

# Q.HOME+ ESS HYB-G2

## LIMITED WARRANTY

This limited warranty (hereinafter “Limited Warranty”) is issued by Hanwha Solutions Corporation, 86 Cheonggyecheon-ro, Jung-gu, Seoul, Korea 04541 (“Q CELLS”), and applies exclusively to Q.HOME+ ESS HYB-G2, (hereinafter “Product”) supplied by Q CELLS. Product consists of Q.SAVE as battery and Q.VOLT as inverter. The sole and exclusive beneficiary of this Limited Warranty is an end customer who purchases Product from Q CELLS (“Customer”) or from any of Q CELLS’ authorized distributors (“Distributor”).

### 1. PURPOSE

The principle purpose of this Limited Warranty is to provide Customer of Product with the warranty terms and conditions. This Limited Warranty covers both Product Warranty (under Clause 3.) and Performance Warranty (under Clause 4.).

### 2. WARRANTY PERIOD

The term of this Limited Warranty (“Term”) for the Customer begins on the initial installation date (“Warranty Start Date”) and ends at the end of the warranty period of ten (10) years from Warranty Start Date.

### 3. PRODUCT WARRANTY

Subject to the terms and conditions in this Limited Warranty, Q CELLS warrants to the Customer for a period of ten (10) years from Warranty Start Date that Q CELLS Product, when installed, used, and serviced under normal operating conditions and in accordance with the Technical Specifications and User Manual provided by Q CELLS, will be free from any defects in materials and workmanship that have a significantly negative effect on the storage of Product (collectively, “Product Defect”). The Product Warranty does not warrant energy throughput of Product, which shall be exclusively covered under the Performance Warranty in Clause 4.. Also, the Product Defect does not include any cosmetic changes or other changes in Q CELLS Product appearance, including but not limited to, any color changes, mold and normal wear and tear.

Q CELLS will, at its sole discretion, either repair, replace or compensate (under Clause 5.) Product confirmed to be defective by Q CELLS and provide necessary materials. The repair, replacement or compensation of Product does NOT extend the remaining Term.

### 4. PERFORMANCE WARRANTY

Subject to the terms and conditions of this Limited Warranty, Q CELLS warrants to the Customer that Q CELLS Product conforms with Technical Specification and the User Manual provided by Q CELLS and Q CELLS warrants, for (10) years from the date specified in Clause 2. of this Limited Warranty

or when its energy throughput of Product reaches “A” MWh, whichever comes earlier, that Product maintains at least “B” % of Nominal Energy (“Performance Warranty”). Failure to meet the Performance Warranty is defined herein as a “Performance Defect.”

Table of Guaranteed Energy Throughput and Battery SOH (State of Health)

Application	A : Energy Throughput for Performance Warranty	B : SOH
Germany	*8.000 MWh	80 %
Other countries (except Germany) with **valid product certification	*11.838 MWh	65 %

\* Energy Throughput is calculated based on the battery capacity of 4 kWh  
\*\* Valid product certification shall mean the product certification, authorization or verification obtained directly by Q CELLS in accordance with applicable regulations and laws for the purpose of distributing the Product in the respective jurisdiction.

- a. Capacity measurement condition (Current and voltage measurement at battery DC side)
- Ambient temperature: 25 - 30 °C
  - Charging / discharging method (1 cycle / day): 0.2 / 0.2 C-rate, DOD 100 %

However, Product shall be operated so that the temperature does not exceed from the range of 0 °C to 40 °C (based on ambient temperature). If Product is operated beyond its temperature range, the energy throughput is reduced according to the following condition:

Operating Temperature:  
If the temperature of Product (Cell / module temperature) is higher than 45 °C but lower than 50 °C or lower than or equal 0 °C but higher than or equal -5 °C for charging and, higher than 50 °C but lower than 55 °C or lower than or equal -10 °C but higher than or equal -15 °C for discharging, apart from the reduction in energy throughput caused by the degradation of cycle life due to the lapse of the operating period, the amount of energy throughput and / or the number of cycles of Product under warranty shall be reduced by (0.0065) %p per 1 minute.

The formula is as follows:  
Adjusted Energy Throughput = Initial Energy Throughput × (100 % – Total time when the battery experienced the corresponding temperature × reduction rate)



For Example:

If the battery temperature during a half-hour period is lower than 0 °C but higher or equal to -5 °C, the battery Energy throughput shall be adjusted as follows:

Adjusted Energy Throughput = Initial Energy Throughput × (100 % – Total time when the battery experienced the corresponding temperature × reduction rate)

= A MWh × {100 % – (30 × 0.0065 %p)}

= B MWh

Table of Example calculating adjusted Energy Throughput

Application	A : Initial Energy Throughput for Performance Warranty	B : Adjusted Energy Throughput for Performance Warranty
Germany	8.000 MWh	7.984 MWh
Other countries (except Germany) with *valid product certification	11.838 MWh	11.815 MWh

\* Valid product certification shall mean the product certification, authorization or verification obtained directly by Q CELLS in accordance with applicable regulations and laws for the purpose of distributing the Product in the respective jurisdiction.

From the moment the energy throughput reaches zero by the above formula, the Q CELLS has the right to terminate the warranty of Product.

If the average hourly temperature of Product exceeds 50 °C or less than -5 °C, Q CELLS shall have the right to terminate the warranty of Product.

## 5. WARRANTY CLAIM PROCESS

a. The Customer will be entitled to make claims under this Limited Warranty (“Warranty Claims”) only if the Customer has provided documented evidence sufficient to prove that the malfunctioning or non-conformity of Q CELLS Product resulted exclusively from a Product Defect or Performance Defect covered by this Limited Warranty.

b. In case of an alleged defect claim under this Limited Warranty or substantial reduction in Product performance below guaranteed capacity specified in the Performance Warranty (under Clause 4.), Customer shall within five (5) business days submit the followings to Q CELLS: (a) description about alleged defect; (b) serial number; and (c) installation site and date.

c. The Customer is responsible for shipping Q CELLS Product to Q CELLS for evaluation at the Customer’s expense. Q CELLS shall pay the costs of a technical inspection and, in the event that the Warranty Claims is confirmed by such inspection, transportation. Otherwise, the Customer shall be charged with these costs. To make a Warranty Claims, the Customer must submit the original receipt or invoice, which bears the date of the purchase and

of the delivery, the serial numbers of relevant Q CELLS Product and the name of the authorized distributor or seller.

d. Thereafter, Q CELLS will conduct an analysis of the concerned component in question and determine if Customer complied with Q CELLS’s instructions for installation and usage. If Product is determined to be defective or such battery capacity failure is confirmed by Q CELLS, Q CELLS may provide Customer compatible components for the purpose of repair, replace or compensation of the defective (or deficient) components or compensate the Customer for such deficiencies in performance. Along with that the paid service cost also shall be refunded.

## 6. SERVICE PRODUCTS / PARTS

Service products / parts are able to be used as new or refurbished condition which performance is equal to or higher than defective Product and guaranteed by Q CELLS. In the event Product is not available in the market anymore, Q CELLS, at its option, may replace it with different kind of product with equivalent functions and performances or refund the remaining annually depreciated value of the purchase price of Product during the term of Performance Warranty (10 years) as the Compensation Scheme below. The purchase price mentioned hereinabove means the list price actually paid by the Customer for the purchase..

Compensation Scheme

Period (after installation date)	*Compensation Rate (of purchase price)
Within 2 years	100 %
Over 2 years to up to 3 years	58 - 72 %
Over 3 years to up to 4 years	44 - 58 %
Over 4 years to up to 5 years	30 - 44 %
Over 5 years to up to 6 years	16 - 30 %
Over 6 years to up to 7 years	6 - 16 %
Over 7 years to up to 8 years	4 - 6 %
Over 8 years to up to 9 years	2 - 4 %
Over 9 years to up to 10 years	0 - 2 %

\* For monthly compensation rate in detail, refer to appendix A

The remedies and compensation rate set forth in this Limited Warranty are Q CELLS’s sole and exclusive liability and obligation, and the Customer’s sole and exclusive remedies, for any Product Defect or Performance Defect in any Q CELLS Product.

## 7. EXCLUSION OF WARRANTY

a. If Customer fails to procure log data, any repair or replacement of such Product shall be at Customer’s cost. Failure of procuring log data will be such as loss of web connection and / or saving data to Product as Q CELLS required.

b. Q CELLS shall not be liable for indirect, incidental, consequential or special damages, howsoever caused, including, but not limited to, loss of use, loss of profits, loss of production, or loss of revenues.

c. Other costs incidental to handling of defective Product, including, but not limited to, labor costs during the installation or disassembly for repair or replace Product, shall be borne by Customer.

d. Q CELLS's aggregate liability regarding each defective Product, if any, in damages or otherwise, shall not exceed one hundred percent (100%) of the invoice value as paid by the Customer per unit of defective Product.

e. The terms of this Limited Warranty are expressly in lieu of and exclude all other express or implied warranties, including, but not limited to, warranties of non-infringement, merchantability, fitness for particular purpose, use or application, and all other obligations or liabilities on the part of the Q CELLS, unless such other obligations or liabilities are expressly agreed to in writing signed and approved by Q CELLS.

f. For the sake of clarity, any defect found in the components other than battery module will not be covered under the Performance Warranty, but will be exclusively handled in accordance with clause 3. of this Limited Warranty, Product Warranty. Furthermore, any claims or demands by Customer based upon deficiencies in Performance Warranty by reason of failures in the components other than battery capacities (or battery SOH) will not be honored, and will be rejected after the expiration of period specified in clause 3. of this Limited Warranty.

g. Q CELLS shall not be liable for any issues arising out of removal, installation or disassembly of Product.

h. Q CELLS shall not be liable for any claims and / or damages arising from or in connection with following factors, and all costs incurred by Q CELLS for conducting the performance analysis shall be compensated by Customer:

- Any shortfalls in performance due to or in connection with Customer's improper usage, which deviates from Q CELLS's operating instructions, product technical specification, installation guide, technical, and safety regulations applicable in the country in which the battery is being operated; or
- Any shortfalls in performance due to external influences, including, but not limited to, air pollution, sea wind and sulfur corrosion, smoke, acid rain or other pollutants or persons (vandalism), forces of nature outside reasonable control of Q CELLS, such as fire, earthquake, storm lightening, or other abnormal environmental conditions (force majeure); or

- Any shortfalls in performance due to defect or electrical effects from other device(s) which was not supplied by Q CELLS.

## 8. ASSIGNMENT

Customer may not assign this Limited Warranty for any Q CELLS Product to a new owner without a written consent by the Distributor. Any attempt to assign or transfer without a written consent shall be null and void.

## 9. AUSTRALIAN CONSUMER LAW (APPLIES TO CUSTOMERS IN AUSTRALIA ONLY)

Our goods and services come with guarantees that cannot be excluded under the Australian Consumer Law. For major failures with the service, you are entitled

- to cancel your service contract with us; and
- to a refund for the unused portion, or to compensation for its reduced value.

You are also entitled to choose a refund or replacement for major failures with goods. If a failure with the goods or a service does not amount to a major failure, you are entitled to have the failure rectified in a reasonable time. If this is not done, you are entitled to a refund for the goods and to cancel the contract for the service and obtain a refund of any unused portion. You are also entitled to be compensated for any other reasonably foreseeable loss or damage from a failure in the goods or service.

## 10. MISCELLANEOUS

### a. Survival

If any provision of this Limited Warranty terms and conditions is held to be invalid, illegal or unenforceable in any respect, such provision will be changed and interpreted to accomplish the objectives of such provision to the greatest extent possible under applicable law and the remaining provisions will continue in full force and effect.

### b. Governing Law

All matters arising from or relating to this Limited Warranty shall be governed by, and enforced in accordance with, the internal laws of South Korea, without regard to its choice of law rules, The UN Convention on the International Sale of Goods shall not apply. Parties agree that the Seoul Central District Court shall have jurisdiction to hear and determine any suit, action or proceedings, and to settle any disputes, which may arise out of or in connection with this Limited Warranty ("Proceedings") and, for such purposes, irrevocably submits to exclusive jurisdiction of such court. Each of Parties hereto irrevocably waives any objection which it might now or hereafter have to the Seoul

Central District Court being nominated as the forum to hear, determine and settle any Proceedings, and agrees not to claim that any such court is not a convenient or appropriate forum. Both parties consent generally in respect of any Proceedings to the giving of any relief or the issue of any process in connection with such Proceedings including (but without limitation) the making, enforcement or execution against any property whatsoever of any order or judgment which may be made or given in such Proceedings.

c. Waiver of Jury Trial: Jurisdiction

Any dispute, controversy or claim arising out of or relating to this Limited Warranty or any of its provisions, or the breach, termination, interpretation, enforcement or validity thereof, including any dispute hereby is waived to the fullest extent permitted by applicable law any right it may have to a trial by jury with respect to any litigation directly or indirectly arising out of, under or in connection with this Limited Warranty. Any dispute, controversy or claim arising out of or relating to this Limited Warranty or any of its provisions, or the breach, termination, interpretation, enforcement or validity thereof, including any dispute irrevocably is submitted to the jurisdiction of the Seoul Central District Court.

11. Q CELLS CONTACT DETAILS

a. Australia: Hanwha Q CELLS Australia Pty. Ltd.  
Suite 1, Level 1, 15 Blue Street North Sydney, NSW 2060, Australia  
EMAIL Qhome.au@q-cells.com  
TEL +61 (02) 9016 3033

b. Europe: Hanwha Q CELLS GmbH, Germany  
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Appendix A. Table for Monthly Compensation Rate

Month	Rate[%]	Month	Rate[%]	Month	Rate[%]	Month	Rate[%]	Month	Rate[%]
1	100.0	25	70.8	49	42.8	73	15.2	97	3.8
2	100.0	26	69.7	50	41.7	74	14.3	98	3.7
3	100.0	27	68.5	51	40.5	75	13.5	99	3.5
4	100.0	28	67.3	52	39.3	76	12.7	100	3.3
5	100.0	29	66.2	53	38.2	77	11.8	101	3.2
6	100.0	30	65.0	54	37.0	78	11.0	102	3.0
7	100.0	31	63.8	55	35.8	79	10.2	103	2.8
8	100.0	32	62.7	56	34.7	80	9.3	104	2.7
9	100.0	33	61.5	57	33.5	81	8.5	105	2.5
10	100.0	34	60.3	58	32.3	82	7.7	106	2.3
11	100.0	35	59.2	59	31.2	83	6.8	107	2.2
12	100.0	36	58.0	60	30.0	84	6.0	108	2.0
13	100.0	37	56.8	61	28.8	85	5.8	109	1.8
14	100.0	38	55.7	62	27.7	86	5.7	110	1.7
15	100.0	39	54.5	63	26.5	87	5.5	111	1.5
16	100.0	40	53.3	64	25.3	88	5.3	112	1.3
17	100.0	41	52.2	65	24.2	89	5.2	113	1.2
18	100.0	42	51.0	66	23.0	90	5.0	114	1.0
19	100.0	43	49.8	67	21.8	91	4.8	115	0.8
20	100.0	44	48.7	68	20.7	92	4.7	116	0.7
21	100.0	45	47.5	69	19.5	93	4.5	117	0.5
22	100.0	46	46.3	70	18.3	94	4.3	118	0.3
23	100.0	47	45.2	71	17.2	95	4.2	119	0.2
24	100.0	48	44.0	72	16.0	96	4.0	120	0.0

