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HIGH QUALITY MODULES

LiB 12.8V 100Ah

WIFI SPEC

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Product Specifications

1. SCOPE

The specification describes the requirements for the Lithium-Ion rechargeable battery supplied by LiB Energy.

2. NORMAL PERFORMANCE

No.	ITEM			GENERAL PARAMETER	REMARK
1	Model			LiB 12.8V 100Ah WiFi	
2	Standard capacity (0.2C5A)			100Ah	
3	Minimum Capacity(0.2C5A)			95Ah	
4	Rated Voltage			12.8V	
5	Max Charge Voltage			14.6V	
6	Cut-off Voltage			10.8V	
7	Standard charge and discharge current.			20A	
	Maximum Continuous Charge current			100A	not allowed less than 10°C, 10-20°C 20-45°C, SOC less than 50%, not allowed if higher than 45°C
8	Max Continuous discharge current			100A	
9	Weight (Approx including case)			≈10.50Kg	
10	Impedance (Max, at 1000Hz.)			≤20mΩ	
11	Charge method (CC/CV)	Standard	CC 20A	14.6V cut off	
			CV 14.6	2Acut off	
12	Operate Temperature	Charge		0°C~45°C	
		Discharge		-20°C~60°C	
		Storage		-20°C~45°C	
13	Series or parallel			≤4 pieces	

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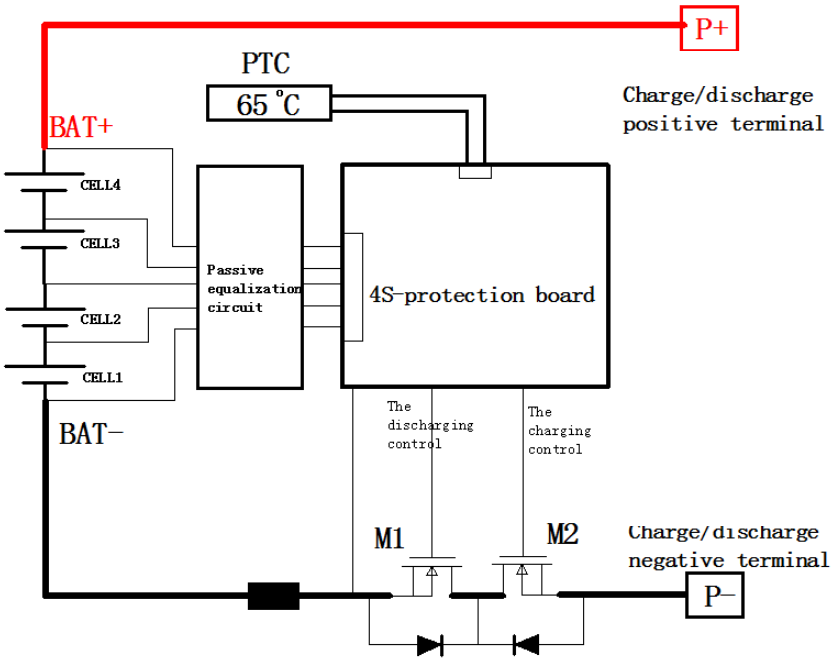
Product Specifications

3. Battery pack block diagram



4. TERMINAL SPECIFICATION

P-	Charge and Discharge negative	M8
Comm.	Communication terminal	SM2.54-2P black male and female
P+	Charge and Discharge positive	M8

5. ABSOLUTE MAXIMUM RATING

PARAMETER	RATING	UNIT
Operating temperature range	-20 ~ 60	°C
Operating humidity range	5 ~ 85%	%RH
Storage temperature range	-20 ~ 60	°C
Operating humidity range	<75%	%RH
Supplying voltage range	80	V

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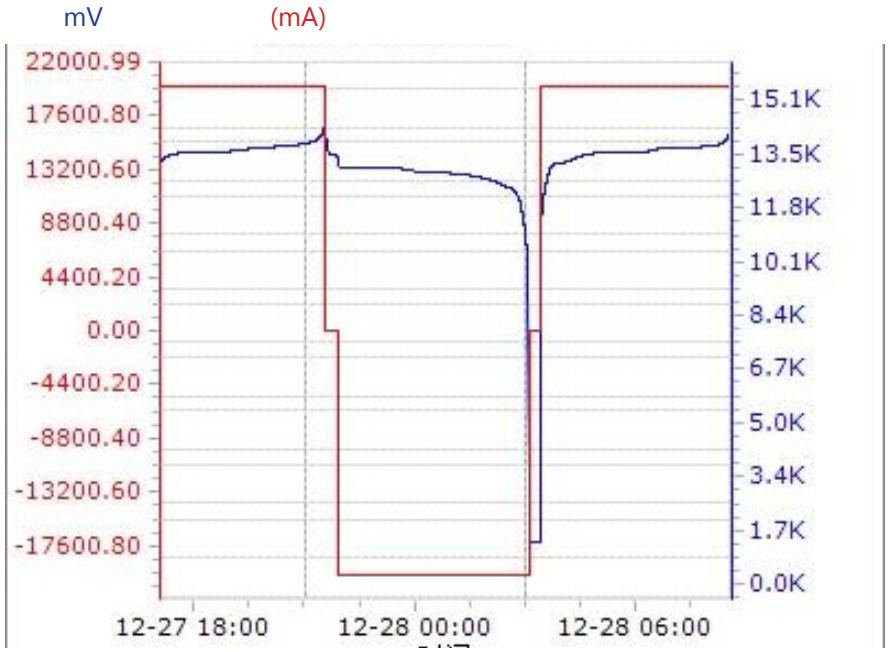
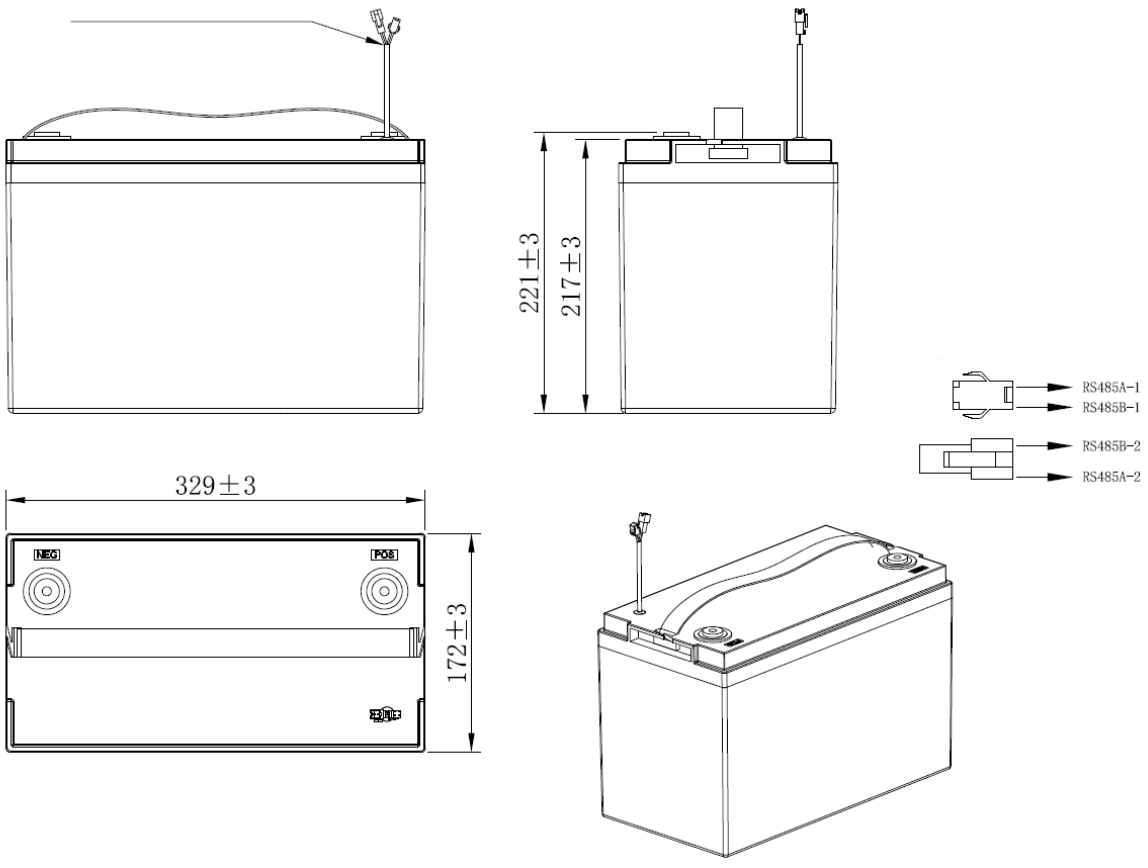
6. BATTERY CHARGING/DISCHARGING PROFILE

Applying standard charging/discharging current and testing the battery capacity



7. OUTLINE DRAWING



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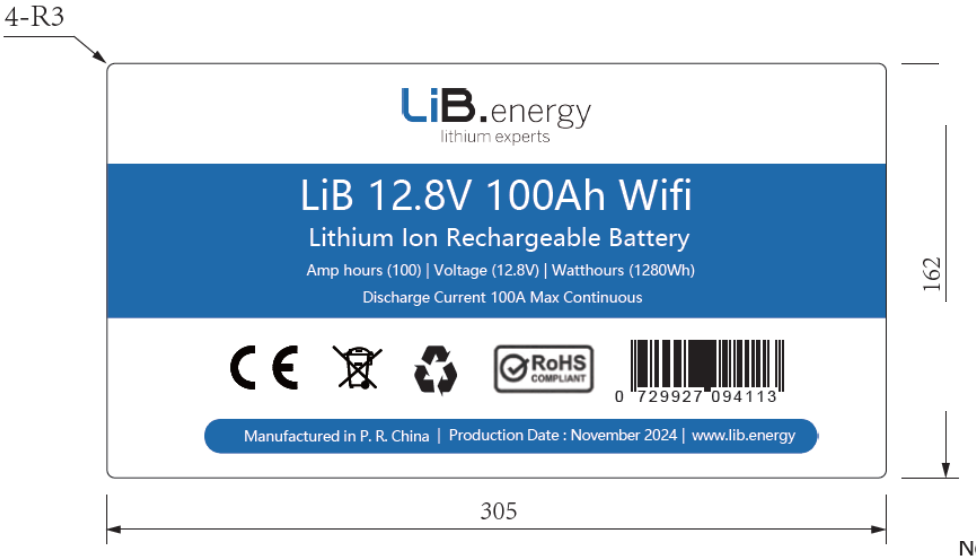
Product Specifications

8. MATTER PICTURE

Applying standard charging/discharging current and testing the battery capacity

9. LABELS

9.1



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November 2024,

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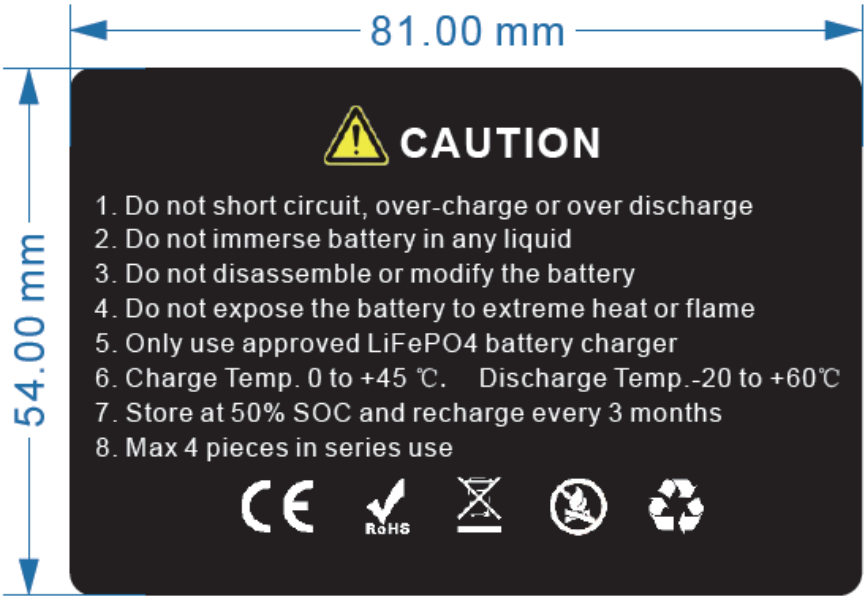
Product Specifications



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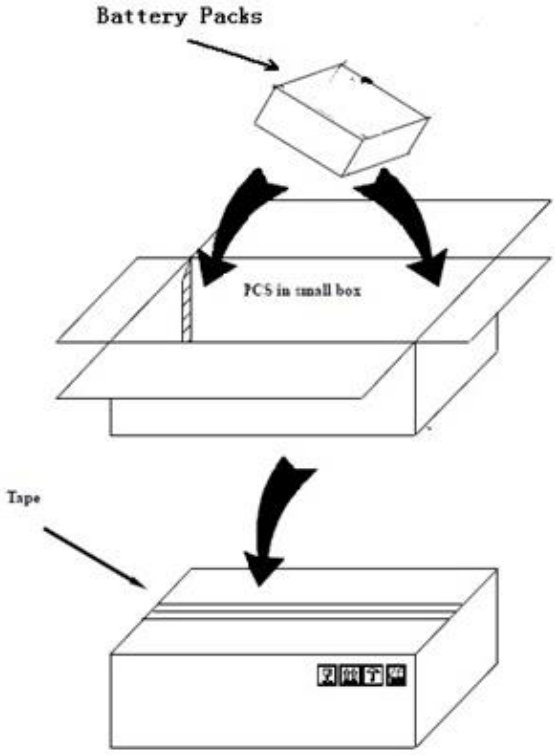
9.2 SERIAL NUMBER LABEL

WIFI code: DL-FB4C2E0DXXXX
LiB12.8V100Ah24110001
45*15mm

10. PACKAGE



11. INSTRUCTIONS AND REQUIREMENT

11.1 Please read the battery instructions and the labels before use.
11.2 Please prevent the battery from heat, high voltage and children. Do not drop the battery.
11.3 Do not short circuit cathode and anode directly. Do not disassembe the batter. Do not put the battery in the damp place.
11.4 Please deal the obsolete battery properly. Do not put into fire or water.
11.5 The battery should be stored at room temperature, with SOC 40%-60%. It is suggested to charge it every 3 months to prevent from over-discharge.
11.6 Battery should be used under specified condition. For the battery stored over one year, performance is not guaranteed.
11.7 Battery should meetcorresponding requirements during transportation, such as package, documents, and label.
11.8 Series connection of batteries:
A. Only batteries of same model fromsame batch can be used in series.
B. the total voltage difference between batteries should be ≤100mV.
C. The connection conductor should be of good electronical conductivety and thick to enlarge contact area.Please ensure good connecction to minimize the internal resistance between batteries.
D. Maximum 4 batteries can be connected in series.
11.9 Battery packs should not be used in parallel from different batches, voltage difference ≤100mV, a maximum of 4 battery modules can be connected in parallel.

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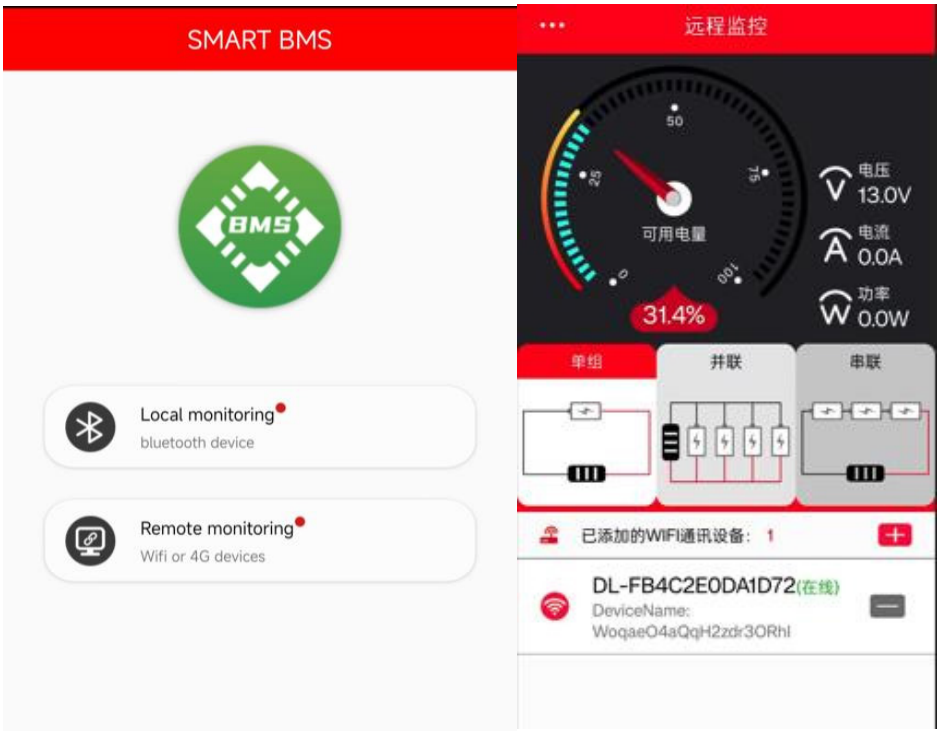
Product Specifications

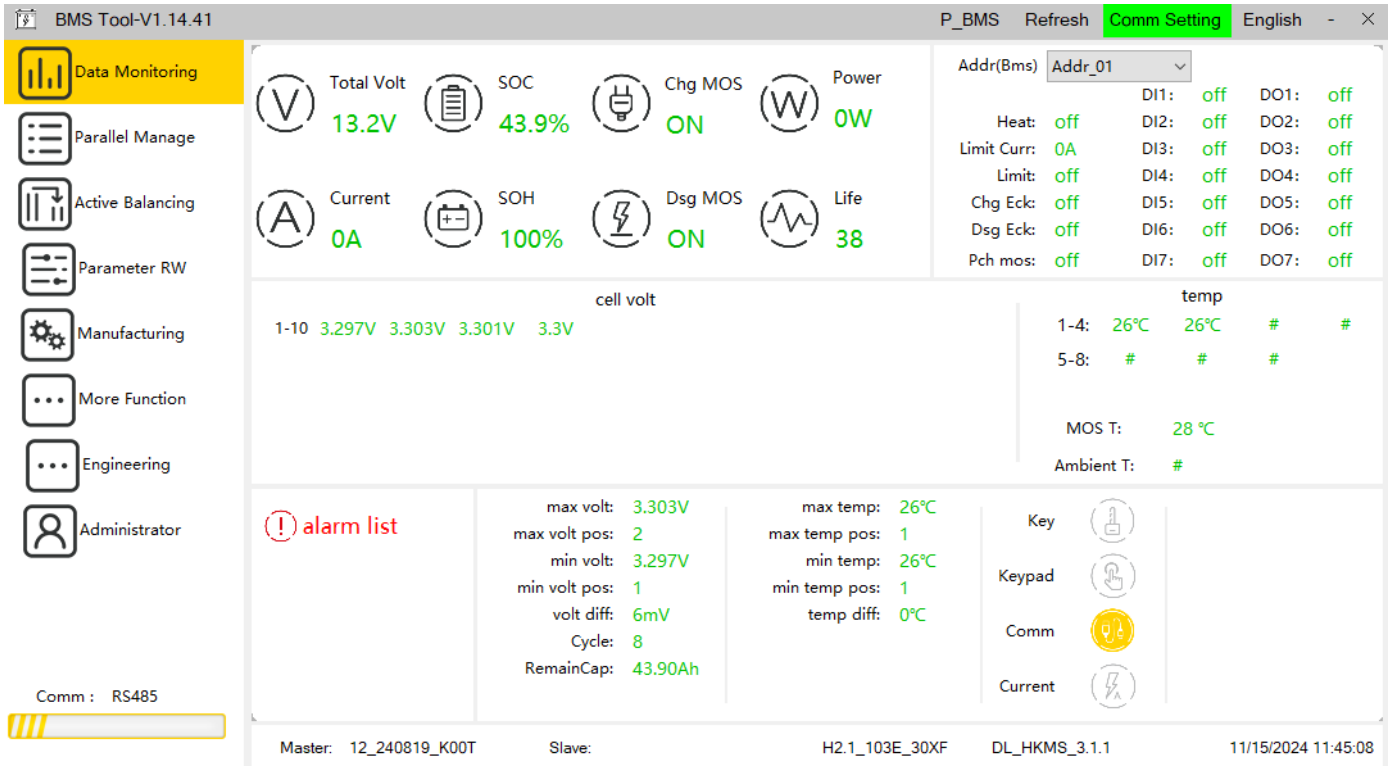
12. PCM PARAMETERS

12.1 Electronic Characteristic

No.	ITEM	SPEC	UNIT	REMARK
1	Overcharge detection voltage	3.65 ± 0.05	V	
2	Overcharge release voltage	3.55 ± 0.05	V	
3	Overvoltage delay	1000±500	mS	
4	Over-discharge detection voltage	2.50 ± 0.05	V	
5	Over-discharge release voltage	2.70 ± 0.05	V	
6	Undervoltage delay	1000±500	mS	
7	Overcurrent Charge protection value	120±5	A	
8	Overcurrent Charge delay	10000±1000	mS	
9	1th Overcurrent Discharge	120±5	A	
10	1th Overcurrent Discharge delay	10000±1000	mS	
11	2th Overcurrent Discharge	200±10	A	
12	2th Overcurrent Discharge delay	500±500	mA	
13	Overcurrent Discharge release	Disconnect load or charge release		
14	Charge continue current	≤100	A	
15	Discharge continue current	≤100	A	
16	Overtemperature Charge	60±5	°C	
17	Overtemperature Charge protection release value	55±5	°C	
18	Overtemperature Discharge Temperature protection value	60±5	°C	
19	Overtemperature Discharge protection release value	55±5	°C	
20	Overtemperature Charge protection release conditions	The temperature drops to the charging high temperature release value		
21	High temperature protection of FET(Built-in)	90±8	°C	
22	High Temperature protection release value	65±15	°C	
23	Overtemperature Discharge protection release conditions	The temperature drops to the discharging high temperature release		
24	Short circuit protection delay time	500±300	uS	
25	Short circuit protection recovery	Disconnect load or charge release		
26	Balance Start up Voltage	3.4±0.02	V	
27	Balance current	150±20	mA	
28	Impedance	≤10	mR	
29	Consumption	≤850	uA	
30	Communication	WIFI		

12.2 Communication interface
WIFI





13. FREE-RESPONSIBILITY DECLARATION

Before using the battery, you should read the specifications, usage instruction and some attentions carefully to learn its application methodand areas. If the phenomenon such as error using method or wrong circuit connection, or input power data, working indexare in consisted with the specifications happen and cause damage to production, circuit and its accessories, we are not responsible for it.

Any matters that this specification does not cover should be conferred between the customer and LiB. The final explanation right belongs to LiB Energy.

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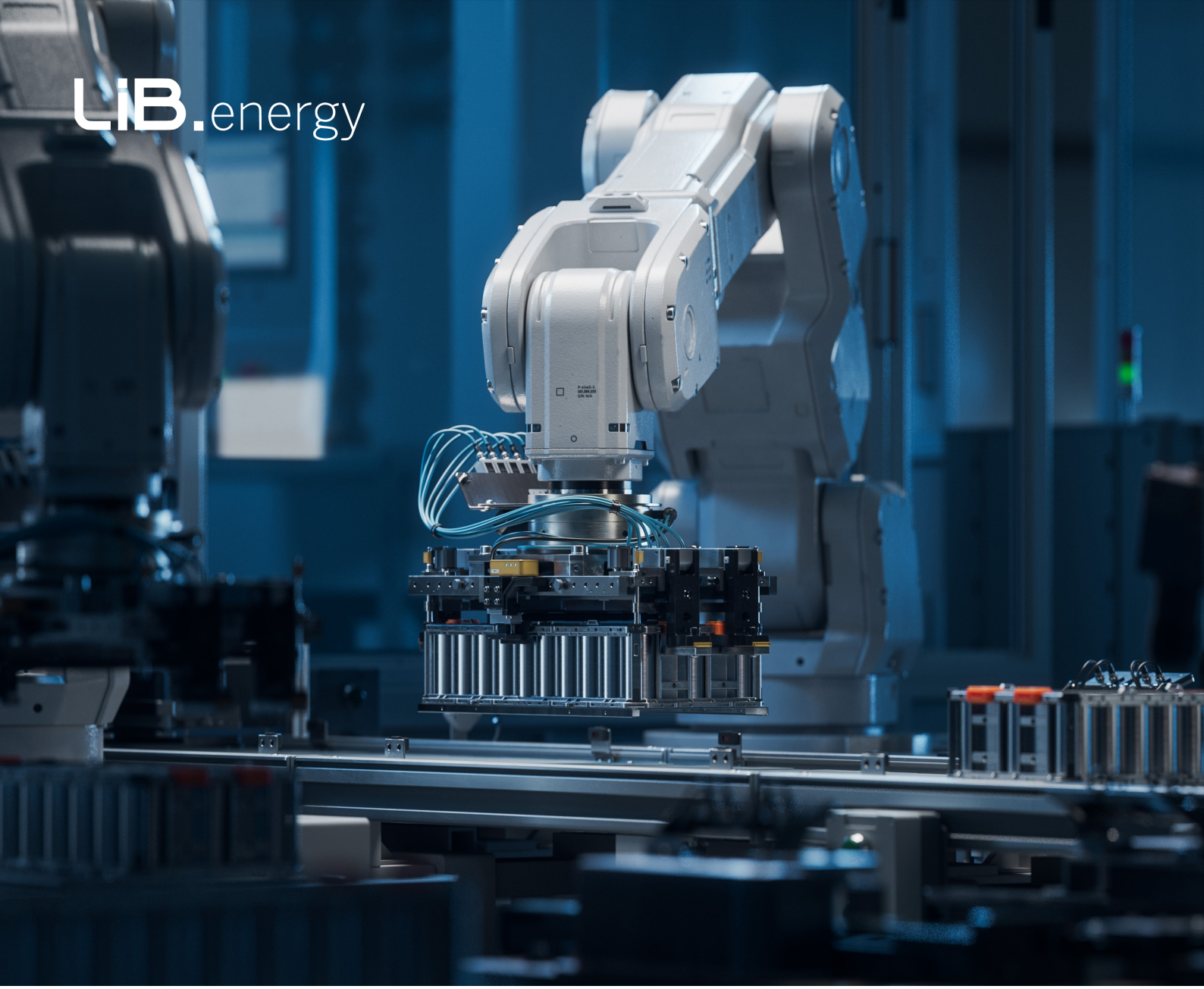

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