

## Limited Warranty for PV modules of S-ENERGY

- ❑ S-ENERGY’s Series PV Module
- ❑ Effective April 01, 2020

S-ENERGY Co., Ltd. (“S-ENERGY”) provides the Original Buyer (“Buyer”) with a product warranty (A) and a performance warranty (B). The product warranty covers the material and workmanship of the modules, whereas loss of performance (degradation) and minimum output of the modules are exclusive to the objects of the performance warranty. Warranty conditions for both warranties are set forth under Section C. Warranty A and B shall be effective from the date of shipment of the products. If buyer is not able to provide the appropriate document for the purchase, the effective date will be applied to 3 months from production. The limited warranty applies exclusively to the following S-ENERGY brand Photovoltaic Module(s) (“PV Module(s)”):

1. SNxxxM-10/15 SN10-60MBE-xxxD SN20-60MAE-xxxD SN10/20-72MAE-xxxD	60/72 Mono crystalline solar cells
2. SNxxxP-10/15 SN15-60/72PAE-xxxD	60/72 Poly crystalline solar cells
3. SC10-60MAE-xxxD SC20-60MAE/MBE/MCE-xxxM SC20-60MAE/MBE-xxxD SC20-72MAE/MBE/MCE-xxxM SC20-72MAE-xxxD	60/72 Mono crystalline Half-cut solar cells
4. SC15-60/72PAE-xxxD	60/72 Poly crystalline Half-cut solar cells
5. SL20/25-60MAI/MBI/MCI-xxxA SL20/25-72MAI/MBI/MCI-xxxA	60/72 Mono crystalline Half-cut 9BB cells

### SECTION A. PRODUCT WARRANTY

1. S-ENERGY PV Module(s) are warranted to be free of defects in material and workmanship under the conditions stated herein for a period of twelve (12) years from the date of shipment of the PV Module(s)
2. The warranty is applicable to PV Module(s) where malfunction or non-conformity result exclusively from defects in materials and/or workmanship under normal application, installation, use and service conditions. The warranty applies only to PV Module(s) that cause degradation in functionality of the PV Module(s). Changes in color, or other changes in module appearance, including but not limited to abrasion, scratches, oxidation, mold and mechanical wear-out, that occur after delivery to Buyer, are exempt from this warranty.

## SECTION B. PERFORMANCE WARRANTY

S-ENERGY PV Module(s) are warranted to perform the following minimum power outputs specified each period:

### 1. **Polycrystalline Solar Cell Modules:**

(a) For the first year of sales: S-ENERGY warrants that the minimum “Peak Power under Standard Test Conditions (STC)” of the Poly PV Modules for a period of first year from the date of shipment of the PV Modules shall not be reduced to less than ninety-seven point five percent (97.5%) of the nominal power classification

(b) From year 2 to year 24: S-ENERGY warrants that the minimum “Peak Power under STC” of the PV Modules maintain the level of max annual power decline will not be more than zero point seven percent (0.7%) for a period of second year to twenty-fourth year from the date of shipment of the PV Modules to the Buyer from S-ENERGY’s facility.

(c) For the year 25: S-ENERGY warrants that the minimum “Peak Power under STC” of the PV Modules maintain the level of no less than eighty point seven percent (80.7%) for the Poly PV Modules of the nominal power classification for a period of twenty-five (25) years from the date of shipment of the PV Modules to the Buyer from S-ENERGY’s facility.

### 2. **Monocrystalline Solar Cell Modules**

a) For the first year of sales: S-ENERGY warrants that the minimum “Peak Power under Standard Test Conditions (STC)” of the Poly PV Modules for a period of first year from the date of shipment of the PV Modules shall not be reduced to less than ninety-seven point five percent (97.5%) of the nominal power classification

(b) From year 2 to year 24: S-ENERGY warrants that the minimum “Peak Power under STC” of the PV Modules maintain the level of max annual power decline will not be more than zero point seven percent (0.7%) for a period of second year to twenty-fourth year from the date of shipment of the PV Modules to the Buyer from S-ENERGY’s facility.

(c) For the year 25: S-ENERGY warrants that the minimum “Peak Power under STC” of the PV Modules maintain the level of no less than eighty point seven percent (80.7%) for the Poly PV Modules of the nominal power classification for a period of twenty-five (25) years from the date of shipment of the PV Modules to the Buyer from S-ENERGY’s facility.

3. **Standard Test Conditions (STC):** Module performance shall be measured under STC. Peak Power under STC is the power in Watt peak that a PV module generates in its Maximum Power Point. STC is as follows (a) light spectrum of AM 1.5, (b) an irradiation of 1.000 W per m<sup>2</sup> and (c) a cell temperature of 25 degrees centigrade at right angle irradiation. The measurements are carried out in accordance with IEC 60904 as tested at the connectors or junction box terminals—as applicable—per calibration and testing standards of S-ENERGY valid at the date of manufacture of the PV module(s). S-ENERGY's calibration standards shall be compliant with the standards applied by international institutions accredited for this purpose. The default test uncertainty which is two point five percent (2.5%) will be compensated to the measured power output value when make the conclusion of the power output against the warranted threshold.

### SECTION C. WARRANTY CONDITIONS

#### 1. General

1.1 Warranties are granted only to the Original Buyer. Original Buyer is defined as the person who directly purchases from S-ENERGY or approved retailer.

1.2 In the event that these warranty conditions deviate from the specifications set forth in the data sheet, these warranty conditions shall prevail.

1.3 Claims arising from or in connection with this warranty must be filed in writing within the applicable warranty period. No extension of the warranty period, regardless of legal basis, will be permitted.

#### 2. Disclaimers / Liability limitations

2.1 This warranty is valid for normal and correct use and installation, and only under normal operating conditions. The warranty assumes that the performance of the modules has not been reduced by actions or events outside the sphere of influence of S-ENERGY, in particular;

2.1.1 Mishandling failure during the transportation or store/preserve.

2.1.2 Modifications/damage as a consequence of force majeure (such as, but not limited to, storms, hail, fire, power outage, lightning, flooding, snow damage, avalanches, frost, earthquakes, tornadoes, volcanic eruptions, landslides, plagues of insects and other detrimental effects by animals, acts of war, etc.) or damage caused by third parties due to vandalism and theft;

2.1.3 Unprofessional installation, commissioning, operation or improper removal and/or reinstallation of modules (e.g. not in compliance with S-ENERGY's installation manual);

2.1.4 Inappropriate maintenance including, but not limited to, maintenance by an unauthorized technician or not in compliance with S-ENERGY's maintenance manual;

2.1.5 Use on mobile units such as vehicles and ships as well as other off-grid use of modules;

2.1.6 Impairment through external influences (e.g. acid rain, dirt, smoke, salt, chemicals and other impurities);

2.1.7 Interconnection with modules made by other manufacturers;

2.1.8 System defects where the module is integrated;

2.1.9 Insufficient ventilation. In particular the maximum temperatures according to the operating manual may under no circumstances be exceeded.

2.2 Warranty claims will only be accepted if the modules have been used according to their intended purpose and do not exhibit any signs of excessive wear and tear or external damage not reconcilable with normal use.

2.3 The serial number and/or type label must not be damaged to identify that the subject products are identified as being manufactured by S-ENERGY. If the serial number or label is deformed, erased or removed, the modules are exempt from this warranty. All installation and operating instructions must have been closely followed. Adherence to the safety and warning notes contained therein and the permissible installation and operating conditions specified on the data sheet is a prerequisite for the acceptance of warranty claims.

2.4 Claims under this warranty, after written agreement, can be transferred or assigned to any third party.

2.5 In order to verify whether claim is applied or not, or to verify the conditions specified in Provision B and their sub-clauses, the Buyer is able to request for a test after written agreement with S-ENERGY. If the test result shows that it is an article of claim, S-ENERGY shall pay, however if the result shows otherwise, the Buyer shall pay for the test cost. As per this Provision, it shall be evaluated by an expert appointed by one of the following test institutions listed below

- Fraunhofer ISE in Freiburg in Germany
- International authorized certification body
- Authorized KS certification body in Korea.

2.6 S-ENERGY shall not be liable under any circumstance to any incidental, indirect, consequential or special damages, howsoever caused. Loss of use, loss of profits, loss of production, loss of revenues are therefore specifically but without limitation excluded. S-ENERGY's aggregate liability, if any, in damages or otherwise, shall not exceed the purchase value of the PV Module(s) as paid by the Buyer.

2.7 S-ENERGY undertakes no responsibility for the quality of the goods except as otherwise provided in this limited warranty and the attached contract.

### 3. Claim Procedure

3.1 In case of a valid warranty claim, S-ENERGY shall, at its sole discretion, replace the module(s) with the same or similar type of function, repair the defects of the module(s) or refund the difference between the original sales price and current market price at the time the warranty claim was received and confirmed to be valid to that module(s). Should the type of module no longer be produced at the time of the warranty claim, S-ENERGY shall be permitted to supply another type of solar module (different size, shape, color and/or capacity). In addition, in case that S-ENERGY decides that the Product should be replaced or repaired, transportation costs of the replaced Product at arrival port that may be designated by Client will be solely borne by S-Energy, not any costs with related to storage, removal, reinstallation of the Product.

3.2 No other claims shall be derived from this warranty.

3.3 For modules newly supplied or repaired, only the remaining time of the original warranty period shall apply.

### 4. IMPLEMENTATION/ENFORCEMENT OF THE PERFORMANCE WARRANTY

4.1 All warranty claims must be submitted in writing to:

S-ENERGY Co., Ltd.  
3rd Fl., Miraeasset Tower, 686, Sampyeong-dong,  
Bundang-gu, Seongnam-si, Gyeonggi-do, KOREA  
Tel : +82 70 4339 7100, Fax : +82 70 4339 7199  
E-Mail : [as@s-energy.com](mailto:as@s-energy.com), [inquiry@s-energy.com](mailto:inquiry@s-energy.com)

4.2 For judgment of claim, as a prerequisite, shall fill out and submit A/S Request Form to S-Energy.

4.3 The Original Buyer must also submit proof that the module performance has fallen below the minimum guaranteed by S-ENERGY. The Buyer must maintain the standard test conditions while producing evidence that the performance has fallen below the guaranteed minimum performance. S-ENERGY reserves the right to verify the shortfall in performance. If the test body commissioned by S-ENERGY comes to the conclusion that the divergence is permissible or that no divergence exists, S-ENERGY shall be entitled to claim a refund of the

performance test costs.

4.4 Claims arising out of or in connection with this warranty must be asserted within thirty (30) days of the event giving rise to the claim. No consideration will be given to late complaints. The determining factor for compliance with the warranty time limit is timely receipt of notification.

4.5 Customer shall only be entitled to return modules with the prior written consent of S-ENERGY.

### **5. Disputes Resolution**

5.1 All legal disputes arising from this warranty shall be governed by the law of the Republic of Korea. The UN Sales Convention (CISG) and conflict of law rules do not apply.

5.2 Both parties shall make every effort to resolve any disputes arising from or in connection with this Warranty agreement by means of commercial arbitration.

5.3 Notwithstanding the provision 5.2, disputes related to technical issues (issues related to function or malfunction of the PV Modules or other related products) shall be first submitted to non-binding expert evaluation as provided provision 5.4.

5.4 The Technical Related Disputes shall be evaluated by an expert appointed by one of the following test institutions listed in the Section 2.5. The appointed expert shall provide its expert opinion regarding the function of the PV Modules, and the causes of the malfunction (if exists). The expert shall also provide a suggestion for the adequate resolution of the dispute including monetary compensation if needed.

5.5 The expert's opinion shall be non-binding on either of the parties to this Agreement, but may be used as admissible evidence if the dispute is submitted to arbitration. For avoidance of doubt, both parties reserve the right to submit the case to arbitration pursuant to paragraph (a) above and to present alternative expert opinion(s) to the arbitration tribunal in accordance with 5.4.

5.6 The parties shall cooperate to fully accommodate the appointed expert and shall provide the expert the necessary assistance to promptly complete its tasks. The parties shall share the fees to be paid to the expert.