

# SN 72-Cell<sup>1,000V</sup>

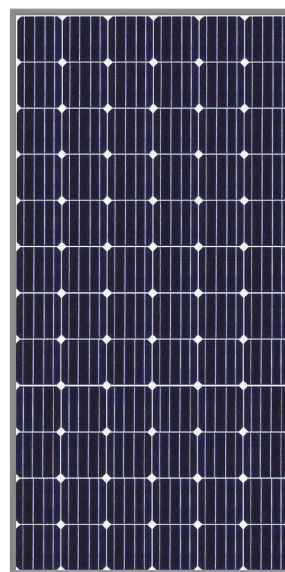
Monocrystalline PV Module

SN340M-10 SN345M-10 SN350M-10 SN355M-10 SN360M-10



## 340 ~ 360 Watt

Continuously manufacturing PV modules since 1991, S-Energy is one of the most experienced module makers in the industry. More than 20 years of operating data support S-Energy's reputation as the best overall quality, performance, and value for solar investors. The cutting-edge SN-series leads the industry again in advanced design, construction, and performance. The SN-series is the ideal module for any system size in any given environment. With the quality to last the lifetime of the PV system, S-Energy's SN-series provides the confidence and assurance to each and every one of our customers.



### Features



#### HAIL IMPACT TEST

30.7m/s speed ball  
(IEC Standards: 23m/s)



#### MECHANICAL LOAD

5,400 Pa (551kg/m<sup>2</sup>)  
(IEC Standards: 245kg/m<sup>2</sup>)



#### POWER ADVANTAGE

25-year, linear power warranty  
> 97.5% nominal power during 1st year  
Positive tolerance up to +5W



#### PID RESISTANCE

Enhanced potential induced degradation



#### FIRE SAFETY

UL1703 Fire Classification : Type 1, Type 2



#### ENVIRONMENT RESISTANCE

Suitable for extreme conditions  
Resistant to high salt mist and ammonia  
(certified by TÜV Rheinland)

### Qualifications & Certifications

IEC 61215 & 61730, UL 1703, ISO 9001,  
ISO 14001, OHSAS 18001, WEEE



### Mechanical Characteristics

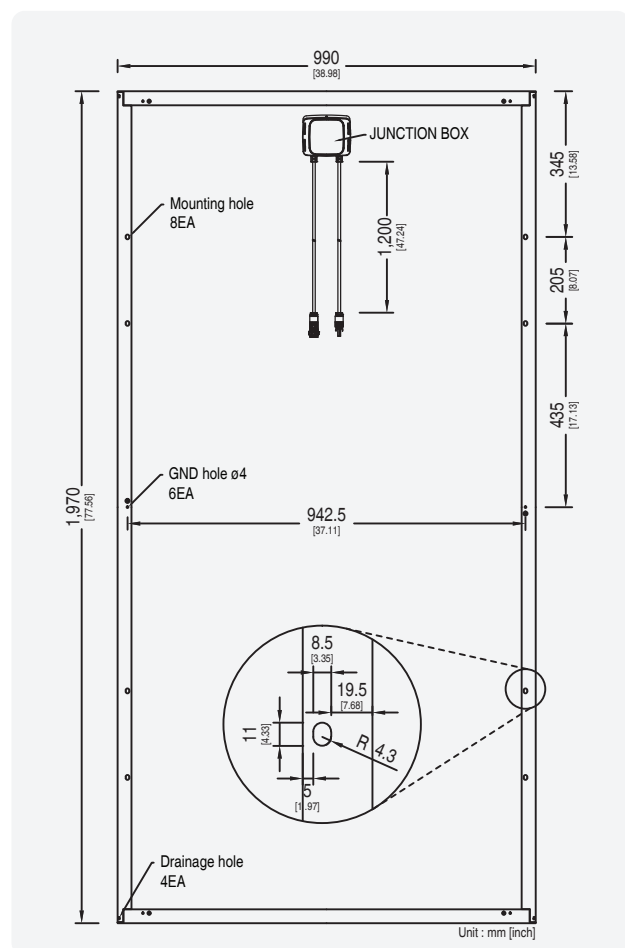
|                 |                                                                    |
|-----------------|--------------------------------------------------------------------|
| Solar Cells     | Monocrystalline 156 x 156mm (6 inches)                             |
| Number of Cells | 72 Cells (6x12 Matrix)                                             |
| Dimensions      | 1,970 x 990 x 40mm                                                 |
| Weight          | 23kg (50.71 lbs)                                                   |
| Front Glass     | High-Transmittance Low Iron Tempered Glass                         |
| Frame           | Anodized Aluminum Frame (Silver / Black)                           |
| Output Cables   | PV Wire (PV1-F), 12AWG (4mm <sup>2</sup> ), Cable Length : 1,200mm |
| Connectors      | MC4 Connectable                                                    |

### Warranty

|                      |                                                |
|----------------------|------------------------------------------------|
| Product Warranty     | 10-year Limited Product Warranty               |
| Performance Warranty | Minimum Power Output for Year 1 : 97.5%        |
|                      | Maximum Power Decline from Year 2 to 24 : 0.7% |
|                      | Power Output at year 25 : 80.7%                |

## Electrical Characteristics

| STC (Irradiance 1,000W/m <sup>2</sup> , module temperature 25°C, AM=1.5) | SN340M-10                | SN345M-10 | SN350M-10 | SN355M-10 | SN360M-10 |
|--------------------------------------------------------------------------|--------------------------|-----------|-----------|-----------|-----------|
| Rated Power (P <sub>max</sub> )                                          | 340W                     | 345W      | 350W      | 355W      | 360W      |
| Voltage at P <sub>max</sub> (V <sub>mp</sub> )                           | 38.5V                    | 38.9V     | 39.4V     | 39.9V     | 40.3V     |
| Current at P <sub>max</sub> (I <sub>mp</sub> )                           | 8.84A                    | 8.87A     | 8.89A     | 8.90A     | 8.92A     |
| Warranted Minimum P <sub>max</sub>                                       | 340W                     | 345W      | 350W      | 355W      | 360W      |
| Short-Circuit Current (I <sub>sc</sub> )                                 | 9.40A                    | 9.46A     | 9.50A     | 9.52A     | 9.56A     |
| Open-Circuit Voltage (V <sub>oc</sub> )                                  | 48.3V                    | 48.6V     | 48.8V     | 48.9V     | 49.1V     |
| Module Efficiency                                                        | 17.43%                   | 17.69%    | 17.95%    | 18.20%    | 18.46%    |
| Operating Module Temperature                                             | -40°C to + 85°C          |           |           |           |           |
| Maximum System Voltage                                                   | 1,000V(UL) / 1,000V(IEC) |           |           |           |           |
| Maximum Series Fuse Rating                                               | 15A                      |           |           |           |           |
| Maximum Reverse Current                                                  | 20.25A                   |           |           |           |           |
| Power Tolerance                                                          | 0 ~ +5W                  |           |           |           |           |

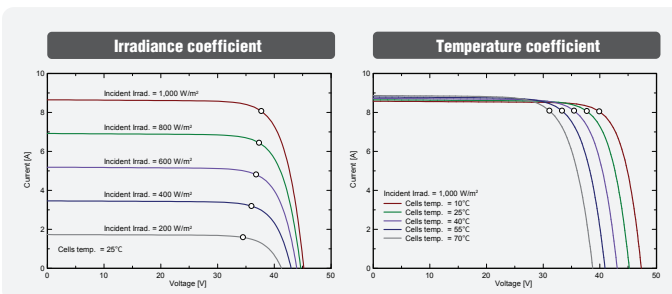


## Temperature Characteristics

|                                                                           |               |
|---------------------------------------------------------------------------|---------------|
| Temperature coefficient of I <sub>sc</sub>                                | 0.046 % / °C  |
| Temperature coefficient of V <sub>oc</sub>                                | -0.282 % / °C |
| Temperature coefficient of power                                          | -0.394 % / °C |
| NOCT (T <sub>air</sub> 20°C ; Irradiance 800W/m <sup>2</sup> ; Wind 1m/s) | 45±2 °C       |

## Packing Configuration

|                       |           |
|-----------------------|-----------|
| Container             | 40' H/C   |
| Modules Per Pallet    | 25pcs     |
| Pallets Per Container | 22pallets |
| Modules Per Container | 550pcs    |



## Remarks :

P<sub>max</sub> measurement tolerance : ±2.5%  
 S-Energy uses triple AAA class simulator.  
 Specification subject to change without prior notice. S-Energy reserves the rights of final interpretation.  
 Document : SN 72cell(340-360)\_4BB\_UL/TUV\_1000\_EN\_2017.03

**S-Energy Co., Ltd.**

3rd Fl., Miraeasset Tower, 20, Pangyoyeok-ro 241beon-gil, Bundang-gu, Seongnam-si, Gyeonggi-do, KOREA, 13494  
 Tel. +82-70-4339-7100 Fax. +82-70-4339-7199 E-mail. inquiry@s-energy.com

**SEAI America, Inc.**  
 (d.b.a. S-Energy America)

20 Corporate Park, Suite 190, Irvine, CA 92606, U.S.A.  
 Tel. +1-949-281-7897 Fax. +1-949-281-7893 E-mail. sales.us@s-energy.com

**S-Energy Japan Co., Ltd.**

1-6-9, Koujimachi, Chiyoda-ku, Tokyo, DIK Kojimachi building 3F-A, Japan  
 Tel. +81-3-6261-3759 Fax. +81-3-6261-3769 E-mail. toru.yasuda@s-energy.com