

Parallel Statement for PowerBrick Series Products

PowerBrick series products are divided into the following models according to cell specifications:

314Ah cells: PowerBrick Max, PowerBrick Plus, PowerBrick SC

280Ah cells: PowerBrick, PowerBrick Pro

In daily use, Dyness permits the parallel operation of Brick series products with different cell specifications under the following conditions:

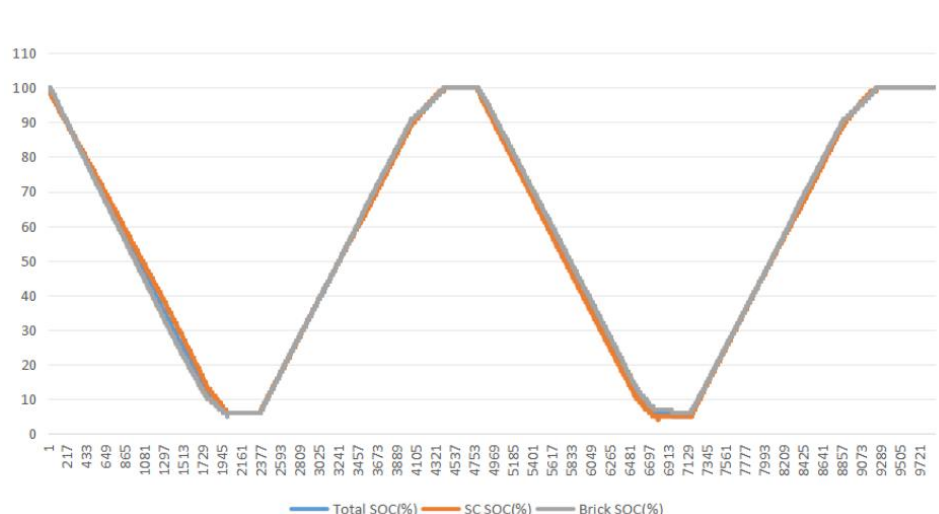
Prerequisites:

1. The ratio of total battery power to total inverter power shall be 1:0.67.(For example: When one PowerBrick is used in parallel with one PowerBrick Max, the total battery power is 14KWh + 16KWh = 30KWh. The total inverter power shall not exceed $30\text{KWh} \times 0.67 = 20.1\text{KW}$.)
2. Each battery product shall be used correctly in accordance with its respective protection grade.
3. Parallel cables of the same specification and as equal length as possible shall be used to minimize the difference in line resistance.

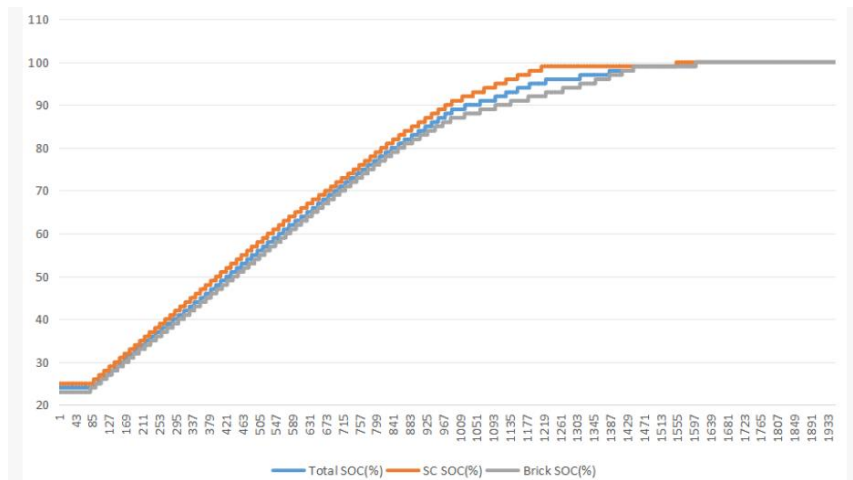
Normal phenomena (not valid for claims) when Brick series products of different capacities are used in parallel:

1. SOC difference between products.Due to differences in product capacity and internal resistance, inconsistent SOC among modules may occur during use. There will be no obvious difference when the charge/discharge rate is within 0.5C. As the charge/discharge rate increases, the difference will also become larger. This is a normal phenomenon and will not affect the normal operation of the system.

PowerBrick and Power Brick SC are connected in parallel. Changes in SOC under 0.5C charge and discharge conditions:



PowerBrick and Power Brick SC are connected in parallel. SOC changes under charge and discharge conditions higher than 0.5C:



2. Difference in charge and discharge current distribution among products. Due to the variance in internal resistance and capacity among battery modules, there will be differences in charge and discharge current distribution between modules during parallel operation. The current distribution varies with SOC and load conditions. This is a normal phenomenon and does not affect system performance or safety.