

# **APP Instructions**



# **ELS SERIES**

# **Residential Hybrid Inverter**

ELS3K, ELS3K6, ELS4K, ELS4K6, ELS5K, ELS6K

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# 1 Download APP

Add the WiFi adapter and the connected device to the cloud server by website (<u>https://www.valueclouds.com</u>) or APP. Then you will be able to monitor the device and set parameters by PC or APP.



# 2 Registration and Login

19:50	6	\$\$%al ₽\$5%
	V2.17.1.	English 👻
173	53174802	-
<b>@</b>		$\checkmark$
Forgot Acco	unt	Forgot PWD
	Sign in	
DE	мо	Sign up
	≁ Toolb	ox
	Other login	way
C		
	0	

1. Sign up

19:50	6	≈ %al æ 5%
	V2.1	English •
۲	17753174802	-
6		4
Forgot	Account	Forgot PWD
	Sig	n in
	DEMO	Sign up
	≁ To	olbox
	Other k	ogin way
	0	C



Download the APP and open it, click the "Sign up" icon. Input the telephone number/user name/email, verification code, and password, and then select the user type from the drop-down box. Tick to agree with the privacy agreement and click the "Sign Up." After registering, return to the APP. Input the telephone number/user name/email, and click the "Sign in" button to enter the APP.

# 3 Add Devices





 After signing in, enter the "Monitor" page, and click "Add device" to enter "Bluetooth addition" and "Scan addition"

pages.

 Select "Bluetooth addition", turn on the Bluetooth permission of your mobile phone, and get close to the device so that it can search for the corresponding device. Then click the "+" icon to add it. Otherwise, click

"Refresh".

< Bluetooth Scan addition addition	0
	×
Please check the communication address of the connected device	0
Connection1	
Device name	
My Device-01	
Address	
1	
Confirm	

( Hethonking compar	ution
Wi-Fi (5G not supported)	
Please select or enter Wi-Fi name	(:
Password	
Please enter Wi-Fi password	Ŷ
Remember the current networking configuration	
Tips:	
<ol> <li>Ensure that the network signal is goo network is unblocked;</li> </ol>	d and the
<ol> <li>Routers in the SG band are not curre Please use routers in the 2.4G band;</li> <li>Ensure that the password of the rout</li> </ol>	ntly supported er is correct.
<ol> <li>Routers in the SG band are not curre Please use router in the 2.4G band;</li> <li>Ensure that the password of the rout S Ensure that the password of the rout Can't the device connect to the internet?</li> </ol>	ntly supporter er is correct. Networking diagnosis
2. Nouters in the 56 band are not come 3. Ensure that the password of the rout Can't the device connect to the internet? Start networking	ntly supported er is correct. Networking diagnosis

 You can rename the device and communication address. Then click
 "Confirm" button and the interface will automatically turn to "Monitor" page. 4. Turn on WiFi switch on your mobile phone, and get close to the WiFi stick. Search for and select a nearby WiFi with good signal, enter the correct WiFi name and password, click "Start networking" and wait for the connection. (The same process as scanning the QR code.)

← Netw	orking	successfu	lly
		J.	
Network c	onfigur	ration suc	ccessful 2 🛋
After co con approxi added do b	mpleting figuratior mately 5 evices to e patient	the networi a, it will take minutes for see data. Pl and wait	king the ease

 Wait for the network configuration. If the configuration is successful, click
 "Confirm" and return to the home page of the APP. If it is unsuccessful, repeat the above steps. (The same process as scanning the QR code.)



6. Select "Scan addition", and first insert the WiFi stick into the "WIFI/GPRS" port on the device. Turn on mobile phone's scanning function and scan the QR code on the WiFi stick to add the device.



 Click "Confirm" button and the interface will automatically turn to "Monitor" page. Click "Done" to finish device addition and enter the device selection page. You can rename the device and communication address here.



8. Check "General" information and

"Energy storage" information on the

"Overview" page.

# 4 Local Monitoring

V2.17.	English •	
17753174802	*	
<b>a</b>	ų	
Forgot Account	Forgot PWD	
Sign in		
DEMO	Sign up	
Toolbox Other login way		



- 1. Click the "Toolbox" button on the home
- 2. Select "Local mode" to enter "Ble pair"

page.

page.



< I300002310309171	36 @
Real time	Device info
Update time: 2024	-12-21 19:53:52
Important parameter	\$
10.23 kWh Today Generation	0.33 kWh Today Charged Ener
3.64 kWh Today Dischar Energy	0.47 kWh Today Import Energy
0.00 kWh Today Export Energy	15.57 kWh Today Load Consu
33.22 kWh Total Generation	4.30 kWh Total Charged Energy
System Parameter	
System Time : 2024-12-21 19:52: 42	Input Mode: Independent
EPS:	Operation Mode:

3. Wait for 1 to 3 minutes to search for nearby devices. Select the device you want to connect to and click on it to enter the device detail interface. If the connection is not successful. click "Rescan".  After the above steps, enter the "Real time" page. Wait for 1 minute for data refresh. It contains system information, device information, energy data, PV data, battery data, grid data, and load data.

( 1300002310	30917136
Real time	Device info
Basic info	
Device brand	EPEVER
Туре	unsupported-device
SN	06430371410797RZ-0
🔂 Module info	Reboot
Model	WFBLE.DTU.PlugProA
Signal	al
FMW VER	8.50.11.3
PN	130000231030917136 🔿

(E)		\$ \$
	3542039269 wner	,
Toolbox		
Local mode MESH networkin	DTU config	Network config
More (B) Community (C) Electricity price	Help and feedba	Contact us
	Sign out	
Monitor	Alarm	() Me

5. On the device information page, wait for one minute until the data is refreshed. The

bottom right key is "Copy".

 Return to the home page and click on "Me" at the bottom right. You can also access local monitoring, network configuration, and adding devices by scanning the QR code.

# Device Situation



# 6 Real-time Data

<	- <u>\$-</u>
SN 0	<b>Device-01</b> 6430371409797R <sup>の</sup> nal Energy storage
Device situ Re	al-time Statistics H
System Inform	ation
Operating Stat On Grid	tus On Grid Countdown <b>0Sec</b>
Internal TEMP	Heat Sink TEMP
36°C	30°C
Today Gen Duration	Total Gen Duration
27Min	152Min
Total Run Duration	Insulation Resistance
560Min	0kΩ
System time	Leakage Current
2024-12-21 17:56:34	2mA

Energy Information	1
Today Generation 10.23kWh	Today Charged Energy 0.33kWh
Today Dischar Energy	Today Import Energy
1.67kWh	0.42kWh
Today Export Energy	Today Load Consumption
0.00kWh	11.45kWh
Total Generation 33.22kWh	Total Charged Energy 4.30kWh
Total Dischar Energy	Total Import Energy
3.98kWh	1.08kWh
Total Export Energy	Total Load Consumption
0.88kWh	17.77kWh

Device Information	1
Hardware Version	Software Version
1.00	1.000
ARM	DSP-M
V001203	V001203
DSP-S	SN
V001000	06430371409797 RZ-00013
BMS-Link	Power Level
V00000	5000W
Switch Status	Device Model
ON	ELS5K

Battery Informatio	on
Battery Voltage 52.2V	Battery Current
Battery Power -2.1kW	Battery SOC 83%
Battery Temperature -40°C	Battery Cycles 0
Battery Status Standby	

PV Information	
PV1 Voltage	PV1 Current
3.0V	0.00A
PV1 Power	PV2 Voltage
0.00kW	4.4V
PV2 Current	PV2 Power
0.00A	0.00kW
Total PV Power	
0.00kW	

Grid Information	iç.
Grid Voltage	Grid Current
231.2V	0.24A
Grid Power	Grid Frequency
-0.01kW	49.99Hz
INV Output	INV Output Power
Current	1.94kW
4.32A	

Load Information	n
Load Voltage	Load Current
230.0V	4.42A
Load Power	Load Frequency
2.13kW	49.99Hz
INV Output Voltage	
228.9V	

# 7 Data Statistics



Dav





Month



Year

Total

# 8 Historical Data

<	<b>My Dev</b> SN 06430 Normal	<b>ice-0</b> ′ 1371410 Energy	- <b>0-</b> <b>1</b> 0797RZ storage	 O
🖯 Datalog	iger 130	000023	10309171:	36 ወ
-time d	Statistics	Hist –	orical da.	. Ala
🗠 Chart	List	< :	2024-12-23	
Select	C	Select (kW)	ed 1 item	>
∿ Grid Po	wer			
kW				
0.8				
0.4				
0.0				
-0.4	17:56			
-0.8	• Grid Pow	<sup>ver:</sup> -1.1 kW	8	
-1.2			YU.	
0 2	4 6 8 10	12 14	16 18 20	22 24

# 9 Device Alarm

#### Real-time Alarm



O Device name/PN

Happeni... • All Lev... • Filter Da... •

All Status Happening

Alarm

0

Device Alarm

Monitor

#### Alarm Date





# **10 Parameter Setting**



Click the setting button to enter the parameter setting interface.

## 10.1 System Parameter

## 10.1.1 System time

Select the corresponding time based on local time and deliver. It is recommended to calibrate the time on a monthly basis.

< Device	Control	Close 20	024-12-21 18:17:	Deliver
Control System Para	ameter Factory •••			viii 1 000ec.
		2022Y 10Mc	o 19Day 16Hour15I	Min 56Sec.
Q Search	OneClickRead	2023Y 11Mc	o 20Day 17Hour16I	Min 57Sec.
System Time	Input Mode	2024Y 12Mc	o 21Day 18Hour17I	Min 58Sec.
2024-12-21 19:33:18	Independent	2025Y	22Day 19Hour18	Min 59Sec.
R	Q	2026Y	23Day 20Hour19I	Min

## 10.1.2 PV Input Mode

Since the inverter is designed with two PV input terminals, select the "Input Mode" as "Parallel" or "Independent" according to the connection method between the PV array and the inverter. And then, deliver the new setting.

< Device	e Control	Close	Radio Button	Deliver
Control System Par	ameter Factory •••			
Q Search	OneClickRead		Parallel	
System Time	Input Mode		Independent	
2024-12-21 19:33:18	Independent 🗸			
R	R			

#### 10.1.3 EPS Control

Enable this parameter to realize the function of an uninterrupted power supply (UPS). The battery will supply power to the load during the absence of the grid. Set the parameter "EPS" as "Enable" and click "One Click Send".

< Device Control	Close Radio Button Deliver
Control System Parameter Factory •••	
Q Search OneClickRead	EPS OFF
EPS Operation Mode	EPS ON
EPS ON Self Consumption	
<b>9</b>	

## 10.1.4 Operation Mode

Operation modes include Time of Use, Economic, Self Consumption, and Peak Shaving; select the operation mode based on user's actual needs and deliver the new setting.

< Device Control	Close Radio Button Deliver
Control System Parameter Factory •••	
Q Search OneClickRead	Self Consumption
	Economic
EPS ON Self Consumption	Time of Use
<b>9</b>	Peak Shaving

## 10.1.5 Safety Code

Select the corresponding safety code based on local grid connection requirements, and then, apply the new setting.



## 10.1.6 CT AutoCalibration

Select "Disable" when the CT is installed in the normal direction, and select "Enable" when the CT is installed in the reverse direction.

< Devic	e Control	Close	Radio Button	Deliver
Control System Pa	rameter Factory •••			
Q Search	OneClickRead			
Safety Code	CT AutoCalibration		Disable	
	$\left( \right)$		Disable	
IEC61727	Disable		Enable	
Q	R			

## 10.1.7 Remote Switching

Users can remotely control the power on/off and select to deliver the new setting according to actual needs.

< Device	Control	Close	Radio Button	Deliver
Control System Par	ameter Factory •••			
Q Search	OneClickRead		OFF	
Remote Switching	CT variable ratio			
Allowed values:0~65535			ON	
ON -	0			
R	R			

## 10.1.8 CT variable ratio

Set according to the transformation ratio of the selected CT and then deliver the new setting.





### 10.2 Batched setting

### 10.2.1 Time of Use Mode



When the operation mode is selected as "Time of Use" mode, related parameter settings are required. Users set the corresponding charging time period and charging power, or discharging time period and discharging power according to the actual needs, and the device allows the setting of multiple time period rules. Set the corresponding parameters and click "One Click Send". It is recommended to calibrate the time on a monthly basis.

#### 10.2.2 Economic Mode



When the operation mode is selected as "Economic" mode, related parameter settings are required. The user sets the corresponding date, charging start time, charging end time, charging power, and charging cutoff SOC based on their needs, and the device allows the setting of multiple rules. Set the corresponding parameters and click "One Click Send". It is recommended to calibrate the time on a monthly basis.

#### 10.2.3 Peak Shaving Mode



When the operation mode is selected as "Peak Shaving" mode, related parameter settings are required. User sets the peak shaving power according to their needs, namely, the upper limit of power allowed to buy from the grid or sale to the grid. Set the power limit buy/sale electricity and click "One Click Send"

## 10.2.4 Feed-in Power Control

Enable the feed-in power control and set the feed-in power and feed-in overload protection before

20 Copyright © EPEVER using this function. And then, click "One Click Send".

< Device	Control
Q Search	R
Zero Power Calibr (W)	Feed-in Power Ctrl
0	Feed Feed
Feed-in Power (W)	
5550	
5550	

# 10.2.5 On-grid 1.1 × Enable

< Device C	ontrol
Q Search	R
On-grid 1.1x Ena ble	
Ena	
Read succe	essfully

## 10.2.6 Battery Configuration

Users need to set appropriate parameters based on their specific battery, including setting the over voltage, charge voltage, under voltage, low voltage, and rated battery voltage, as well as the maximum charge current limit, maximum discharge current limit, battery capacity, and battery type.

Set the battery model according to the battery BMS protocol.

The "DOD (On-Grid)" represents the maximum discharge depth of the battery when connected to the grid. For example, if the "DOD (On-Grid)" is set to 80%, it means the battery will stop discharging when the battery SOC drops to 20%.

The "DOD (Off-Grid)" represents the maximum discharge depth of the battery when there is no grid power. For example, if the "DOD (Off-Grid)" is set to 80%, it means the battery stops discharging when the battery SOC drops to 20%.

The "Discharge ReturnDiff" indicates the threshold for resuming battery discharge. For example, if the "DOD (Off-Grid)" is set to 80%, and the "Discharge ReturnDiff" is set to 20%, it means the battery stops discharging when the battery SOC drops to 20%, and resumes discharging when the battery SOC is charged back up to 40%. Set the corresponding parameters and click "One Click Send".



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#### 10.2.7 Activating Battery

When a battery BMS communication error occurs due to severe insufficient voltage, it needs to activate the battery by the following settings. Set "Batt Auto Activate" to "Enable", and set "Batt Manual Activate" to "Enable", then click "One Click Send".



#### 10.2.8 Parallel Control

When using a parallel system, it is necessary to enable the parallel control. Select one inverter as the master unit, and the others as slaves, ensuring that each inverter has a unique address. After setting the parameters, click "One Click Send".



#### 10.2.9 Buzzer

Set the alarm prompt according to customer requirements. If a buzzer reminder is needed, choose to enable and deliver the setting. If a buzzer reminder is not needed, choose to disable and deliver

23 Copyright © EPEVER the setting.



### 10.2.10 PCC Electric Meter

When users select an electric meter for grid monitoring, select the "PCC Electric Meter" as "Enable". And then, deliver the new setting.



### 10.3 Factory Data Reset

"Factory Data Reset" includes "clear accumulated energy, return to factory settings, and clear event record."



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# **11 Project Device and Alarm**

Project Monitoring



#### Project Alarm

None Data

Alarm

Alarm

0

....

None Data Alarm 0

Any changes without prior notice! Version number: V1.0

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