LiFe Series Battery Settings for **Deye** Inverters

Deye

OVERVIEW

Settings listed are only applicable to battery charge and discharge. All other settings are the responsibility of the integrator.

It is the responsibility of the integrator to have a full understanding of the connected PCE prior to programming, and it is preferred that they have attended the manufacturer's training or integration course should they be available.

SoC Drift

State of Charge ("Soc") drift happens when the product that is calculating SoC builds up an accumulative error. This error is generally due to tolerance of components that measure voltage and current, and algorithms used to calculate the SoC. Most products will reset its accumulative error when the system gets to 100% SoC or Float.

It is important that a well-designed battery storage system reaches Float stage as regularly as possible, preferably every one to two days to rest SoC drift.

SoC drift can be addressed in many ways.
Examples:

1. Sufficient solar sized to charge batteries to float on the winter equinox

2. Backup source installed (grid or generator) to allow charging of batteries during extended bad weather or high load events.

How many batteries do I need?

Minimum battery size should be greater than the rated peak output of the inverter.

Battery to PV ratio is no less than 2.5kWh (battery) : 1kw (PV).

The battery quantity is not compulsory, however it's highly recommended as a minimum to reduce possible battery trips due to over current

Always consult and read the manufactures documentation before designing, installing and programming their devices.

Important: LiFe4838P batteries <u>are not</u> compatible with PWM charge controllers

Please Note: These settings are for LiFe4838P batteries with serials after LXXXX6000 only, please contact PowerPlus Energy support for legacy settings.

LiFe4838P batteries with serials prior to LXXXX6000 <u>are not</u> compatible with LiFe4838P batteries with serials after LXXXX6000.

Recommended Minimum Battery Modules

	LiFe4833P	LiFe4838P
5kW Single Phase	3	3
8kW Single Phase	5	5
8kW Three Phase	5	5
10kW Three Phase	6	6
12kW Three Phase	7	7

Battery Settings for Inverters

	LiFe4833P	LiFe4838P
Battery Type	Batt-V mode	
Battery capacity	Total Ah Capacity of PowerPlus Energy Battery Bank Installed	
Float Voltage	57.6V	55.7V
Absorption Voltage	57.6V	55.7V
Equalization Voltage	57.6V	55.7V
Equalization cycle	0 Days	
Equalization Operating Time	0h/2	
Battery Empty Voltage	50.2V	
Battery resistance	0 mΩ	
Battery charge efficiency	96%	
Temperature compensation	0	
Max A Charge	Max - 0.5 (C2) - 50% of the total Ah Capacity Installed	
Max A Discharge	Continuous dsicharge rating of the installed battery modules	
Battery Shutdown Voltage	50.20V	
Battery Restart Voltage	51.2V	
Battery Low Voltage	51.2V	
Activate Battery	Enable	
Disable Float Charge	Disable	

Installers should ensure an adequate system design is carried out at all times. PPE accepts no responsibility for underperforming system designs.
As part of our continued improvement process, settings are subject to change without notice and are correct at time of publishing.