WWW.ZYC.ENERGY



Inverter Setting Guide

for SIMPO 5000

ZYC ENERGY ZERO YOUR CARBON

Version: V1.2

Released Date: 2024-08-27



Contents

Foreword	. 1
1. Victron Inverter (Managed Mode)	2
2. SMA Inverter (Managed Mode)	. 7
3. Selectronic Inverter (Managed Mode)	.11
4. Selectronic Inverter (Self Managed)	. 17
5. Noark Inverter (Managed Mode)	22
6. Deye Inverter (Managed Mode)	26
7. Contact Us	.30

Foreword

- 1. This manual contains the configuration methods for the inverters matched to the SIMPO 5000. Please read this manual carefully during installation.
- 2. If your inverter is listed in the recommended minimum battery modules table of ZYC SIMPO 5000, indicating support for communication with the SIMPO 5000 BMS, we strongly recommend utilizing the communication mode. This ensures a better and more stable operating system for you.
- 3. For using selectronic inverter. The SIMPO 5000 is not in the 'Model No' list yet, so please choose 'Pylontech US5000B' for current setting. However, there is a difference between SIMPO 5000 module cells and Pylontech cells, so the settings still need to be made according to the following manual.
- 4. If your installation is in non-communication mode with Selectronic inverters, please read the chapter Selectronic Inverter (**Self-Managed**) carefully.
- 5. When configuring with Selectronic inverter access in **Self-Managed** mode, make sure that the firmware version of the SIMPO 5000 is upgraded to **V2.7.0 or above via ZYC Portal, ZYC Assist(APP), or ZYC Assist Pro** before installation.
- 6. Due to our ongoing process of improvement, settings may be altered without prior notice and are accurate at the time of their release/publishing.
- 7. When the load is small, the battery is easier to be fully charged, and it is easier to trigger over-voltage of the battery in **Self-Managed** mode. In this situation, it is highly recommended to use the communication mode
- 8. When designing the system, please satisfy the following conditions at the same time while meeting the recommended minimum SIMPO 5000 modules for full performance of inverter chargers:

Daily PV power generation - Daily power consumption of the load < Battery capacity



1. Victron Inverter (Managed Mode)

Topological Diagram of ZYC + Victron



Commissioning Process

Step 1: Change pin NO. of communication cable

For communication cable, it is suggested to **use VE.Can to CAN-bus BMS type A cable** Change the pin of commucation cable according to *SIMPO 5000 Installation&Operating Manual* or follow the guide below.





Step 2: Connect power cables and communication cable

Connect the power cables and communication cable according to *SIMPO 5000 Quick Start* or *SIMPO 5000 Installation & Operating Manual* and Manual of Victron Inverters.

The following are two examples of connection between SIMPO 5000 and Victron inverter.

Connecting with Victron Multiplus-II + Color Control GX Retail

Color Control GX Retail





Copyright © 2024 ZYC Energy Co., Ltd. All Rights Reserved.





Setp 3: System start up



Turn on the air switch first, then press and hold the ON/OFF button to start the system.

Device List BlueSolar Charger MPPT 150/60 rev2 MultiPlus-II 48/5000/70-50 CYC Simpo 5000 97% Statistications Settings		1	14:07		
BlueSolar Charger MPPT 150/6	0 rev2		15W >		
MultiPlus-II 48/5000/70-50					
ZYC Simpo 5000	97%	55.80V	0.0A 🕽		
Notifications			1 >		
Settings			>		
<u>네</u> Pages		≡ Men	u		

See the Menu on VRM. **ZYC SIMPO 5000 should be automatically detected by Victron** inverter.

If not, check the cables connection and restart the system. If still can not connect successfully, contact us at **Service@zyc.energy** or via our portal at **www.zycportal.com**

When the setting is successful, the main page will show the battery operation data as below.





Step 4: DVCC settings

Device Lis	st	1	<u>∧</u> 14:0	07	
BlueSolar Charger MPPT 150/60 rev2					
MultiPlus-II 48/5000/70-50				>	
ZYC Simpo 5000	97%	55.80V	0.0A	>	
Notifications			1	>	
Settings				>	
<u>네</u> Pages		≣ Men	u		

Click settings to check all the settings after automatic settings.

<	Settings	14:52
General		>
Firmware		>
Date & Time		>
Remote Console		>
System setup		>
DVCC		>
<u> 네</u> Pages		≡ Menu

Click DVCC



<		DVCC	17:49
Limit charge			
Maximum cha	50A		
Limit manage	ge 💽		
Maximum cha	56.5V		
SVS - Shared	Forced off		
STS - Shared	Forced off		
<u> 네</u> Pag	jes	^	≡ Menu

Set 'Maximum charge current' base on the actual situation or keep the default as 50A.

'Maximum charge voltage' can affect the charging process of batteries. With **sufficient PV energy**, if you find that the battery **cannot** be charged to 100% SOC, set **'Maximum charge voltage'** to **56.5V** to fully charge the batteries.

<	l	DVCC	L	14:45
Maximum cha	rge voltage			56.0V
SVS - Shared v	oltage sense	For	rced off	
STS - Shared t	emperature	Forced off		
SCS - Shared o	urrent sense			
Controlling BM	S		Automatic s	election
Auto selected:	ZYC Simpo			
<u>네</u> Page	es	^	≡ Men	u

'SVS/STS/SCS' is the settings for lead acid batteries. They should all be 'Forced off' by default, if not , **turn them off**.



2. SMA Inverter (Managed Mode)

Step 1: SIMPO 5000 to SMA Inverter Connection

Please follow the below figure to remove the front cover of SMA inverter, and connect the power cable, communication cable and network cable. For SIMPO 5000 connection, please refer to the 'SIMPO 5000 Quick Start Manual'.



Step 2: Connect to the SMA Device

Firstly, according to step 1, connect the SMA inverter to the local network with a network cable, and then enter the IP address of the SMA device through the IP of the local network.

🔹 🕼 🗖 🗾 Inverter 🗙 +									-	ð	×
← C ▲ 不安全 192.168.0.135/#/login				Aø	☆	CD	£≡	œ	∞		•
											Q
									• •		•
											*
											≞¥
	Login										0
	Language	English	~								•
	User group	User	~								-
	Password										+
	Forgot passwordó		Login								
											(X)
											ŝ

Copyright © 2024 ZYC Energy Co., Ltd. All Rights Reserved.





Step 3: Start the Installation Assistant

With the communication mode installation, access to SMA configuration via local network. And please follow the steps below to set up to complete the configuration of the SMA inverter with SIMPO 5000.

SUNNY	ISLAND 6.0H-13						SM	IA
🖶 Home	⑦ Instantaneous values	Device parameters	Events	🔧 Device o	onfiguration	😂 Data	1.	₿ -
Device s	tatus	Batter	У			Nominal energy	Start the installation assistant Smart Inverter Screen ① ✓ SMA Grid Guard login eManual	
E.	Ok	1	Battery operat	ing status:	Discharge battery	E Today:	Logout	
1 22			Current batter	state of charge:	72 %	Yesterday:		
1			Present batter	y discharge:	0 W	Total: 36	3.0 kWh 37.5 kW	'n
Power at	the grid-connection point	Energ	y exchange al	t the grid-conn	ection point			
		- <u></u>	Consi	umption:	Grid feed-in:			
	0 w	Today:		1				
		Yester	day:	0				
		Total:	0 Wh	3) Wh			
State of	charge							

Step 4: System Configuration

Please refer to the SMA Inverter User Manual for steps 1 to 5.

1 Network configuration	2 Time and date	3 4 Application System configurati	5 on Grid management	6 7 Battery configuration Summary
Network configuration				① User information
Networks configured	Type of communication	IP address of the device	Status	Network configuration You can integrate the product, depending on it features, either into your local network via
	WLAN	0.0.0.0 192.168.0.135	😵 No connection	Ethernet using a cable or wireless via WLAN. Select the respective option under Type of communication. Configuring Communication via Ethernet
Type of communication				You can either obtain the network settings automatically from a DHCP server or configure them manually. Select the desired option unde Automatic configuration switched on.
Automatic configuration switch	hed on 🚯			If you want to configure the network settings manually, you have to enter the required netword data additionally.
			Save and r	Direct Ethernet Connection If you want to establish a direct connection to t device via a network cable, you need to actival the automatic configuration of the Ethernet interface. Select the option Yes under Automa configuration switched on.





Step 5: Battery Configuration

Select the **Lithium-Ion(Li-Ion)**, and fill in the nominal capacity according to the actual battery set capacity.

SUNNY ISLAND 6.0H-13	SMA
A Home	1 - 0 -
1 2 3 4 5 Network configuration Time and date Application System configuration Grid management service Batter	6 7 ery configuration Summary
Sattery configuration Nominal capacity Type 200 Ah Flooded lead acid batt. (FLA) 200 Ah Lithium-Ion (LI-Ion) 200 Ah Valve Regulated Lead Acid battery (VRLA) 50 Ah 10,000 Ah) Back Save and next	User information Battery configuration Select the battery type connected. When selecting a lead-acid battery, you have to enter the nominal capacity of the battery for a ten-hour electric discharge (C10). Refer to the lead-acid battery documentation for the battery capacity in relation to discharge time.
Serial number: 3020386598 Firmware version: 3.30.12.R Ethernet IP address: 192.168.0.135	User group: Installer Date: 8/16/24 9:17 AM

Successful setup

When the setting is successful, the main page will show device status and the battery operation as shown in the figure below.

SUNNY	ISLAND 6.0H-13							SMA
🕂 Home	Instantaneous values	Device parameters	B Events	🔧 Device co	onfiguration	🛢 Data		1 - 0 -
Device s	tatus	Batt	ery			Nominal en	ergy throughput of th	e battery
-			Battery opera	ting status:	Discharge		Electric discharge:	Charge:
	Ok	2		-	battery	Today:	0 Wh	0 Wh
~			Current batter	y state of charge:	70 %	Yesterday:		
1			Present batter	ry discharge:	0 W	Total:	36.0 kWh	37.5 kWh
Power at	t the grid-connection point	Ene	rgy exchange a	t the grid-conne	ection point			
	0	· // ·	Cons	sumption: C	irid feed-in:			
	0 w	Toda	ay: 0 Wh	C	Wh			
		Yes	erday:	-				
		Tota	l: 0 Wh	C	Wh			



As shown below, if the settings are incorrect, the device status will show a **warning** and no battery status. Please try to make the setting again. If still can not connect successfully, please login **ZYC Portal** to contact ZYC support team or via email **service@zyc.energy** or our portal at **www.zycportal.com**.

SUNNY ISLAND 6.0H-13							SMA	
Home O Instantaneous values	Device parameter	s 🗄 Events	🔧 Device co	onfiguration	😂 Data		1 - 1	? -
Device status	Bat	tery			Nominal en	ergy throughput of th	e battery	
Fau Fau	lt .	Battery opera	ting status:	Discharge battery		Electric discharge:	Charge:	
Battery	rror	Current batter	ry state of charge:	0 %	Today:			
	-	Present batte	ry discharge:	0 W	Total:	 36.0 kWh	 37.5 kWh	
Power at the grid-connection poin	t Ene	ergy exchange a	t the grid-conne	ection point				
	-1/-	Cons	sumption: G	irid feed-in:				
0 w	Too	lay:						
	Ye	sterday:						
	Tot	al: 0 Wh	n 0	Wh				



3. Selectronic Inverter (Managed Mode)

Step 1: SIMPO 5000 to Selectronic Inverter Connection

Please remove the front cover of Selectronic inverter, and connect the power cable, communication cable and network cable. For SIMPO 5000 connection, please refer to the 'SIMPO 5000 Quick Start Manual'.



Step 2: Communication Cable Wires Order

If the battery system is required to enter the communication mode, please make the PIN No. selection according to the following table, SIMPO 5000 '**INV**' port on battery matching with the Selectronic **CAN Communication** inverter as below.

PIN No.	SIMPO 5000	Selectronic
CAN_H	4	1
CAN_L	5	2

Note: If the system is in No-communication mode, please just ignore this step.



Step 3: PC to Inverter Connection for SP LINK

At the bottom of the inverter, use the USB Device to connect the inverter to your computer, then SP LINK will automatically read the inverter's model.



Step 4: Commissioning

After connecting all the cables, switch the battery on. And then open the software 'Selectronic SP LINK' and select 'Site Configuration Wizard'.

Selectronic SP LINK	Easy Start Guide	×	X
File Connection Performance D Site Information Configuration Set Site Details * Site Name Site Contao Site Phone Address System Integrat Selectronic * require	Site Configuration Wizard Creates a new site connection, helping you to configure basic Open Existing Site File This will open in advanced configuration. Advanced Configuration A new blank site and configuration. Firmware Update Quick connect via a USB cable, to update firmware only. Recent Sites: No recent sites		
SP PRO Details Connection Settin Model Family Serial Numbe: Installation I2024/7/1 Note: The Site Configuratic	I Do not show Easy Start Guide on startup		Associate Default Associate Existing





SIMPO 5000 is not in the '**Model No**' list yet, so please choose '**Pylontech US5000B**' for current setting. Once SIMPO 5000 is added to the list, you can just select it and everything is automatically configured.

Selectronic SP LINK	Easy Start Guide	X	- 🗆 X
<u>File</u> <u>Connection</u> Performance <u>D</u> Site Information Configuration Set	Site Configuration Wizard		
Site Details * Site Name Site Contac Site Phone Address	Select Battery Configuration Battery Configuration Standard Battery Configurations and myGrid kits Model No Pylontech VS5000B v Qty 3 +		
System Integrat Selectronic *required SF PRO Details Connection Setting	 Custom Battery Configuration Is the battery a sealed or flooded type? If unsure, select Sealed Lead Acid Battery Capacity Flooded Lead Acid 300 ♀ Ah 15.3 kWh Lithium LiFePO4 Max Charge Current 42.6 ♀ % 127.8 A With Midpoint Monitoring (All three precharge / battery sense wires must be in 		
* Model Family Serial Numbe: Installation I2024/ 7/ 1 Note: The Site I	State Of Charge SoC Support Limit (Generator Start SoC for Off Grid) 20 • 12.2 kWh Support Battery Capacity Inverter Shutdown SoC 10 • 1.5 kWh Extra Backup Battery Capacity		
Configurati (Cancel Previous Next		Associate Default Associate Existing

Complete the **Site Configuration Wizard** based on the actual installation. Then click on **Connect** to connect your computer to inverter via USB.

📰 simpo5000 - Selectronic SP LINK	- 0 X
File Connection Performance Data Help	Disconnected 00:00:00
Site Information Configuration Settings QuickView Data View Service Settings	
* Site Nume	
Site Contac	
Site Phone	
Address	
System Integrat	
Selectronic	C MARCINE HT A
	5 5
SP FRO Details Connection Settings Powerchain Inverter Assignments Components	
* Connection Type USB 🗸 Model:SPMC482 Serial:379938 🗸	
* Login Password Selectronic SP PRO	
Modem Phone Number	
Modem Initialisat	
Hostname or IP Address Port	
Select Live Email Password	



Once your computer is connected to the inverter successfully. select the '**Configuration Settings**' and fill in all the parameters in '**Inverter**' according to the **red font** below.

Selectronic SP LINK ile <u>Connection</u> Perfo ite Information Configu	ormance Data Help ration Settings JuickVi	ew Data View Service Se	ttings		D	isconnected	00:00:00		Get SP	- D PRO's Configuratio
Configuration F =7									Con	figure SP PRO
Quick Start Unit Application*	Pow	erchain Plan	Battery Type*		AC Source Pow [0.1 · 15.0 kW]	er"	SoC Control	Ba [20	attery Capaci	y"
Solar Hybrid (AS4777.2:2020)	✓ Disab	led V	BMS - Pylontech	~	15.0 🜲	kW 🗸	Enabled	~	200 🜲	9.6 kWh
Econo Pover Save Mode Econo Mode Disabled Econo Transition Level [5-50 W] 10 Econo Pulse Period [0.2 - 1 s] 0.5 0.5	Inverter Output Nominal AC Voltage [210 - 240 V] Nominal AC Frequency 50 Hz	DC Shutdown Battery 07. Load" [39.6 - 52.8 V] 48 € Battery 1007. Load" [39.6 - 52.8 V] 46 € Recovery Voltage" [45.6 - 55.2 V] 51.2 €	SoC Shutdown" Enabled V Shutdown SoC" [0-100 %] 20 V							

Battery Setting:

it Application"	Powe		D		AC C	6-6 6-1-1 P	
		rchain man	Battery Type		AL Source Power [0.1 - 15.0 kW]	SoC Control Ba	60000 Ahj
ar Hybrid (AS4777.2:2020)	✓ Disable	d v	BMS - Pylontech	~	15.0 🔹 kW 🗸	Enabled \lor	300 🜩 14.4 kWh
rter Battery* Large	er* AC Source* Solar	Hybrid Control* System*	Inputs / Outputs* Shur	nts Expansion Card Wiring	g Diagram		
its	AC Coupled Trip	BMS Charger	Battery	Mid Point	SoC Setting	Over Temp. Protection	
x Charge Voltage*	AC Coupled Trip*	Heat Voltage Adjust	Periodic Equalise	Monitoring	Peukert's Exponent*	Limit Charge above*	
58.4	60.0 +	0.0 \$	Disabled	Disabled	100	45 +	
Rattery Alert*	Over Tarnet Chame	Current Tarret Scale*	Equalise Period	Mid Point Range	1.0	Limit Bate	
.0 - 68.4 V]	Voltage Trip*	[90.0 - 100.0 %]		5		[0 - 20 %]	
<u>59.4</u>	10	98.0	Devie die Developmen			10 🖨	
Battery Alert Clear*	1.0		Penodic Recharge	Equalise Request			
.0 - 68.4 V]	Over Target Charge Current Trip*		Disableu	Disabled			
<u> </u>	[0.0 - 25.0 %]		[2 - 100 d]				
	5.0 🖻			-			
	Trip Delay*		Soft Battery				
	<u>10.2 - 20.0 s</u>		Disabled				
	0.0 🗉						





Charger Setting:

Selectronic SP LINK						- 0 ×
File Connection Performance Data	Help			Disconnected	00:00:00	
Site Information Configuration Settings	QuickView Data View Service Se	ttings	Fill in the	capacity of yo	our battery Ba	ink.
Configuration F 🖤			(100 Ah /	module)		Configure SP PRO
Quick Start Unit Application*	Powerchain Plan	Battery Type*	A(C Source Power*	SoC Control	attery Capacity*
Solar Hybrid (AS4777.2:2020) V	Disabled V	BMS - Pylontech	×	15.0 🌩 🛛 kW 🗸 🗸	Enabled V	300 🜩 14.4 kWh
Inverter* Batter * Charger* , Source*	Solar Hybrid Control* System*	Inputs / Outputs* Shunts	Expansion Card Wiring Di	agram		
Charge Settings Initial Stage Max. Charge Current* (as % of Battery Capacity) [1.0 - 200.0 %] Voltage* (48.0 • 60.0 √] Initial Return Voltage* (45.6 V - Float V] Current (as % of Max Ckrg [1 - 100 %] Initial Return SoC* (0 - 99 %] Time* (1 - 240 min) 95 ♣ 4	Bulk Stage Voltage* (48.0-60.0 V] 57.6÷ Current* (as % of Max Chrg Current) 100÷ Time* (1-240 min) 30÷	Absorption Stage Voltage* [48.0 - 62.4 V] Current* (as % of Max Chrg Current) [1 - 100 %] 10 *	Absorb=Float Net Change: (as % of Battery Capacity) [0.1 - 5.0 %] 1.0 * (1 - 240 min] 60 * Max Time* [1 - 240 min] 60 *	Ploat Stage Voltage ⁻ (48.0-60.0 V] Current ¹ (as % of Max Chrg Current) [1-100 %] 20 ÷ Long Term Voltage ⁻ (48.0-60.0 V] 56.0 ÷	Equalise Stage Voltage ⁻ [48.0.64.8 V] Current ⁻¹ [as % of Max Chrg Current) [1.100 %] 1.00 %] 0.1.24.0 hours] 0.1.2	Battery Temperature Compensation Reference Temp. A [-10 - <ref b=""> 'C] Reference Temp. B [<ref a=""> - 70 'C] Min. Comp. Temp. [-10 - <ref a=""> 'C] Max. Comp. Temp. [<ref b=""> - 70 'C] *</ref></ref></ref></ref>

AC Source-Generator Auto Start Setting:

Selectronic SP LINK				1987								- 0 >
File Connection Perfor	mance Data H	lelp	Data Viaw Service Se	ttinge			Di	sconnected	00:00:00			
Configuration F		ALCKALEN	Data view Service Se	t tings							Get SP	PRO's Configuration
Quick Start Unit Application*		Powerch	ain Plan	Battery Type*		AC S	Source Powe	ar"	SoC Control	Bat	ttery Capaci	ty*
Solar Hybrid (AS4777.2:2020)	~	Disabled	~	BMS - Pylontech	~	part is	15.0 🜲	kw ~	Enabled	~ [300 🚖	14.4 kWh
Inverter* Battery* Charg AC Input* Power Quality	er× AC Source* / DRM* Generato	Solar Hyl r Auto Sta	orid Control* System* rt* Generator Schedu	Inputs / Outputs* S e Start Generator Co	Shunts Expansion Car ntroller Settings*	d Wiring Diag	x am					
Generator Lock Out Override On Low Battery Voltage	On Low SoC		On SoC Normal Start SoC	On SoC Night Assis Night Assist	t Start SoC		On SoC Re Renewab	enewable Prefer le Preferred	red Start SoC		On SoC F	Renewable Assist
0% Battery Load*	Disabled	~	[1 - 100 %]	Disabled	~ [1 - 100 %]	80 🜲	Disabled	~	[1 - 100 %]	40 🌲	Disabled	~ [
50 ÷	Start SoC [1 - 100 %]		Stop SoC [1 - 100 %]	Start Time [00:00 - 23:59]	Stop SoC		Start Tim [00:00 - 23	e :59]	Stop SoC		Start Tir [00:00 - 2	me (23:59)
[39.6 - 55.2 V]		40 🜩	85	18:00		90 🖨	07:00	+		50 🌲	07:00	È
48 🖻	Stop SoC [1 - 100 %]			Stop Time [00:00 - 23:59]			Stop Tim [00:00 - 23	e :59]			Stop Tir [00:00 - 2	me 23:59]
		50 🌩		18:30	÷		14:00	*			08:00	•



Important! After completing the parameter setting by the above steps, you must click on **Configure SP PRO** to complete the parameter configuration.

Connection Perfor Information Configura	rmance Data H ation Settings Q	elp uickView	Data View Service Se	ettings				Disc	onnected	00:00:00				
figuration F												Get SP F	PRO's Config	urati
ick Start												Con	inquire SF Fr	10
nit Application*		Powerc	hain Plan	Battery Type*			AC 1	Source Power 5.0 kW]	.	SoC Control	[20 - 6	tery Capacit 10000 Ahj	ty*	
lar Hybrid (AS4777.2:2020)	~	Disabled	~	BMS - Pylontech		\sim		15.0 🌲 🗼	w ~	Enabled	~	300 🜲	14.4 kWh	
Input* Power Quality enerator Lock Out Override	/ DRM* Generator	r Auto St	on SoC Normal	Dn SoC Night Assis	ontroller st	Settings*		On SoC Ren	ewable Prefem	ed		On SoC P	Renewable Assi	ist
In Low Battery Voltage	On Low SoC		Start SoC [1 - 100 %]	Night Assist	~	Start SoC [1 - 100 %]		Disabled	Preferred	Start SoC [1 - 100 %]		Disabled	ble Assist	~
9.6 - 55.2 V]			65	Start Time			80 🌲	Cast			40 🌲	Charle To		
00* D-H	[1 - 100 %]		Stop SoC [1 - 100 %]	[00:00 - 23:59]		Stop SoC [1 - 100 %]		[00:00 - 23:5	9]	Stop SoC [1 - 100 %]		[00:00 - 2	ne [3:59]	
9.6 - 55.2 V]		40 🌲	85	18:00	÷		90 🌲	07:00	-		50 🜲	07:00	ł	÷
48.0 🜩	Stop SoC [1 - 100 %]			Stop Time (00:00 - 23:59)				Stop Time (00:00 - 23:5	91			Stop Tin 100:00 - 2	ne 23:591	
		50 🌲		18:30	-			14:00	•			08:00	ł	÷

When the setting is successful, the page is shown as the figure below. If not, please try to make the setting again. If still can not connect successfully, please login **ZYC Portal** at **www. zycportal.com** to contact ZYC support team or via email **service@zyc.energy**.

		op (simposooo	/21mp05000	Configl.SrDL						Configure SP PRO
k Start Application	P	owerchain Pla	an	Battery Type	Battery Type AC Soc				SoC Control	Battery Capacity
r Hybrid (AS4777.2:2020)	~ Di	isabled		V BMS - Pylontech	\sim		15.0 🜩 kW	\sim	Enabled \checkmark	300 🜲 14.4 kWh
rity 1 Priority 2 H	riority 3 Priority	4 Priority	5 Priority	y 6 Priority 7 Priority 8		18 x 1 4 51 000				
ivation ate and Time Activation —		Dig	ta	Activation Outpu	t AC Source		- Inverter Control -	mit.	Charger Control Battery Charging	-Charger Override Battery Charging
ate Time Activation	Day	Acti	Pro	ramming Configuratio	on Settings in	o the SP P	80		Charging On	✓ Charging On ✓
nabled ~	All	✓ Non	e Cues		or oottings in				Restricted Charge	Limit Override Charge Limit
egin Date	Start Time	Acti	Va	955					[0.0 - 15.0 kW]	[0.0 - 15.0 kW]
Jan - 31 Decj 1月 回マ	00:00 - 23:59]	Acti	/e						15.0 🖨 kW	4.8 ★ k₩ ∨
-10-1-	0. T) ‡		Start SoC Stop SoC
Jan - 31 Dec]	[00:00 - 23:59]									[1.0 - 100 %] [1.0 - 100 %]
12月 🛛 🖉 🔻	00:00	*		None	Disabled	~	Disabled	~		· · · · · · · · · · · · · · · · · · ·
										AC Source limit during Override
Order Priority										AC Source Power ~
orities can be reloc	ated to a higher or	lower positi	on. Low	er -/						





4. Selectronic Inverter (Self Managed)

Important:

- Before connect SIMPO 5000 to Selectronic inverter, please make sure the firmware version of SIMPO 5000 is upgraded to 2.7.0 or above via ZYC Portal, ZYC Assist (APP), or ZYC Assist Pro.
- **SIMPO WIFI Dongle** is required for Self-Managed installation. If you do not have a SIMPO WIFI Dongle, please contact us by **ZYC Portal**.

Step 1: SIMPO 5000 to Selectronic Inverter Connection

Remove the front cover of Selectronic inverter. For **Self-Managed Mode**, just connect the power cables and network cable. And refer to the '**SIMPO 5000 Quick Start Manual**' to connect SIMPO 5000.



Step 2: Power Up SIMPO 5000 and Switch to Self-Managed Mode

When the battery is ON, **double click the "ON/OFF" button** to switch SIMPO 5000 to **Self-Managed** Mode. The **SOC** indicators will **flash two times**, and **RUN** indicator will flash every **1.5s**. This indicates the successful mode switch.



Copyright © 2024 ZYC Energy Co., Ltd. All Rights Reserved.



Step 3: Commissioning

After connecting all the cables, switch the battery on. Open the software '**Selectronic SP LINK**' and select '**Site Configuration Wizard**'.

Then select 'Custom Battery Configuration-Lithium LiFePO4', and fill in the 'Battery Capacity and Max Charge Current' according to the actual installation system.



The SOC indicator on the inverter will also flash, indicating that it is in **Self-Managed** mode.







Complete the **Site Configuration Wizard**. Then click on **Connect** to connect your computer to inverter via USB.

📃 simpo5000 - Selectronic SP	LINK	- 0 X
File Connection Perfor	mance Data Help	Disconnected 00:00:00
Site Information Configura	tion Settings QuickView Data View Service Settings	
Site Details		
★ Site Name		- 7
Site Contac		
Site Phone		
Address	A *	
System Integrat		
Selectronic		
SP PRO Details Connection	a Settings Powerchain Inverter Assignments Components	
* Connection Type US	B v Model:SPMC482 Serial:379938 v	
* Login Password Se	lectronic SP PRO	
Modem Phone Number		
Modem Initialisat		for the second se
Hostname or IP Address	Port	Connect
Select.Live Email	Password	

Once your computer is conncected to the inverter successfully. select the '**Configuration Settings**' and fill in all the parameters in '**Inverter**' according to the **red font** below.

figuration F =7									Get SP F	PRO's Configurati figure SP PRO
ick Start nit Application*	Power	rchain Plan	Battery Type*		AC Source Pow	er"	SoC Control	Batt	ery Capacit	y*
lar Hybrid (AS4777.2:2020)	✓ Disable	i v	BMS - Pylontech	~	15.0 🜩	kW ~	Enabled	~ _	200 🜩	9.6 kWh
erter* lattorus Cha	rank df Sourcest Salan 1	Hubrid Control * Surter	Toputs / Output-t	Shunts Eunansian Card	Wining Diamon					
ono Mode abled v ono Transition Level 50 W] 10 - 0 no Pulse Period 2-1 s] 0 5 1	Nominal AC Voltage [210 - 240 V] Nominal AC Frequency 50 Hz	Battery 72. Load* [39.6 - 52.8 V] 48 ≑ Battery 100% Load* [39.6 - 52.8 V] 46 6 ≑ Recovery Voltage* [45.6 - 55.2 V]	SoC Shutdown* Enabled Shutdown SoC* [0 - 100 %] 15	V						
0.0 💌		52 🕯								





Battery Setting:

Get SP PRO's Configuration Get SP PRO's Configuration Aspatiation Powerchain Plan Battery Type! AC Source Power! SoC Control Battery Capacity! arthysid (Ast777 2000) Disabled BMS - Pyontech To Disable To Disable SoC Control Battery Capacity! arthysid (Ast777 2000) Disabled BMS - Pyontech To Disable SoC Control Battery Capacity! Charge Voltage! AC Coupled Trip! Hash Wrightspe Adjust 200 - 00 % Battery Act Capacity! Soc Setting Over Temp. Protection Imit Charge above!	Information Configurat	tion Settings QuickView	Data View Service Se	ettings			haudrineuted	00.00.00			
ck Start it Application* Prived (AS4777 22000) rt Hybrid (AS4777 22000)	figuration F =7									Get SP	PRO's Configurat
Battery Alert Powerchain Plan Battery Type* AC Source Power* SoC Control Battery Capacity* ar Hybrid (AS4777.22020) Disabled BMS-Pytomach 150 to 100 to 1										Cor	figure SP PRO
ar Hybrid (A54777.2:200) Trip Delay* 0684 V] 57.4 © 2.0 © 2.0 © 2.0 © 2.0 © 2.0 © 2.0 © 2.0 © 2.0 © 0.2 25.0 %] 025.0 %]	ck Start it Application*	Power	chain Plan	Battery Type*		AC Source Por	ver*	SoC Contr	ol E	Battery Capaci	ty*
Pattery* G arger* AC Source* Solar Hybrid Control* System* Inputs / Outputs* Shunts Expansion Card Wiring Diagram is AC Coupled Trip (a.684 V] AC Coupled Trip (a.684 V] AC Coupled Trip (a.0.250 %] Mis Charger Mid Point SoC Setting Over Temp. Protection Does 44 VI (a.0.684 V] Coupled Trip (a.0.250 %] AC Coupled Trip (a.0.250 %] Mid Point Periodic Equalise Disabled Mid Point Range (a.0.00 %] Disabled Imit Charge above* (babed Disabled Disabled <td>ar Hybrid (AS4777.2:2020)</td> <td>✓ Disabled</td> <td>~ ~</td> <td>BMS - Pylontech</td> <td>~</td> <td>15.0 🜩</td> <td>kW 🗸</td> <td>Enabled</td> <td>~ [</td> <td>300 🜩</td> <td>14.4 kWh</td>	ar Hybrid (AS4777.2:2020)	✓ Disabled	~ ~	BMS - Pylontech	~	15.0 🜩	kW 🗸	Enabled	~ [300 🜩	14.4 kWh
Image: States Act Coupled Trip (0-68.4 V] AC Coupled Trip (48.0 - 72.0 V] AC Coupled Trip (5.0 - 100.0 %] Battery (10.0 - 100.0 %] AC Coupled Trip (0.0 - 25.0 %] AC Coupled Trip (0.0 - 25.0 %) AC Couple Trip (0.0 - 20.0 %) AC Couple Trip (0.0 - 20.0 %) AC Couple Trip (0.0 - 20.0 %)	rter <mark>* Battery* C</mark> harge	er* AC Source* Solar }	(vbrid Control* System)	Inputs / Outputs* Shunts	Expansion Card Wiring	Diagram					
	s Charge Voltage* - 664 Vj 56.4 ÷ Sattery Alert* - 684 Vj 58.4 ÷ Sattery Alert Clear* - 684 Vj 57.4 ÷	AC Coupled Trip AC Coupled Trip* (48.0.72.01) Over Target Charge Votacae Trip* [0.0.25.0%] 2.0÷ Current Trip [0.0.25.0%] 2.0÷ Trip Delay* [0.2.20.05] 2.0÷	RNS Charger Hibt Woltbage Adjust [220.0.0.%] Current Target Scale* [90.0.100.0%] 100.0 %]	Battery Periodic Equalise Disabled ✓ Equalise Period [2 · 100 d] Periodic Recharge Enabled ✓ Recharge Period [2 · 100 d] T Soft Battery Disabled ✓	Mid Point Monitoring Disabled ↓ Mid Point Range [2-10 %] Equalise Request* Disabled ↓	SoC Setting Peukert's [1.00 - 1.50]	Exponent"	-Over Temp . Limit Charg [35 - 70 °C] Limit Rate [0 - 20 %]	Protection je above* 55 ÷		

Charger Setting:

Selectronic SP LINK							- 0 X
File Connection Perfe	ormance Data Hel	р			Disconnected	00:00:00	
Site Information Configu	ration Settings Qui	ckView Data View Service S	Settings	Fill in the capa	acity of your ba	attery Bank	
Configuration F 🗂				(100 Ah / mod	ule)		Get SP PRO's Configuration Configure SP PRO
Quick Start Unit Application*		Powerchain Plan	Battery Type*	<mark>A</mark> (0.	C Source Power*	SoC Control	attery Capacity*
Solar Hybrid (AS4777.2:2020)	~	Disabled V	BMS - Pylontech	~	15.0 🔹 kW 🗸	Enabled V	300 🔹 14.4 kWh
Inverter* Battern* Cha	rger* 4 Source* S	olar Hybrid Control* System	* Inputs / Outputs* Shunts	Rypansion Card Wiring D	iagram.		
Charge Settings Max. Charge Current* (as % of Battery Capacity) [1.0-2000 %] 70 € Initial Return Voltage* [45.6 V - Roat V] 52.9 € Initial Return SoC* [0-99 %] 85 €	Initial Stage [48.0 - 60.0 V] Gurrent (as % of Max Chrg Cur [1 - 100 %] 100 % 11 - 240 min]	Point Control 5 € Voltage* [48.0 - 60.0 V] [48.0 - 60.0 V] 5 € Start [48.0 - 60.0 V] [as % of Max Chrg Current*] [as % of Max Chrg Current*] [1 - 100 %] 100 % [1 - 240 min] 40	Absorption Stage Voltage* [48.0 - 62.4 \] Voltage* [48.0 - 62.4 \] Current* (as % of Max Chrg Current) [1 - 100 %] 15	Absort-Tlaat Net Change* (as % of Battery Capacity) [0.1 - 50 %] Change Time* [1 - 240 min] 60 * [1 - 240 min] 60 *	Float Stage Voltage* [48.0 + 60.0 V] Current* (as % of Max Chrg Current) [1 - 100 %] 1 • ⊕ Long Term Voltage* [48.0 + 60.0 V] 54.0 €	Equalise Stage Voltage* [48.0 - 64.8 V] 54.5 (as % of Max Chrg Current) [1 - 100 %] 2 1 1.0	Battery Temperature Compensation Reference Temp. A [-10 - «Ref B> 'C] Reference Temp. B [-Ref A> - 70 'C] Min. Comp. Temp. [-10 - «REF A> 'C] Max. Comp. Temp. [-10 - «REF B> - 70 'C] Max. Comp. Temp. [-10 - «REF B> - 70 'C]





Important! After completing the parameter setting by the above steps, you must click on **Configure SP PRO** to complete the parameter configuration.

Information Configu	ration Settings QuickView	/ Data View Service Set	ttings				Cat SP PDO's Casting
figuration F 🌖 C:\U	[sers\frank.feng\Desktop\Z]	IC No Comm\ZYC No Comm Co	onfig1.SPLC				Configure SP PR
ick Start nit Application	Power	chain Plan	Battery Type	A	C Source Power	SoC Control	Battery Capacity
olar Hybrid (AS4777.2:2020)	✓ Disabled	l v	Lithium LiFePO4	✓ (16 cells)	15.0 🌩 🛛 kW 🗸	Enabled V	100 - 5.1 kWh
erter* Battery* Cha	rger* AC Source Solar Hy	vbrid Control System Ir	nputs / Outputs Shunts Exp	pansion Card Wiring Diagr	am		
arge Settings ax. Charge Current* s % of Battery Capacity)	Initial Stage Voltage* [48.0 - 62.4 V]	Bulk Stage Voltage* [48.0 - 62.4 V]	Absorption Stage Voltage* [48.0 - 62.4 V]	Absorb-Float Net Change* (as % of Battery Capacity)	Float Stage Voltage* [48.0 - 62.4 V]	Equalise Stage Voltage* [48.0 - 64.8 V]	Battery Temperature Compense Reference Temp. A [-10 - <ref b=""> *C]</ref>
0 - 200.0 %] 20.0 🜩 20.0 A	54.5 ÷	54.5 🜩	54.5 ‡	[0.1 - 5.0 %] 1.0 🜩	54.0 🜩	54.5 ‡	25 ÷
itial Return Voltage*	(as % of Max Chrg Current) [1 - 100 %]	(as % of Max Chrg Current) [1 - 100 %]	(as % of Max Chrg Current) [1 - 100 %]	Change Time*	(as % of Max Chrg Current) [1 - 100 %]	(as % of Max Chrg Current) [1 - 100 %]	[<ref a=""> - 70 °C]</ref>
52.9 🜩	100 🖨 20.0 A	100 🜩 20.0 A	10 🜩 2.0 A	60 🜩	20 🜩 4.0 A	10 🜩 2.0 A	Min. Comp. Temp.
tial Return SoC* 99 %]	Time* [1 - 240 min]	Time* [1 - 240 min]		Max Time* [1 - 240 min]	Long Term Voltage* [48.0 - 62.4 V]	[0.1 - 24.0 hours]	[-10 - <ref a=""> °C]</ref>
95 🖨	45 🖨	30 🖨		60 🖨	54.0 🖨	2.0	Max. Comp. Temp. [<ref b=""> - 70 °C] 45 🜩</ref>

When the setting is successful, the page is shown as the figure below. If not, please try to make the setting again. If still can not connect successfully, please login **ZYC Portal** at **www. zycportal.com** to contact ZYC support team or via email **service@zyc.energy**.

Configuration F 🍘 C:\Users\fr	ank.feng\Desktop\ZYC No	Comm\ZYC No Comm (Config1.SPLC				Get SP P Con	'RO's Configuration figure SP PRO
Quick Start Unit Application	Powerchain	Plan	Battery Type		AC Source Power	SoC Control	Battery Capacit	у
werter Battery Charger AC	Source Solar Hybrid Con	atrol System Inpu	ts / Outputs Shunts 1	Expansion Card Wiring Diagraw	n	Enabled		5.1 KWN
Max. Charcie Current [10-200.0 %] 20.0 %] 20.0 %] 20.0 %] 20.0 % Initial Return Voltage (35.0 ×.Fact V) 11.1 52.9 (⊕) Initial Return SoC 0.99 %] 95 (⊕)	lge -62.4 ∨] -62.4 ∨] ard of Max Chrg Current) (a) Current) (b) (b) (c) Current) (c) Current) (c) Current) (c) (c) (c) (c) (c) (c) (c) (c	Itage Incert % of 1 100 % Success Automatical and a second s	Voltage [48.0 - 62.4 V]	ion Settings into the S	Voltage [48.0-62.4 V]	Voltage [48.0 - 64.8 ∨] Current (as % of Max Chig Cu [1 - 100 %] 10 € 2.0 A Time [0.1 - 24.0 hours] 2.2 A	6 (*) Reference 1-0 - «Ref B> Reference rent) («Ref A> - 70) Nin. Comp. (-10 - «REF A) 1-0 (*) Max. Comp. («Ref B> - 70) Max. Comp.	Temp. A Ref [-[0] 25]\$ Temp. B [-[0] 25]\$ Temp. 5 'C] 0]\$. Temp. 5 'C] 45]\$

Important:

If there is any MPPT connecting in the system, please set its **Bulk State Voltage** to **54.5V**, and the **Float State Voltage** is **54V**.

5. Noark Inverter (Managed Mode)

Step 1: SIMPO 5000 to Deye Inverter Connection

Please follow the **SIMPO 5000 Quick Star Manual** for SIMPO 5000 installation. Then follow the below figure to remove the front cover of Noark inverter, and connect the power cable and communication cable to SIMPO 5000.



Step 2: Power Up SIMPO 5000

Once the battery is switched on, the inverter will automatically switch on.





Step 3: System Setup

Access to Deye **System Setup**. With the communication mode installation, please follow the steps below to set up to complete the configuration of the Noark inverter with SIMPO 5000.

Step 3.1: Select Battery Setting

System S	Setup			
Battery	System \	Work Mode		
Setting	Grid Setting	Gen Po Use	rt	
Basic Setting	Advanced Function	Device li	nfo.	

Step 3.2: Tick Lithium

Batt Capacity tells Noark inverter what the battery bank size is.

Max A charge/Discharge: For SIMPO 5000, we recommend Ah battery size x 50%



Step 3.3: Set the generator and grid parameters according to the actual installation.

According to Noark's inverter user manual.

- 1 is the setup to charge the battery with the generator. Start at 30% and A is 40A means system will AutoStart to charge the battery with 40A current when the battery S.O.C at 30%.
- 2 is the setup to charge the battery with the **Grid**. **Start** at 10% and **A** is 80A means system will **AutoStart** to charge the battery with 80A current when the battery S.O.C at 10%.



Step 3.4: Select Lithium Mode to 00





Successful setup

After completing the settings, go back to the setup page to check each parameter to confirm the successful setup.

The following interface appears, the connection state is **ON** and the arrow on the battery side points to the inverter side, it means the communication is successful.



As shown below, if the inverter is not communicating properly with SIMPO 5000, the inverter interface will show **OFF** and no battery data. Please check the cables connection and try to make the setting again. If still can not connect successfully, please contact ZYC ENERGY via **service@zyc.energy** or via our portal at **www.zycportal.com**.





6. Deye Inverter (Managed Mode)

Step 1: SIMPO 5000 to Deye Inverter Connection

Please follow the **SIMPO 5000 Quick Star Manual** for SIMPO 5000 installation. Then follow the below figure to remove the front cover of Deye inverter, and connect the power cable and communication cable to SIMPO 5000.



Step 2: Power Up SIMPO 5000

Once the battery is switched on, the inverter will automatically switch on.







Step 3: System Setup

Access to Deye **System Setup**. With the communication mode installation, please follow the steps below to set up to complete the configuration of the Deye inverter with SIMPO 5000.

Step 3.1: Select Battery Setting

DC	AC	Normal	Alarm	
System	Setup			
Battery	Sy	stem Work Mode	-	
Setting	Grid Set	ting Gen U	Port	
Basic Setting	Ad∨anc Functi	ed on Devic	e Info.	
Basic Setting	Grid Sett	ting Gen U ed on Device	Port se e Info.	

Step 3.2: Tick Lithium

Batt Capacity tells Deye inverter what the battery bank size is.

Max A charge/Discharge: For SIMPO 5000, we recommend Ah battery size x 50%





Step 3.3: Set the generator and grid parameters according to the actual installation.

According to Deye's inverter user manual.

- 1 is the setup to charge the battery with the generator. Start at 30% and A is 40A means system will AutoStart to charge the battery with 40A current when the battery SOC at 30%.
- 2 is the setup to charge the battery with the **Grid**. **Start** at 10% and **A** is 80A means system will **AutoStart** to charge the battery with 80A current when the battery S.O.C at 10%.



Step 3.4: Select Lithium Mode to 00







Successful setup

After completing the settings, go back to the setup page to check each parameter to confirm the successful setup.

The following interface appears, the connection state is **ON** and the arrow on the battery side points to the inverter side, it means the communication is successful.



As shown below, if the inverter is not communicating properly with SIMPO 5000, the inverter interface will show **OFF** and no battery data. Please check the cables connection and try to make the setting again. If still can not connect successfully, please contact ZYC ENERGY via **service@zyc.energy** or via our portal at **www.zycportal.com**.

7. Contact Us

-{}- offgridshop.eu

offgridshop.eu - Sailectron Services GmbH

- Hundsdorf 2, 8111 Gratwein-Strassengel, AUSTRIA
- **6** +43 3124 21818
- 🞽 sales@zyc.at
- 🌐 www.zyc.at