Battery Compatibility for Solis RHI-1P(5-10)K-HVES-5G-US



Connecting the inverter to a battery that is not on the list will void the warranty of the inverter

Note: Section 5.6.3 of the hybrid manual states that only batteries that are on the Battery Compatibility listed can be used with the Solis RHI-1P(5-10)K-HVES-5G-US inverter series.

5.6.3 Battery Select



The Battery Compatibility list can be found on the company website, but it is also included below. The RHI-1P(5-10)K-HVES-5G-US inverter series will not operate with any batteries that are not on this list.

Battery Compatibility List for the Solis RHI-1P(5-10)K-HVES-5G-US Inverter Series

| Solis Inverter Series | Battery Brand | Battery Model | Maximum Storage Capacity [stacks] | UL 9540 Certification |
|-----------------------------------------------------------------------------------|---------------------|---------------|--------------------------------------|--------------------------|
| RHI-1P(5-10)K-HVES-5G-US Includes: 5K, 6K, 7K, 7.6K, 8K, 9K, and 10K models | BYD | B-Box 5K | 5 kWh [1] | ✓ |
| | | B-Box 7.6K | 7.6 kWh [1] | ✓ |
| | | B-Box 10K | 10 kWh [1] | ✓ |
| | LG Energy Solutions | RESU 10H | 20 kWh [2] | ~ |
| | Soluna | 15K Pack HV | 60 kWh [4] | × |
| | Pylontech | Force H1 | 24.8 kWh [1] | × |
| | | Force H2 | 7.1 kWh [1] | × |

The reason that this inverter series cannot work with other batteries is two parts:

- 1. Interoperability matching: In order for the inverter and a battery BMS to have interoperability, a process that we call "matching" must first be completed in the lab. This process requires both pieces of equipment to be tested together in the lab so that firmware can be created which allows the battery and inverter to work together. If matching has not been performed by the lab engineers, connecting a battery not on the list above to the inverter with RS485 or CAN will not guarantee interoperability.
- 2. **Required UL Certification:** UL 9540 certification is required in most jurisdictions of the United States. This certification should not be confused with UL 9540A, which is done by the battery manufacturer for the battery only. UL 9540 is a safety certification that includes both a battery and an inverter. This certification ensures that the system will operate with minimal risk of thermal-runaway and fires. Check with your AHJ if this certification is a requirement or not. The CEC requires equipment have UL 9540 in order to be listed as an energy storage inverter. *If your AHJ does not require the UL 9540 certification, then any of the batteries on the list above can be installed with this inverter series.*

Note: The "User Define" option in the battery select menu is a vestigial option that was used by the lab technicians and should be ignored. It is unfortunately not possible to set up this inverter series with a battery that is not on the list.