

## Warranty

This warranty applies to the purchase of HP-SG embedded energy storage battery system series products from Shuangdeng Group Co., Ltd. (hereinafter referred to as 'Shoto') after August 1, 2024. Shoto provides the warranty services mentioned in this document to direct buyers, and the specific terms are as follows:

### 1. Product warranty

Shoto guarantees that its products will not have quality issues due to improper craftsmanship or material defects. The warranty period is 10 years .at 25°C±2°C, 0.2C charge and discharge, 80% DOD. If any of these conditions are met, the warranty will expire. The warranty period starts from the earlier of the product installation date or three months after the product is manufactured.

The "warranty period" is subject to the conditions stated in clauses 2 and 3. This warranty does not cover any accessories and toolkits that come with the product. If the product has quality defects and is returned within the warranty period, Shoto will repair or replace the product.

Product Model	Usable Energy (kWh)	Minimum Throughput Energy (MWh)
HP-SG	24.5	77.2
	32.7	102.5
	40.9	128.2
	49.0	156.8



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The Minimum Throughput Energy means the total output energy of the product recorded in the control module of the Product.

The Usable Energy and Minimum Throughput Energy for each product Model are set out in the table below.

## 2. Warranty conditions

The product warranty applies only under the following conditions:

- 1) Purchased from Shoto.
- 2) The label is intact and the battery pack is not damaged.
- 3) Installed in an indoor environment and the battery is not submerged in water.
- 4) Installed, operated, and maintained according to the product manual.
- 5) Used only for energy storage systems, within a temperature range of 0°C to 35°C, and with a number of cycles that does not exceed the specified limit.
- 6) Has Shoto's serial number.

The warranty terms will not apply if the product's quality defects or failures are caused by misuse, abuse, accidents, or failure to comply with the user manual by the user.

## 3. Warranty Exclusion Clause

Within the limits permitted by law, Shoto bears no responsibility for any damage or issues caused or contributed to by the following reasons:

- 1) The product is installed and used together with inverters or chargers

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that have not been Shoto certified.

- 2) The battery was not operated correctly according to the product manual.
- 3) Transportation, including but not limited to dropping, trampling, deformation, impact, or puncture with sharp objects.
- 4) Storage, installation, debugging, modification, or repair of the product performed by non-professional installers.
- 5) Abuse, misuse, negligence, accidents, or force majeure events, including but not limited to lightning, floods, fires, extreme cold weather, or other events beyond Shoto's reasonable control.
- 6) Any attempt to extend or shorten the product's lifespan without written confirmation from Shoto.
- 7) Failure of the product caused by water, conductive dust, or corrosive gases.
- 8) Connection of the product with different types of batteries.
- 9) Normal wear and tear or aging; the warranty does not cover vulnerable parts such as fuses in the battery system and the high-voltage box. The high-voltage box comes with a free warranty for the first five years and a paid warranty for the last five years.
- 10) Theft or intentional damage to the product or any of its components.

## 4. Reparation

Users must notify Shoto for claims within 24 hours after discovering the problem through the following means: The high-voltage box comes

with a free warranty for the first five years and a paid warranty for the last five years.

- 1) Contact Shoto to provide product after-sales information
- 2) Provide on-site installation photos of the product from different angles.

**In order to make a claim under this warranty, users must:**

- 1) Submit the product purchase invoice, specifying the delivery date.
- 2) Provide log data recorded by Shoto ' s system to determine if the minimum capacity has been reached (though this is not decisive).

Shoto will contact the customer to obtain more information about the quality issue and may request the customer's assistance in completing the root cause analysis to support the claim. Shoto will verify the cause of the product problem. If the customer disagrees with Shoto's verification, it must be evaluated by a testing laboratory accredited by the local government or a certified third-party testing agency. The customer will bear the cost of the third-party evaluation service (unless the claim is proven to be valid, in which case Shoto will be responsible for the testing cost).

If any testing of product capacity is required, it must be conducted under the following conditions:

- a) This test is based on individual battery pack parameter settings.
- b) The ambient temperature is  $25^{\circ}\text{C} \pm 2^{\circ}\text{C}$ .
- c) The initial temperature of the battery pack is  $25^{\circ}\text{C} \pm 2^{\circ}\text{C}$ .



d) Constant current (20A) and constant voltage (56.8V) charging until the charging current is less than 2.5A.

e) Constant current (20A) discharging until the battery reaches low voltage protection (2.5V per cell).

## 5. Define

1) The minimum capacity refers to 60% of the rated capacity within the warranty period.

2) The rated capacity refers to the initial rated capacity printed on the product label.

3) The product refers to the HP-SG embedded energy storage battery system produced by Shoto.

4) The product manual refers to the instructions and manuals provided by Shoto upon product release, which specify how to install and operate the product.

5) Shoto refers to Shuangdeng Group Co., Ltd., located at 999 Tianmu West Road, Jiangyan Economic Development Zone, Taizhou City, Jiangsu Province, China.



Shuangdeng Group Co., Ltd

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