Eco Series Battery Settings for **Schneider** Products

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 Schnieder products 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 reset 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?

The table below outlines the required quantity of batteries to achieve the full performance of the SW and XW Inverter. 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.

Recommended Minimum Battery Modules for Schneider Products

	Eco4840P	Eco4847P
Connex SW4048 (7kW)	2	3
Connx SW8548	3	4
Connex XW+ 7048	3	3
Connex XW+ 8548	3	4
Connex XW PRO 8548	3	4

Schneider Connex SW, XW+ and XW PRO Settings

	Eco4840P	Eco4847P
	Inverter Settings	
Low Battery – Cut Out Voltage	48V 0% SoC 49.50V 10% SoC 50.20V 20% SoC	
LBCO Delay	5 Seconds	
LBCO Hysteresis	2V	
High Batt Cut Out	60V	57V
Search Watts	If Unknown Leave Default	
Search Delay	If Unknown Leave Default	

	Eco4840P	Eco4847P
	Charger Settings – Custom Settings	
Battery Type	Lithium-ion	
Control	3 Stage	
Bulk Voltage	57.6V	55.7V
MaxBulkCurrent	Max – 0.5 (C2) – 50% of Total Ah Capacity Installed	
Absorb Voltage	57.6V	55.7V
MaxAbsCurrent	Max – 0.5 (C2) – 50% of Total Ah Vapacity Installed	
Float Voltage Standby (Short Term Float) (Example Solar Application)	57.6V	55.7V
Float Voltage Standby (Long Term Float) (Example UPS Application)	54.4V to 56V	55.5V
MaxFloatCurrent	Max – 0.5 (C2) – 50% of Total Ah Capacity Installed	
DisChgImax	100%	
DisChgImax Time	300Sec	
	Charger Settings	
Battery Capacity	Total Ah Capacity of PowerPlus Energy Battery Bank Installed	
Max Charge Rate	Max – 0.5 (C2) – 50% of Total Ah Capacity Installed	
Battery Default Temp	Warm	
Recharge Volts	51V	
Absorb Time	4 Hours	2 Hours
Chg Block Start	Leave Default	
Chrg Block Stop	Leave Default	

Schneider Connex MPPT 80 600

	Eco4840P	Eco4847P
	Setup	
Equalise Activate	Stop	
	Advanced Settings - Multi Unit Config > Connections	
DC Conn	BattBank1	
	Advanced Settings > Charger Settings	
Batt Voltage	48V	
Batt Type	Custom	
Batt Capacity	Total Ah Capacity of PowerPlus Energy Battery Bank Installed	
Mac Chg Rate	50%	
Recharge Volts	52.9V	
Absorb Time	180min	120min
Dflt Battery Temp	Warm	
Charge Cycles	3 Stage	
	Setup	
Force Chg	Bulk	
	Setup > Meters	
Batt Temp	N/A	
Equalise Support	Disabled	
Equalise Voltage	57.6V	55.7V
Bulk Volatge	57.6V	55.7V
Absorb Voltage	57.6V	55.7V
Float Voltage Cyclic (Short Term Float) (Example Solar Application)	57.6V	55.7V
Float Voltage Standby (Long Term Float) (Example UPS Application)	54.4V to 56V	55.5V

Schneider Connex MPPT 60 150

	Eco4840P	Eco4847P
Battery Menu		
Equalise Activate	Stop	
Equalisation Reminder	0 Days	
Battery Bank 1	1	
Battery Voltage	48V	
Battery Type	Custom	
Capacity Limit	Total Ah Capacity of PowerPlus Energy Battery Bank Installed	
Recharge Volts	52.9V	
Max Absorb Time	180min	120min
Force State bulk	Bulk	
Dflt Battery Temp	Warm	
Charge Cycles	3 Stage	
Custom Settings		
Equalise Support	Off	
Equalise Voltage	57.6V	55.7V
Bulk Voltage	57.6V	55.7V
Absorb Voltage	57.6V	55.7V
Float Voltage Cyclic (Short Term Float) (Example Solar Application)	57.6V	55.7V
Float Voltage Standby (Long Term Float) (Example UPS Application)	54.4V to 56V	55.5V

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.