

Felicitysolar Low Voltage Battery Parallel Connection Compatibility Guidelines and Warranty Disclaimer

1. Background

Due to the integration of Felicitysolar product series and product name adjustments, this document is issued to help customers, distributors, and installers correctly select and configure different series of Felicitysolar low-voltage battery products during practical applications, and to prevent system abnormalities caused by model differences, different operating conditions, or parameter mismatches.

The parallel connection of Felicitysolar low-voltage batteries must meet product compatibility requirements and be confirmed and operated in accordance with official technical specifications. Before connecting batteries of different models or different operating conditions in parallel, evaluation and confirmation by the Felicitysolar technical team are required.

2. Basic Principles for Battery Parallel Connection

1. Before connecting batteries with different models, different series, or different operating conditions in parallel, approval and confirmation must be obtained from Felicitysolar customer service, repair engineers, or technical support team.

2. Without confirmation from Felicitysolar, users or installers are not allowed to connect different battery models or batteries with different operating conditions in parallel without authorization.

3. The specific battery models allowed for parallel connection shall be subject to the compatibility list officially released by Felicitysolar.

3. Requirements for Mixed Parallel Connection

3.1 Battery Model Compatibility Requirements

Under the following conditions, different models within the same series may be applied for parallel connection:

- The cell type and key technical parameters have minor differences;
- The battery voltage platform is consistent;
- The capacity levels meet system configuration requirements;
- The BMS communication protocol and control logic are compatible;
- The battery models are within the range approved by Felicitysolar.

3.2 Battery Operating Time Requirements

During actual operation, batteries may experience capacity degradation, internal resistance variation, and differences in SOH (State of Health). Therefore:

- The accumulated operating time difference between two batteries connected in parallel shall not exceed 6 months;
- The operating time shall be determined based on the initial installation date, first power-on date, BMS operating data, system operation records, and other relevant information.

The following situations are generally prohibited for direct parallel connection:

- **Connecting a brand-new battery directly in parallel with a long-term used battery (after a battery has been operating for more than six months, it is prohibited to connect it in parallel with a new battery);**
- **The accumulated operating time difference between two battery groups exceeds 6 months.**

For special projects requiring such applications, a specific evaluation and approval by the Felicitysolar technical team are mandatory.

4. Maximum Charge and Discharge Current Matching Requirements**4.1 Same Maximum Charge and Discharge Current**

When the maximum continuous charging current and maximum continuous discharging current of the parallel-connected batteries are the same, the batteries may be connected in parallel after confirmation by Felicitysolar.

4.2 Different Maximum Charge and Discharge Current

When the maximum continuous charging and discharging current parameters of the parallel-connected batteries are different:

- Contact Felicitysolar technical support personnel;
- Set the maximum charging and discharging current of all parallel-connected batteries to the lowest value among the mixed battery group;
- Parallel connection is allowed only after parameter adjustment and confirmation are completed.

5. Parallel Connection Operation Requirements

1. All batteries must comply with Felicitysolar installation specifications.
2. Before parallel connection, the battery voltage status, SOC status, BMS communication, and software version must be verified to ensure compliance with requirements.
3. Unauthorized modification of BMS parameters, protection parameters, or communication configurations is strictly prohibited.

6. Responsibility and Warranty Disclaimer**Statement:**

After the parallel connection has been confirmed and approved by the Felicitysolar technical team, due to possible differences in battery models, operating time, and battery aging conditions, inconsistencies in SOC (State of Charge) and SOH (State of Health) may occur during charging and discharging operations. Such conditions are considered normal characteristics of battery parallel operation and shall not be regarded as product quality issues.

1. If users or installers connect batteries of different models or different operating conditions in parallel without confirmation from Felicitysolar, any resulting system abnormalities, performance degradation, battery damage, or safety issues shall not be considered as product quality responsibility.
2. For issues caused by unauthorized parallel connection, including but not limited to BMS protection abnormalities, battery capacity imbalance, abnormal charging/discharging, reduced battery lifespan, or battery damage, Felicitysolar reserves the right to determine responsibility based on the actual cause of failure.
3. Problems caused by unauthorized or improper parallel connection, regardless of whether new batteries or used batteries are involved, shall not be covered by free warranty service

Table 1

Model	Max. Cont. C/D Current (A)	Mixed Use Allowed	Parallel Methods
FLA48100	100	Allowed	Direct Parallel
FLA48100-EU	100		
LUX-E-48100LG03	100		
FLA48171-EU	120	Allowed	Direct Parallel
FLA48200	120		
FLA48200-P	150	Allowed	Direct Parallel
LUX-E-48200LG03	150		
FLA48230	150		
FLA48230-EU	150		
LUX-E-48230LG03	150		
FLA48250	150		
FLA48250-EU	150		
LUX-E-48250LG03	150		
FLA48280	150	Allowed	Direct Parallel
FLA48280-EU	150		
FLA48280TG2-EU	150		
LUX-Y-48280LG01	150		
FLA48300	150		
FLA48300-EU	150		
LUX-Y-48300LG01	150		

Table 1 (Continued)

Model	Max. Cont. C/D Current (A)	Mixed Use Allowed	Parallel Methods
FLA48460-EU	200	Allowed	Direct Parallel
FLA48500	200		
FLA48460-EU	200	Allowed	/
FLA48500	200		
FLA48460TG2-EU	250		Set Max. Cont. C/D Current (A) to 200A
FLS48100SG1	Max 400A, increasing with parallel battery pack count	Allowed	Direct Parallel
FLS48100SG2			
LUX-X-48100LG01			
FLS48050SG1	Max 80A, increasing with parallel battery pack count	Allowed	Direct Parallel
LUX-X-48050LG01			
FLH96050SG2/ FLH96050SG2-H	50	Allowed	Direct Parallel
【V1.5】:FLH96050SCG1	50		
【V1.5】:LUX-X-96050HCG01	50		
FLH48100UCG2	100	Allowed	Direct Parallel
【V1.5】:FLH48100UCG1	100		
【V1.5】:LUX-Y-48100HCG01	100		
LPBA48100-OL	60	Allowed	Direct Parallel
LUX-E-48100LG04	60		

For any questions, contact Felicitysolar staff at any time

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