Pixii Global Warranty

Appendix A Shoto 100Ah LFP SDA10-48100

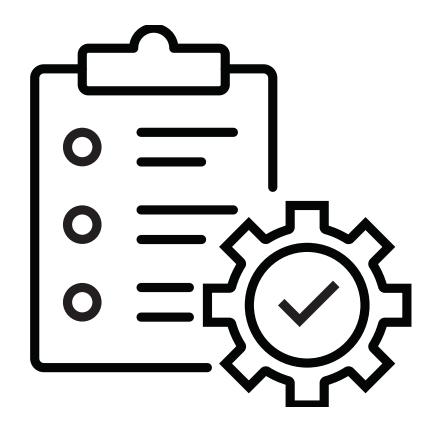




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1.0	29.05.2024	Initial

1 Appendix A - Performance Guarantee

In the Pixii Global Warranty document, Pixii provides a warranty to purchaser of the Product with Shoto SDA10-48100 100Ah LFP that the supplied Lithium Batteries will at the time of shipment, be free from defects by reason of defective material, design, or workmanship and fully functional and operational according to Pixii standard warranty terms.

In addition, Pixii provides the Performance Guarantee detailed in this Appendix A, on batteries supplied with our systems.

1.1 Performance Guarantee

For Product delivered with Shoto SDA10-48100 100Ah LFP batteries, the battery is determined defective if the system fails to deliver in accordance with the table below:

Guaranteed Cycles	DOD (Depth of discharge)	Temperature Range	C-rate (Charge/ Discharge	State of Health (SoH)	Time Period (Max.)
2500	80%	25 ± 5°C	1C	80%	10 years
4000	80%	25 ± 5°C	0.5C	80%	10 years

NOTE:

Performance guarantees is for a total 80% of its original capacity (SoH) for 10 (ten) years or number of cycles at respective C-rate whichever occurs earlier. The Performance Guarantee is valid for a period of 10 (ten) years from the battery is being shipped to the customer.

1.2 Performance Guarantee Conditions

The Performance Guarantee is subject to the following terms and conditions:

- 1. The ambient temperature should be in the range of 10 to 30 degree Celsius. The cumulative duration of the ambient temperature in the range of 30 to 40 degree Celsius must not exceed 300 hours per year, and the battery should be shaded.
- 2. The battery can be used for floating and cyclic scenarios, and the total Depth of Discharge (DOD) of the battery cannot exceed 80% every day, and the cycling frequency cannot exceed 2 times every day.
- 3. The depth of discharge of the battery should be limited, which means that the discharge voltage of the battery cannot be lower than 42V.
- 4. The charge parameter settings should be as under:
 - a. Float Charge Voltage: 54 VPC at 25 °C
 - b. Equalize Charge Voltage: 57.6 VPC at 25 °C
- 5. Parameters not claimed here shall be set in accordance with requirements of User Manual and Product datasheet of Shoto (The datasheet version number: V1.220230908EN).
- 6. The battery should be recharged within 24 hours after each full discharge. For a fully discharged battery (below 10% SoC), if it is not recharged for more than 72 hours, it will shorten the battery service life, so warranty is not provided if this case happens more than 3 times. And it is not recommended to fully discharge the battery every day.
- 7. The battery is fully charged to 100% SOC once every 30 days.
- 8. 1 cycle is defined as discharging from 90% SOC to 10% SOC and charging back again to 90% SOC. This charge & discharge cycle of 80% of usable energy could take place at once or various smaller occurrences that accumulates to total usable capacity.
- 9. Pixii would replace the battery during the warranty period based on a faulty block but not as a whole string.
- 10. Pixii should not be held responsible for any physical damage, improper installation, handling, and damage caused by any disaster.
- 11. Pixii suggests that user should keep and provide the following monthly logs if possible:
 - a. Number of cycles, duration of each time, the end voltage of discharge, and others.
 - b. Ambient and battery surface temperature.
- 12. Any storage and maintenance of this battery should refer to the battery User Manual.

- 13. The humidity of the battery application scenario should be at 10%-80%, non-condensing. If humidity is out of this range, or there is condensation inside the battery, the damage will not be covered by the warranty.
- 14. The buyer must cooperate to provide the operating temperature and parameter settings and history logs and so on. If necessary, the buyer should cooperate with Pixii or the battery supplier technical engineer to check on site.
- 15. The customer has given Pixii every opportunity to inspect and remedy the defects, non-conformity, and deviation.

1.3 Battery repair and pro-rata guarantee

In case a battery module is faulty and intended for repair by Pixii, the replacement module will feature an equal or greater remaining energy throughput (Ah) than the replaced battery.

Furthermore, we provide a pro-rata guarantee for 80% SoH for 10 (ten) years or above-mentioned full cycles of the battery at respective C-rate. This provides that the battery has been operated under the conditions of this performance guarantee statement.

In case the product doesn't achieve the full life span, means that the End of life (EoL) criteria's are met earlier than specified, Pixii will discount the price for a new battery by the difference of the non-achieved performance (in %). (For e.g., If the battery SOH is 70% during 10 (ten) years of operation or has 10% less than specified number of full cycles at respective C-rate, Pixii will provide 10% discount on the purchase of the new battery).

