

# Approved LV Battery List

**Version:** Growatt-LV48-0016

**Date issued:** 2025/11/26

**Issued by:** ShenZhen Growatt New Energy Co.,Ltd.

We Growatt hereby declares that these inverter models are compatible with below brand batteries.

**Issued by:** Daisy Xiao

## **Inverter models:**

SPM 3-6kTL-HU, SPM 8-10kTL-HU, SPH 8-10kTL-HU-US(B), SPH 10000TL-HU, SPH 10000TL-HU-US will be abbreviated as SPH/SPM in the following.

SPE 8000-12000 ES, SPE 3.5-6KTL HVM-G2, SPE 6000-12000 US will be abbreviated as SPE in the following.

SPF 6000ES Plus, SPF 3-5k ES, SPF 3.5-5k ES Lite, SPF 2-5kTL HVM, SPF 3000TL LVM, SPF 3.5-5kTL HVM-Pro, SPF 4-12kT HVM, SPF 4-12kT DVM, SPF 4-18kT DVM-MPV will be abbreviated as SPF in the following.

WIT 4-25k-HU will be abbreviated as WIT in the following.

## Battery list:

Battery		Inverter		
Battery Brand	Battery Model	Inverter Model	RS485 or CAN	Inverter Setup
Growatt	Hope 5.5L-A1,Hope 5.0L-B1	SPH/SPM HU	RS485	00
		SPE, SPF		L01
	ALP 5.0L-E2-US, ALP 5.0L-E1, AXE 5.0L - C1 Hope 5.5L-A1,Hope 5.0L-B1, Hope 14.3L-A1	SPH/SPM HU	CAN	01
		SPE, SPF		L51
		WIT		√
	Sacolar	STR 5.5-A1	SPH/SPM HU	CAN
SPE, SPF			L51	
WIT			√	
SPH/SPM HU			RS485	00
SPE, SPF				L01
Energys	OGHB 1548-Li	SPH/SPM HU	CAN	02
Topband	TB48100F-T110AD	SPH/SPM HU	RS485	03
		SPE, SPF		L01
Pylontech <sup>3</sup>	US2000B,US3000, US2000C, US3000C, Pelio-L UP5000, US5000, Force L1, Force L2, UF5000	SPH/SPM HU	CAN	04
		SPE, SPF		L52
		WIT		*√ <sup>3</sup>
Dyness	DL LV Series Power LV Series A/B/BX LV Series	SPH/SPM HU	CAN	01
		SPE, SPF		L51
		WIT		√
		SPH/SPM HU	RS485	00
		SPE, SPF		L01
PYTES	V5°, E-BOX-48100R	SPH/SPM HU	CAN	01
		SPE, SPF		L51
		WIT		√
		SPH/SPM HU	RS485	00

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		SPE, SPF		L01
Raystech	RT5427, RT10854, RT5000 LM, RT5000 B, RT5427-LV-RACK, RT5120M	SPH/SPM HU	CAN	01
		SPE, SPF		L51
		WIT		√
EG4 <sup>4</sup>	EG4-LL, SR-48-100-LP4-IN-02, WM-48-100-IN-00, WP-16/280-1AWLL, WM-48 280-LL-00, WM-48-280-1-IN-LL-00	SPH/SPM HU	CAN	01
		SPE, SPF		L51
		WIT		√
Zetara	ZLES5000R, ZRLVESS5KR, ZRLVESS10KR, ZRLVESS5KR-LP, ZRLVESS5KR-V3, ZLES5000W, ZRLVESS5KW-SC, ZRLVESS10KW, ZRLVESS14.3KW, ZRLVESS14.3KW-OD, ZRLVESS5KHS, ZRLVESS5KVS	SPH/SPM HU	CAN	01
		SPE, SPF		L51
		WIT		√
Soluna	Soluna EOS 5K Pack Soluna EVO 5K Pack Soluna 10K Pack LV Soluna Franz 9.6K Pack LV	SPH/SPM HU	CAN	01
		SPE, SPF		L51
		WIT		√
CF Energy <sup>5</sup>	CFE-5100,CFE-5100S, CFE-2400,CFE-10H, CFE-5,CFE-WL10, CFE-WL15	SPH/SPM HU	CAN	01
		SPE, SPF		L51
		WIT		√
Briggs & Stratton	SPHI-6.6-L0 SPHI-13.2-L0 SPHI-19.8-L0 SPHI-6.6-L0-C SPHI-13.2-L0-C SPHI-19.8-L0-C	SPH/SPM HU	CAN	04
		SPE, SPF		L52
Bicodi <sup>6</sup>	BD048100P05 BD048200P10 BD048230W12 BD048314W16 BD048345W18 BD048100L05 BD048100R05	SPH/SPM HU	CAN	01
		SPE, SPF		L51
		WIT		√
Vami	F48100/48171/48200/48230/48300/48314 R48100	SPH/SPM HU	CAN	01
		SPE, SPF		L51
		WIT		√

LVTOPSUN	LVTS-256100	SPH/SPM HU	CAN	01
	LVTS-256200			
	LVTS-256280	SPE, SPF		L51
	LVTS-512100			
	LVTS-512200	WIT		√
	LVTS-512230			
	LVTS-512280			
	LVTS-512300			
	LVTS-512314			
	LVTS-512560			
Leoch Battery <sup>7</sup>	LR51.2-50	SPH/SPM HU	CAN	01
	LR51.2-100			
	LR51.2-150	SPE, SPF		L51
	LR51.2-200			
	LW51.2-50	WIT		√
	LW51.2-100			
	LW51.2-150			
	LW51.2-200			
	LF51.2-300			
Eccosolar	LFELI-12100T	SPH/SPM HU	CAN	01
	LFELI-24100T			
	LFELI-24100	SPE, SPF		L51
	LFELI-4850W1			
	LFELI-48100	WIT		√
	LFELI-48100MB16			
	LFELI-48200MB16			
	LFELI-51.250			
	LFELI-51.2100			
	LFELI-51.2200			
Sunket	LFP 10kWh/LV	SPH/SPM HU	CAN	01
	LFP 5kWh/LV	SPE, SPF		L51
	LFP 5000			
	LFP 16000	WIT		√
	LFP 16kWh/LV			
EVE	EVE-LVI-5.0	SPH/SPM HU	CAN	01
	EVE-LVW-5.0	SPE, SPF		L51
	RES-PLI-II-5.0			
	RES-PLW-II-5.0	WIT		√
	RES-PLW-I-10.0			
	RES-PLW-I-16.0			

KNYEE ENERGY <sup>8</sup>	KNY51100	SPH/SPM HU	CAN	01	
	KNY51200			L51	
	KNY51300				
	ZC-L48100	SPE, SPF			
	ZC-L51100				
	ZC-W51100				
	ZC-S51100	WIT		√	
	ES-LV-5				
	ES-LV-10				
	ES-LV-15				
	ZC-P51100				
	KNY-P51300				
SHOTO <sup>9</sup>	SDC10-Box5	WIT	CAN	√	
	SDC10-Box16				
	HP10-Box5 Pro				
	HP10-F5				
	HP10-F10				
	HP10-F14				
	SDC48150				
	HP-B10				
	ZTS48150S				
	SDA10-48100				
EASYWAY <sup>10</sup>	UNIV5100	SPH/SPM HU	CAN	01	
	UNIV5200	SPE, SPF		L51	
	UNIV6900				
	UNIV7600				
	UNIV10kWh(S)	WIT		√	
	UNIV-14.3kWh				
	UNIV16kWh				
BETTENERGY	ELESHELL 5K	WIT	CAN	√	
	ELESHELL 10.2K				
	ELESHELL 14.3K				
	ELESHELL 16K				
	ELESHELL 10.2K PLUS				
	ELESHELL 16K PLUS				
	ELEBOX 5K-LV				
	ELECUBE 10.2K				
	ELECUBE 16K				

**Growatt battery partners that support closed-loop communications**

**SACOLAR**

**TOPBAND**  
BATTERY

**Pytes**

**PYLONTECH**

**DYNES**

**EnerSys**

**RAYSTECH**

**ZETARA**

**SOLUNA™**

**EC4**

**C&E**  
energy storage system

**BRIGGS&STRATTON**  
ENERGY SOLUTIONS

**BICODI**

**VAMI**

**LEOCH**  
理士電池  
Leoch Battery

**LVTOPSUN**

**LVTOPSUN**

**ECCO**  
SOLAR

**SUNKET**

**SUNKET®**  
Sun, Key Energy, Technology

**EVE** Energy

**KNYZE ENERGY**

**shoto**

**EASYWAY**

**EASYWAY**  
ENERGY

**BETTENERGY**

**BETTENERGY**

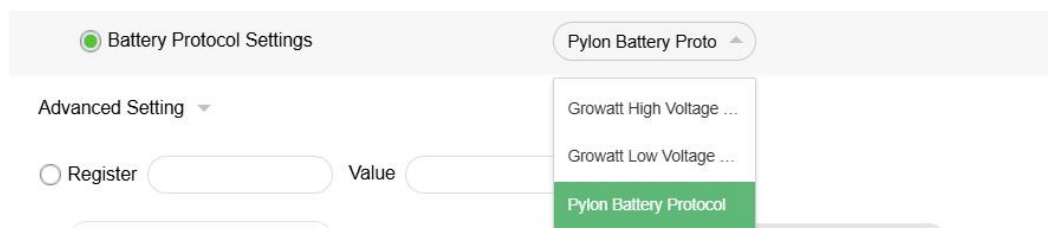
## Appendix I Note:

1. Please set Battery Mode to Lithium and set the Lithium Mode according to the inverter set up above.
2. The purchaser should confirm with the battery supplier if the battery is compatible with Growatt inverter, or Growatt will not be liable for any failure that caused by communication issue.

### 3. Pylontech Batteries

If using Pylontech batteries, **the communication cable provided by Pylontech must be used** to ensure proper communication and compatibility.

- 3\*. If using Pylontech batteries with **WIT 4-25K-HU**, please change the Battery Protocol Settings to Pylon Battery Protocol through Growatt OSS or Growatt ShineTools.



### 4. EG4 Batteries

If issues occur while using EG4 batteries, **upgrade the battery firmware to the latest version** and verify if the problem persists.

### 5. CF Energy Batteries

CF Energy Batteries do not support wake-up by the inverter. If the battery is discharged to the **maximum allowable Depth of Discharge (DOD)** and shuts down,

**A. press the power button to restart it.**

**B. Then, use grid power or PV power to recharge the battery to restore**

normal operation.

## 6. Bicodi Batteries

Please make sure that the firmware version of Bicodi Batteries is above V1.2.1T2

## 7. Leoch Battery

Please make sure that the firmware version of Leoch Batteries is above P1547V320-18751-3.02C-000

## 8. KNYEE ENERGY

- 1) Please change the communication protocol of KNYEE ENERGY Battery to Growatt CAN communication protocol
- 2) Please make sure that the firmware version of KNYEE ENERGY Battery is at least the following version or higher.

	Model	Firmware Version
KNYEE ENERGY	KNY51100	23.2.4
	KNY51200	
	KNY51300	
	ZC-L48100	2.01A
	ZC-L51100	2.01
	ZC-W51100	12.13.2
	ZC-S51100	2.01
	ES-LV-5	2.00
	ES-LV-10	
	ES-LV-15	
	ZC-P51100	1.00
	KNY-P51300	2.00

## 9. SHOTO Battery

It is recommended that the firmware version of WIT4-15K-HU is above YEaa1008 ZDda10



## 10. EASYWAY Battery

If using EASYWAY batteries,

1) Please change the communication protocol of EASYWAY Battery to Growatt CAN communication protocol.

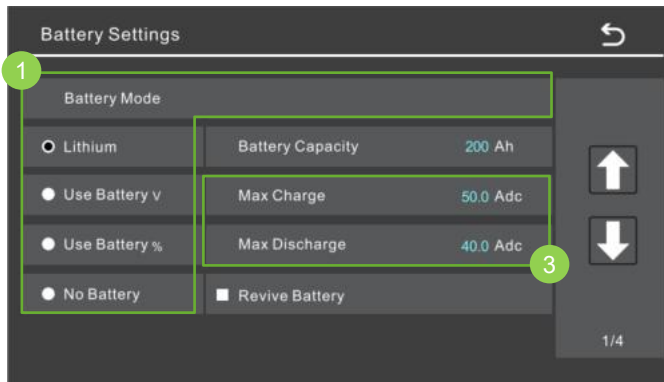
2) Please note that the battery screen displays information about a single battery cluster, while the inverter displays information about the complete battery system. If there are multiple battery clusters, the data will differ.

11. Kindly reach out to the email address provided below if you are seeking compatibility with Growatt Inverters.

iverson.li@growatt.com      Iverson Li

zhenqi.xiao@growatt.com      Daisy Xiao

## Appendix II Lithium Battery Commissioning for SPH



1. Choose **Lithium** for **Battery Mode**

2. Set the communication protocol according to the **Inverter Setup** on the **Battery List** above.

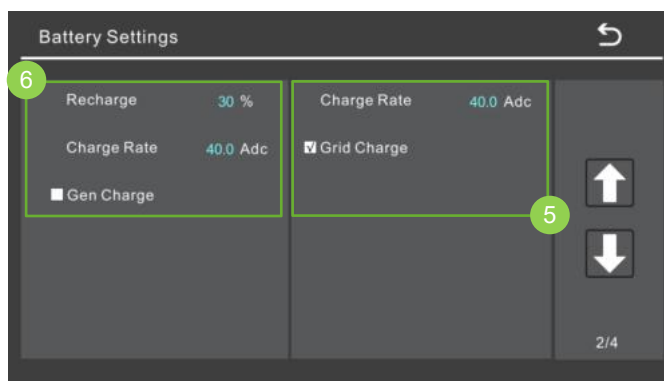
3. **Max Charge:** The **Max Charge** current will be provided by BMS automatically and can not be changed if the communication is successful.

**Max Discharge:** Set the Battery capacity and Max Discharge current according to the Battery parameters.



4. **LBCO / LBCO / LBCO Alarm.**

**LBCO:** Low Battery Cut Off. The



inverter will shut off its AC output if the actual battery capacity is lower than this value. The backup load can still be powered by the grid. The default value is 10%. The minimum value that can be set is 5%.

**LBCO Alarm:** Low Battery Cut Off Alarm, the inverter will send alarm if the actual battery value reaches this value. The default value is 20%. The minimum value can be set is 10%.

**LBCI:** Low Battery Cut In. The inverter AC output will resume if actual battery capacity reaches this value. The default value is 30%.The minimum value can be set is 29%.

The set value must match **LBCO<LBCO alarm<LBCI**, otherwise the setting will not be successful. The **Battery SOC / Volt** setting of **TOU** needs to be **greater** than the **LBCO alarm** value, or the settings will not be successful.

#### 5. Set the **Charge Rate** and **Grid Charge** based on needs

**Grid Charge:** Enable Grid Charge to use grid to charge the battery.

**Charge Rate:** Set the charging current of the grid

#### 6. Set the **Recharge**, **Charge Rate** and **Gen Charge** based on needs.

**Recharge:** When there is a blackout and Automatic Start for generator is enabled the generator will automatically start and power the loads if the actual battery capacity is lower than the Recharge value

**Charge Rate:** Set the charging current of the generator

**Gen Charge:** Allow generator to charge the battery