Capacity extension methods of GoodWe batteries

GOODIAE Smart Energy Innovator

Supported extensions:

- Extension of LYNX Home U with parallel batteries
- Extension of LYNX Home F PLUS + with parallel batteries
- Extension of LYNX Home F and LYNX Home PLUS+ with additional modules

Disclaimer:

This document does not replace the installation manuals or the warranty terms of GoodWe. It is addressed to qualified installers and is subject to update without notice. Read through the manuals of GoodWe batteries and inverters before proceeding with this document.



Extension of LYNX Home U with parallel batteries

Steps:

- 1. Turn off old batteries and inverter.
- 2. Remove the power cables and BMS cables between old batteries and inverter.
- 3. Reconnect the batteries in parallel. Follow the instructions of parallel connection in the installation manual of LYNX Home U. Connect cables between inverter and batteries.
- 4. Turn on the inverter and batteries.

Notes:

- Extension up to 6 batteries in parallel possible.
- A SOC of ~30% in the existing batteries is required before the parallel connection.
- The battery SOCs will equalize after their activation.





Extension of LYNX Home F PLUS + with parallel batteries GOOL

Requirement:

- The new battery must have the same number of modules as the existing battery.
- Only possible with Lynx Home F PLUS+ (not with Lynx Home F)

Steps:

- 1. Turn off old battery and inverter.
- 2. Remove the power cables/BMS cables between old battery and inverter.
- 3. Reconnect the old and new batteries in parallel. Follow the instructions of parallel connection in the installation manual of LYNX Home F PLUS+. Connect cables between inverter and batteries.
- 4. Turn on the inverter and battery system.

Notes:

- Extension up to 8 batteries in parallel possible.
- SOC of ~30% in the existing battery is recommended before parallel connection.
- The battery SOCs will equalize after their activation.



Extension of LYNX Home F Plus+ or LYNX Home F with additional modules (Method 1)

Requirements:

- With ET/BT inverters, a minimum of two modules must be extended in one go!
- With EH/BH inverters, one or more modules can be extended in one go!
- Maximum number of modules per battery is five.
- It is possible to mix modules of Lynx Home F and Lynx Home F PLUS+ in the same battery. However, aesthetic deviations are possible.

Steps:

- 1. Charge existing battery to 100% SOC using the ECO Mode in SolarGo App.
- 2. Remove the existing modules and install the new modules with the base and PCU of the existing battery.
- 3. Charge new modules to 100% SOC using the ECO Mode in SolarGo App.
- 4. Combine all modules to a new battery (100% SOC)
- 5. Perform a new commissioning using SolarGo App.







Extension of LYNX Home F Plus+ or LYNX Home F with additional modules (Method 2)

Steps:

- 1. Discharge the existing battery to 20% SOC using the ECO Mode and DOD setting in SolarGo App.
- 2. Identify the production month of the new modules from their serial numbers or part numbers.

Digits 11/12 of serial number = production year Digit 13 of serial number = production month (1-9, A=Oct, B=Nov, C=Dec)





Part No. BME0033-01-01P-224-2-1



3. Estimate the SOC of the new modules based on the number of months passed since their production:



- 4. Charge the existing battery to SOC of the new modules using the ECO Mode in SolarGo App.
- 5. Add the new module(s) to the battery
- 6. Charge extended battery to 100% SOC







SolarGo settings





Eco-Mode and DOD Settings for Battery discharging to 20%:

下午3:31 🔮 0.0K/s 參 🗇 🛱 🛗 🖬 🖅 🗤			下午3:10 🗅 💈 0.0K/s 🌢 🗐 🗂 🖬 📚 🗊				
<	Setup Time	Save	<	Battery Settin	g	S	ave
Start Time		02:00	Battery	Modules			4
End Time Repeat		12:00 Every day >	Max. Ch	arging Voltage		216.	.0V
Rated powe	er(%)	100 %	Max. Ch	arging Current		100	.0A
Select mode		100	Max. Dis	scharging Current		100	.0A
Charge			SOC Pro	otection C Protection in turned on, bi	attery stop	5	D
Discharge		~		ng according to the Depth of			2
Set different t to TOU price.	time periods to charge or discha	arge according	1.1.1.1	f Discharge(on-grid) OD(%) in on-grid state	100	80	%
			1999 - 199	f Discharge (off-grid) OD(%) in off-grid state	60	60	%
			If no bat	eminder : ttery model is selected, asic setting-Select batte			

Check the user manual of SolarGo for more details (<u>https://emea.goodwe.com</u>)