

P O Box 162,
Cnr Van Rooyen St and Nolte St
Rayton
1001
South Africa
Phone 012 734 0915 / 082 515 1655
Email info@thesunpays.co.za

LiFePO4 Battery Important information & Axpert Inverter Settings

- The Sun Pays LiFePO4 battery (rack mount and wall mount models) have a built-in battery management system (BMS) which monitors and protects the battery during use. It is important to note that the BMS is set to switch off the battery if the voltage drops below 41 V. Please arrange with the technicians at The Sun Pays if the battery have switched off due to low voltage protection.
- The charging current is limited by the BMS to 20 A to ensure optimal battery life.
- The battery life expectancy is strongly dependant on the depth of discharge (DoD) of the battery. A DoD of 80% is recommended for the battery to obtain at least 3500 Cycles. The 80% DoD voltage is as follows:
 - Battery Discharge rate 100 A [~ 4.8 kW Load] : 47.4 V
 - Battery Discharge rate 50 A [~ 2.4 kW Load] : 47.9 V
 - Battery Discharge rate 20 A [~ 0.96 kW Load] : 48.1 V
- Batteries should be connected in parallel if more than one LiFePO4 battery is to be used.
- Utility/generator will only charge the batteries if the battery voltage is below setting 12 value.

The following settings can be used on the Axpert inverters for TSP LiFePO4 batteries:

Setting Description	Value	TSP 4kW /5kW – Menu Item No.	Sacolar / Growatt– Menu Item No.
Discharge Priority	SBU	01	01
Total Charge Current	20A per battery	02	02
Battery Type	USE	05	05
Back to Utility	48.0 V (if generator is used, set to 51V)	12	12
Back to Battery	51 V (if generator is used, set to 52V)	13	13
Charge Priority	SnU	16	14
Charge Voltage	53.2V	26	19
Floating Voltage	52V	27	20
Battery Cut-off	46V (Alarm will sound from 47V)	29	21

For more information on warranty conditions, please visit : <https://shop.thesunpays.co.za/pages/product-warranty>