Current ( $I_{sc}$ ) | 7.17         | 7.09         |

NOCT: Irradiance 800W/m<sup>2</sup>, Ambient temperature 20 $^{\circ}C$ , Wind speed 1 m/s.

**Mechanical Characteristics**

|                   |  |
|-------------------|--|
| Solar Cell        | Polycrystalline silicon (6 inches)                                     |
| No. of Cells      | 72 (6 × 12)  |
| Module Dimensions | 1979×1019×5.6 mm (77.9×40.1×0.2 inch)                                  |
| Weight            | 7.7 kgs (17.0 lbs)   |
| Backsheet         | White  |
| Frame             | Black Anodized Aluminium Alloy   |
| J-box             | IP 68 rated  |
| Output Cables     | Photovoltaic technology cable 4.0 mm <sup>2</sup> , (+)150 / (-)450 mm |
| Connector         | MC4 compatible   |

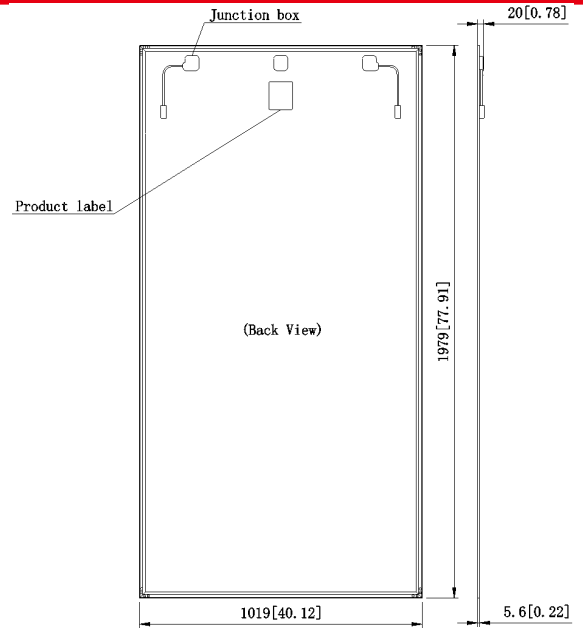
**Packaging Configuration**

|                      | 20' GP | 40' HC |
|----------------------|--------|--------|
| Module per pallet    | 54     | 54     |
| Pieces per container | 270    | 1080   |

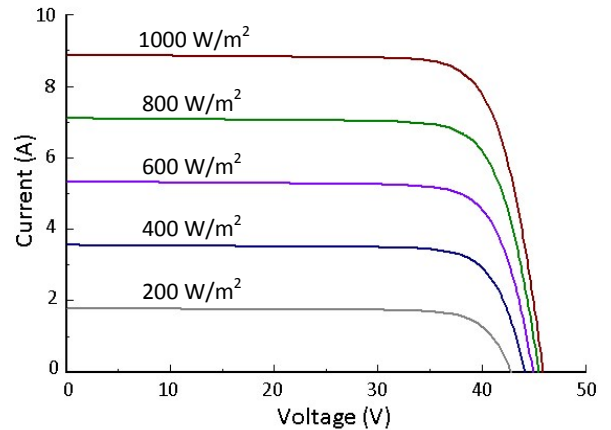
CAUTION: Read installation manual before using the product.

© 2017 Sunman (Hong Kong) Limited. All rights reserved. Specifications included in this datasheet are subject to change without notice.

**Dimensions**



**I-V Curve (320)**



**Temperature Characteristics**

|   |                      |
|---|----------------------|
| Nominal Operating Cell Temperature (NOCT) | 45 ± 2 $^{\circ}C$   |
| Temperature Coefficient of Pmax           | -0.41 %/ $^{\circ}C$ |
| Temperature Coefficient of Voc            | -0.30 %/ $^{\circ}C$ |
| Temperature Coefficient of Isc            | 0.048 %/ $^{\circ}C$ |

Dealer Information

SMD\_IEC\_EN\_2017A