










BLUETTI EP800

Quick Guide V2.0

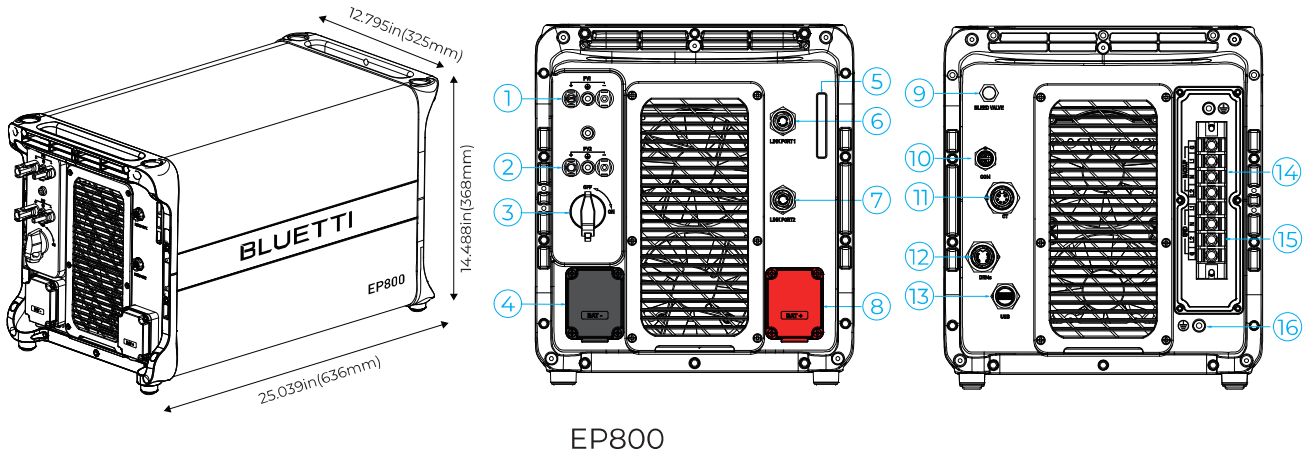
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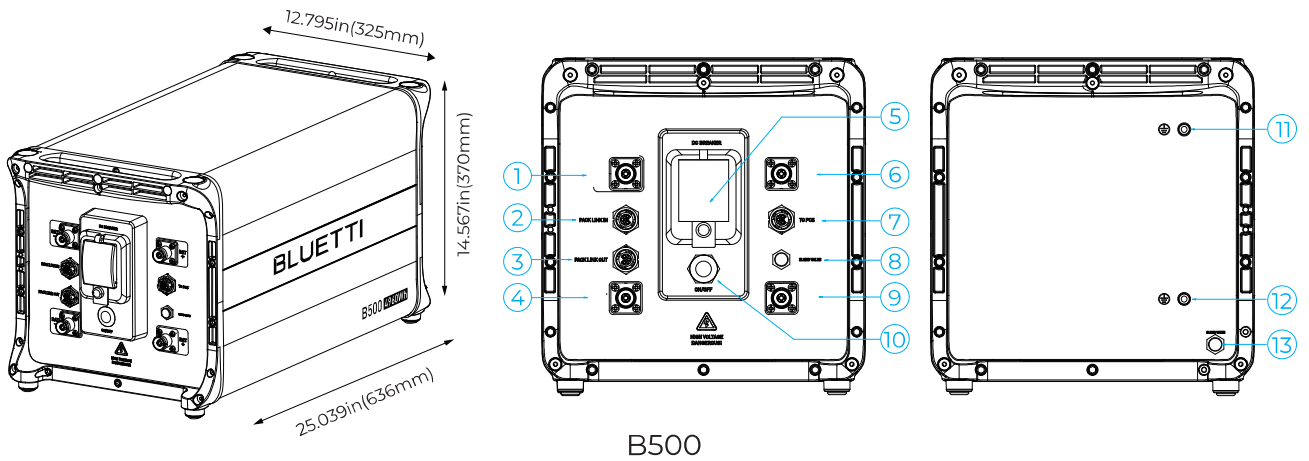
1. Special tools and parts need before installation for EP800

No.	Item	Picture	Remarks
1	Crimping tools		It is not provided by BLUETTI
2	Sub panel (Transfer Switch)		The sub panel with interlock breaker is provided by the BLUETTI
3	AC disconnect		The safety switch is connected between the main panel to the EP800 grid input terminal .60A ,240V. It is not provided by BLUETTI
4	Junction box , and junctions		Recommend to connect the cables from sub panel to EP800 backup terminal or grid terminal. It is not provided by BLUETTI
5	Electric cable		White, black, red ,green , 6 AWG electric cables . It is not provided by BLUETTI
6	Liquid-tight conduit		3/4 inch or above, it is not provided by BLUETTI
7	Electric metallic tube and other accessories		3/4 inch or above, it is not provided by BLUETTI

2. Overview



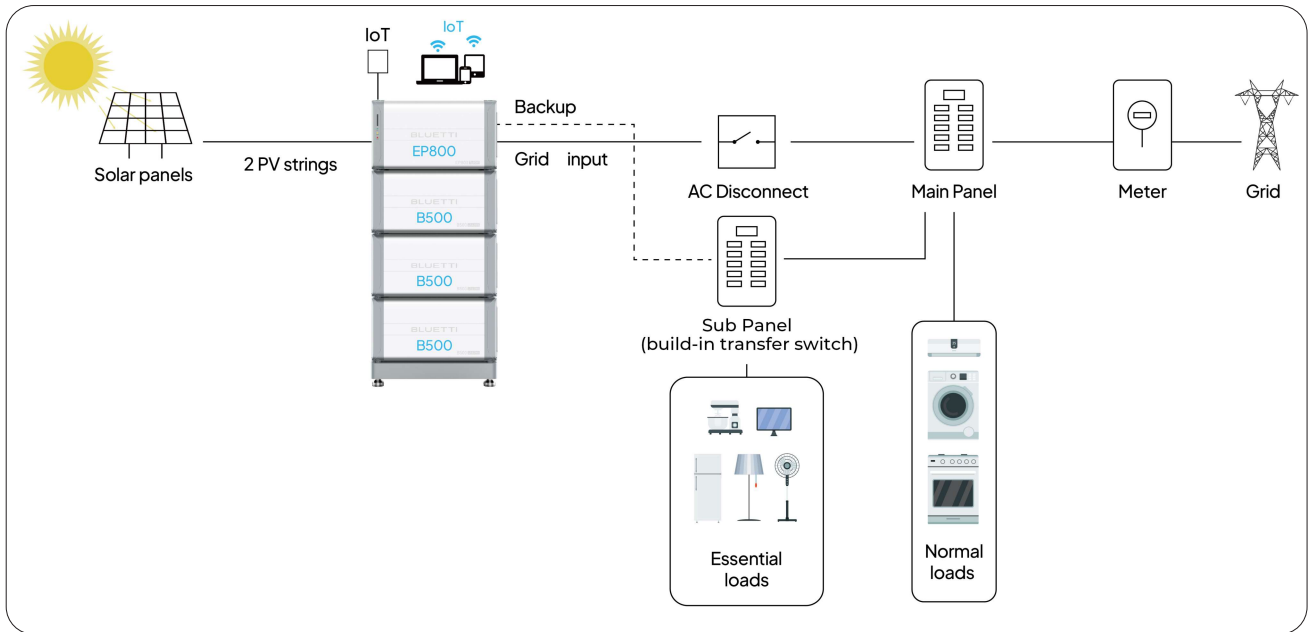
1	PV input 1	5	LED indicator	9	Bleed valve	13	USB port
2	PV input 2	6	IoT signal port (Link Port 1)	10	COM Port (NC)	14	BACKUP Terminal
3	DC switch	7	Battery signal port (Link Port 2)	11	CT	15	GRID Terminal
4	BAT- terminal	8	BAT+ terminal	12	DRMs port (Generator Input)	16	GND Terminal (Grounding)



1	BAT- terminal 1	6	BAT+ terminal 1	11	Grounding port 1
2	Pack link-in	7	TO PCS (Inverter signal port)	12	Grounding port 2
3	Pack link-out	8	Bleed valve 1	13	Bleed valve 2
4	BAT- terminal 2	9	BAT+ terminal 2		
5	Breaker switch	10	Power button		

3. Installation

3.1 Overview

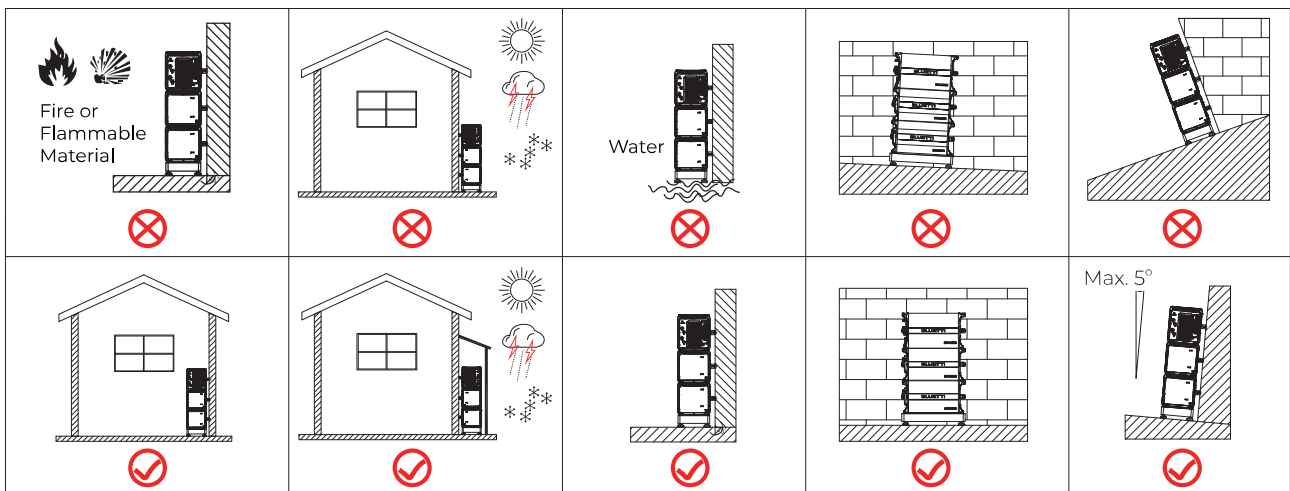


3.2 Installation requirements

Before Installation: Important Notes

- The installation must be performed by a licensed electrician. Improper installation may result in death or serious injury and property damage.
- Prepare necessary tools and accessories.
- Read the EP800 User Manual and Quick Start Guide.
- Recommended the open circuit voltage of solar system is between 240V and 500V.

Select an Appropriate Installation Location



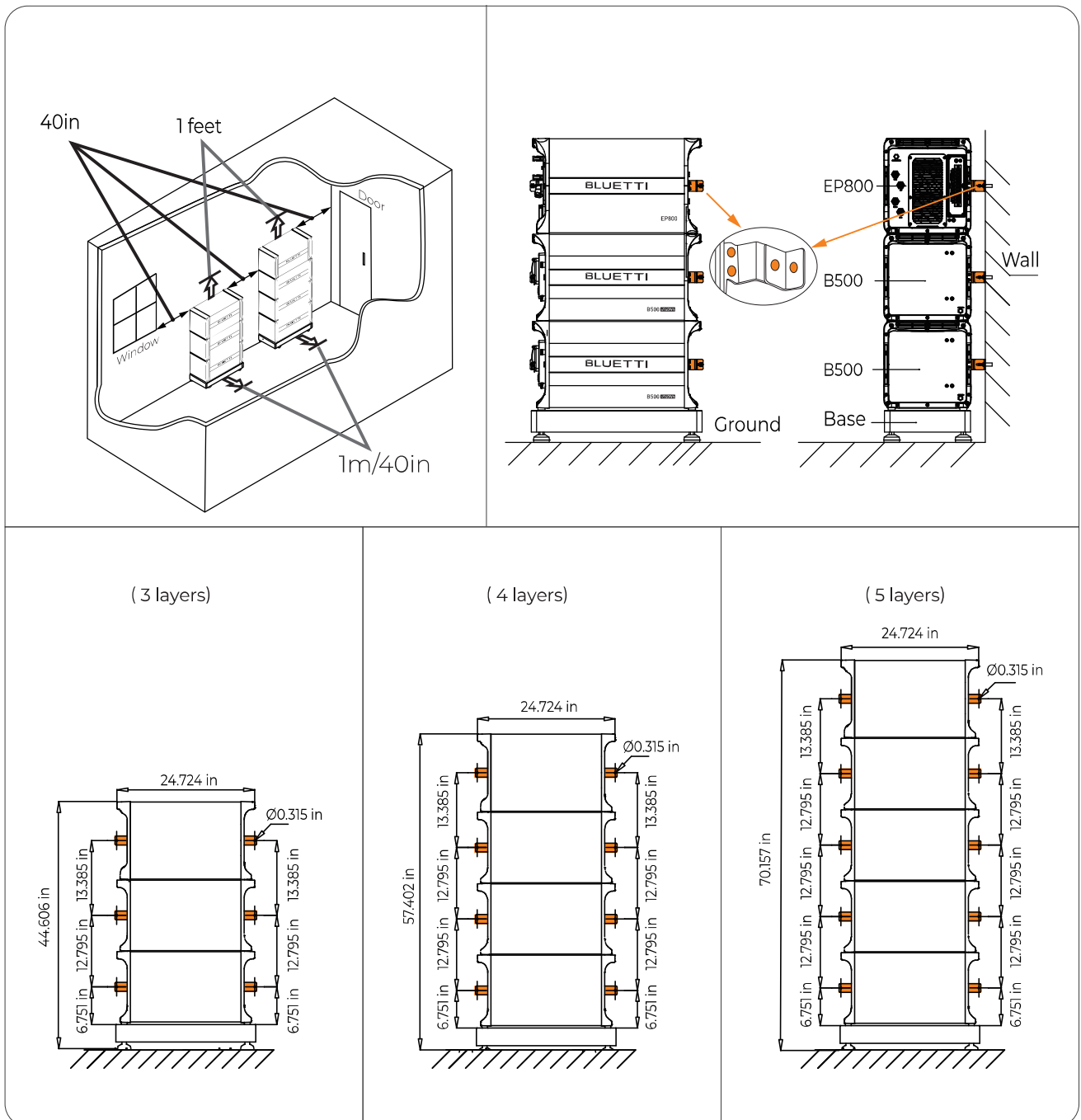
Operating Instructions

- If there's no power input and the SoC drops to 1%, switch off all battery main switches to prevent over-discharging. Only restart the system when recharging from the grid.
- Charge the batteries when the SoC is below 5% and maintain it at least at 5% for continuous operation.
- For long-term storage, charge the batteries to 40%-60% SoC and perform a full cycle at least every 3 months.

Temperature considerations:

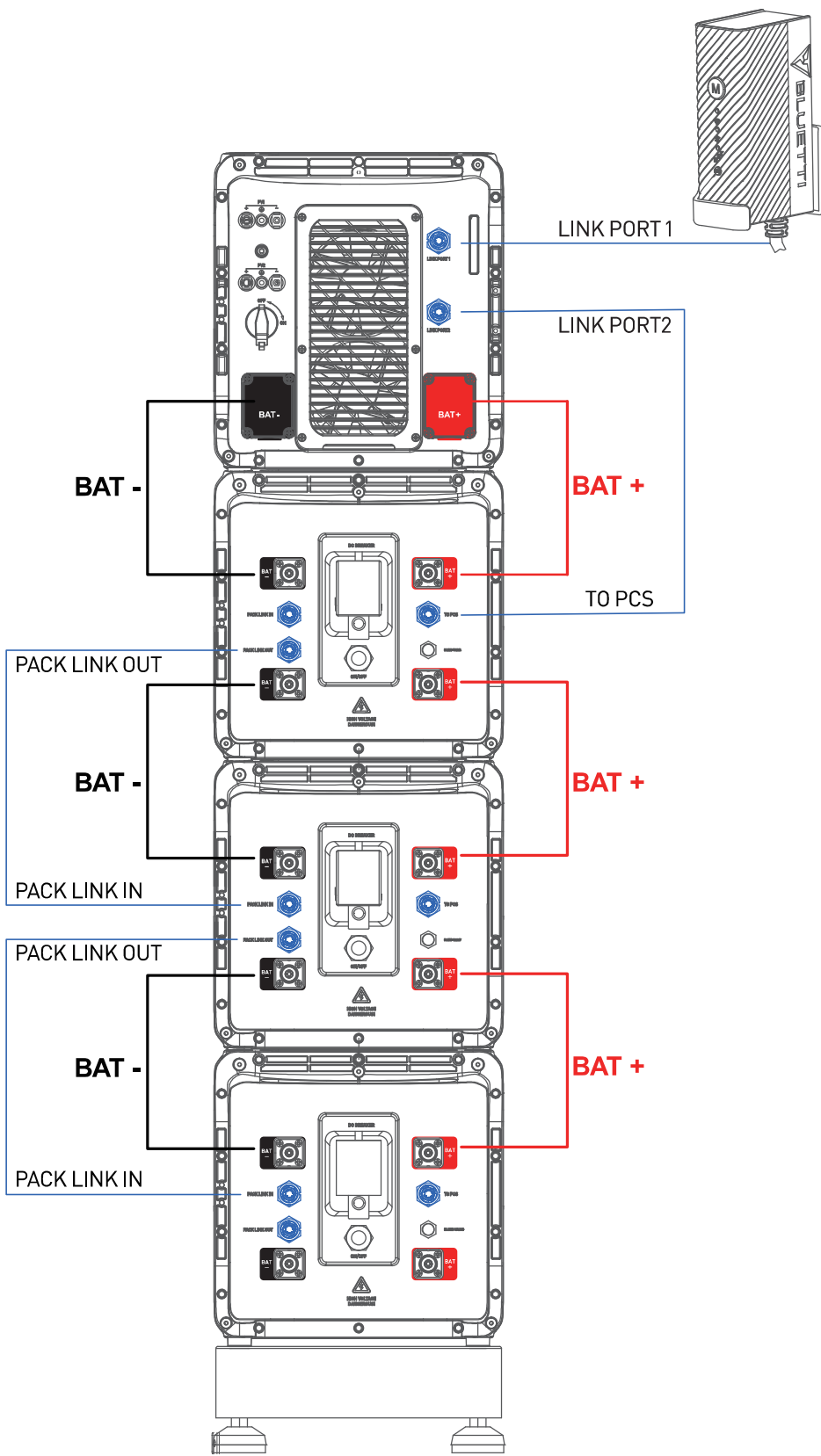
Operating Temperature	Charging	Off-grid: 0°C to 40°C / 32°F to 104°F On-grid: -20°C to 40°C / -4°F to 104°F
	Discharging	-20°C to 40°C / -4°F to 104°F
Storage Temperature	-20°C to 0°C / -4°F to 32°F (Fully cycle monthly) 0°C to 35°C / 32°F to 95°F (Fully cycle every 3 months)	

3.3 Wall mounting

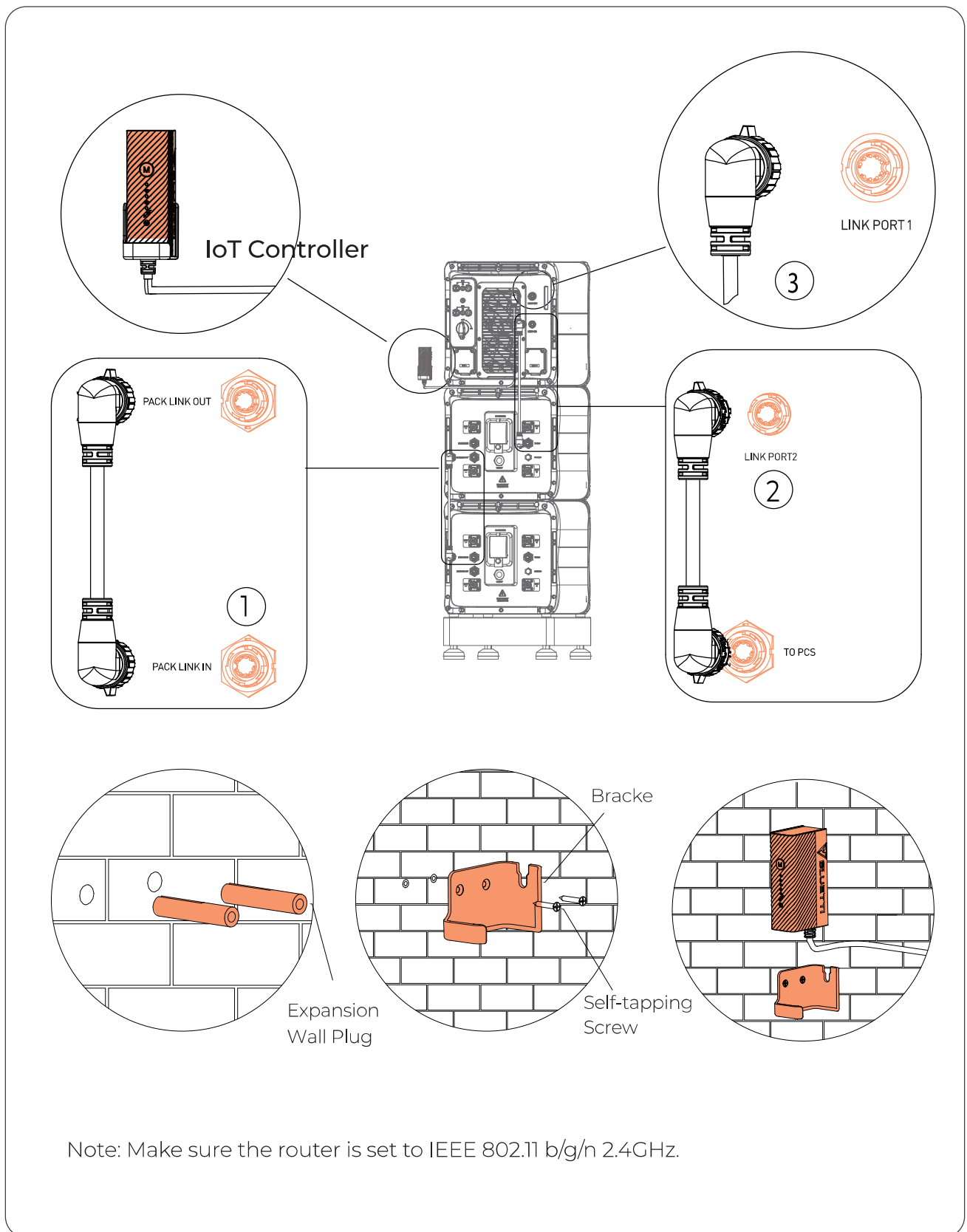


4. Electrical connection

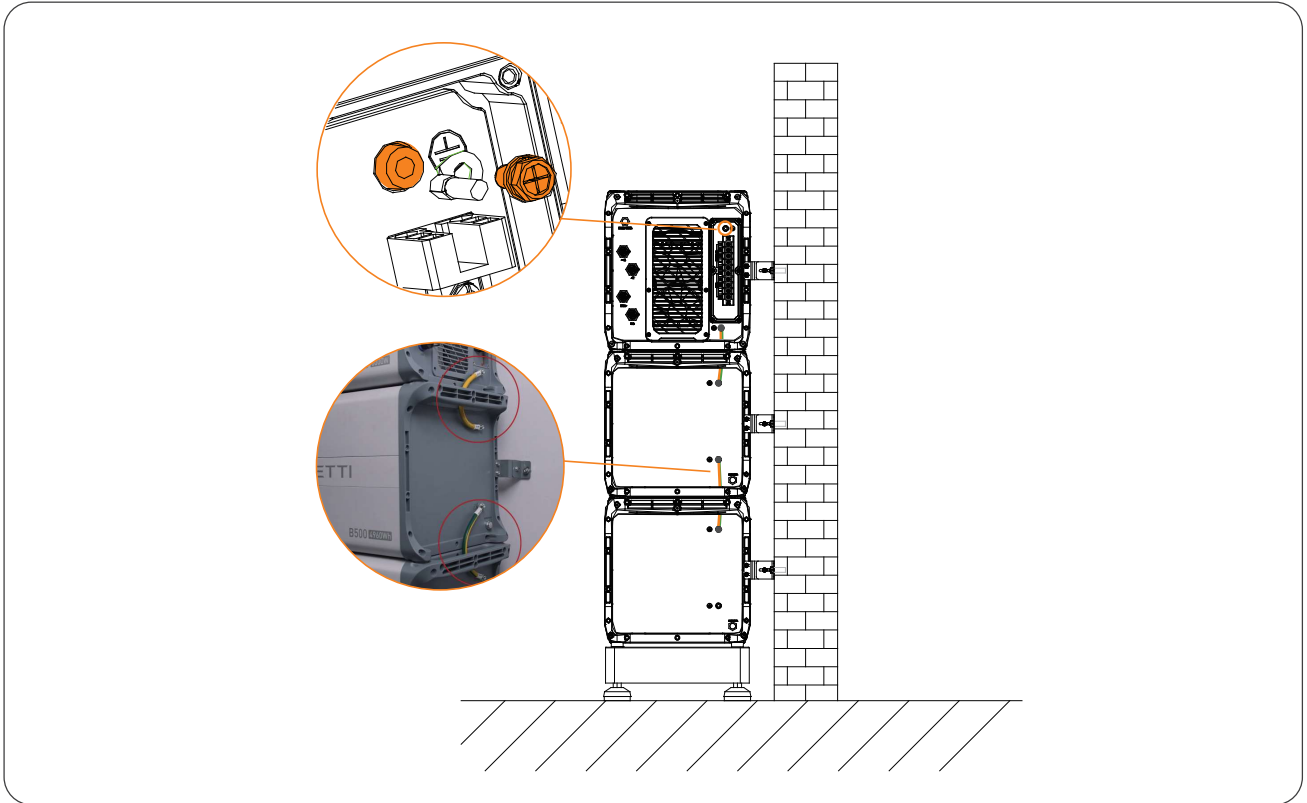
4.1 Overview



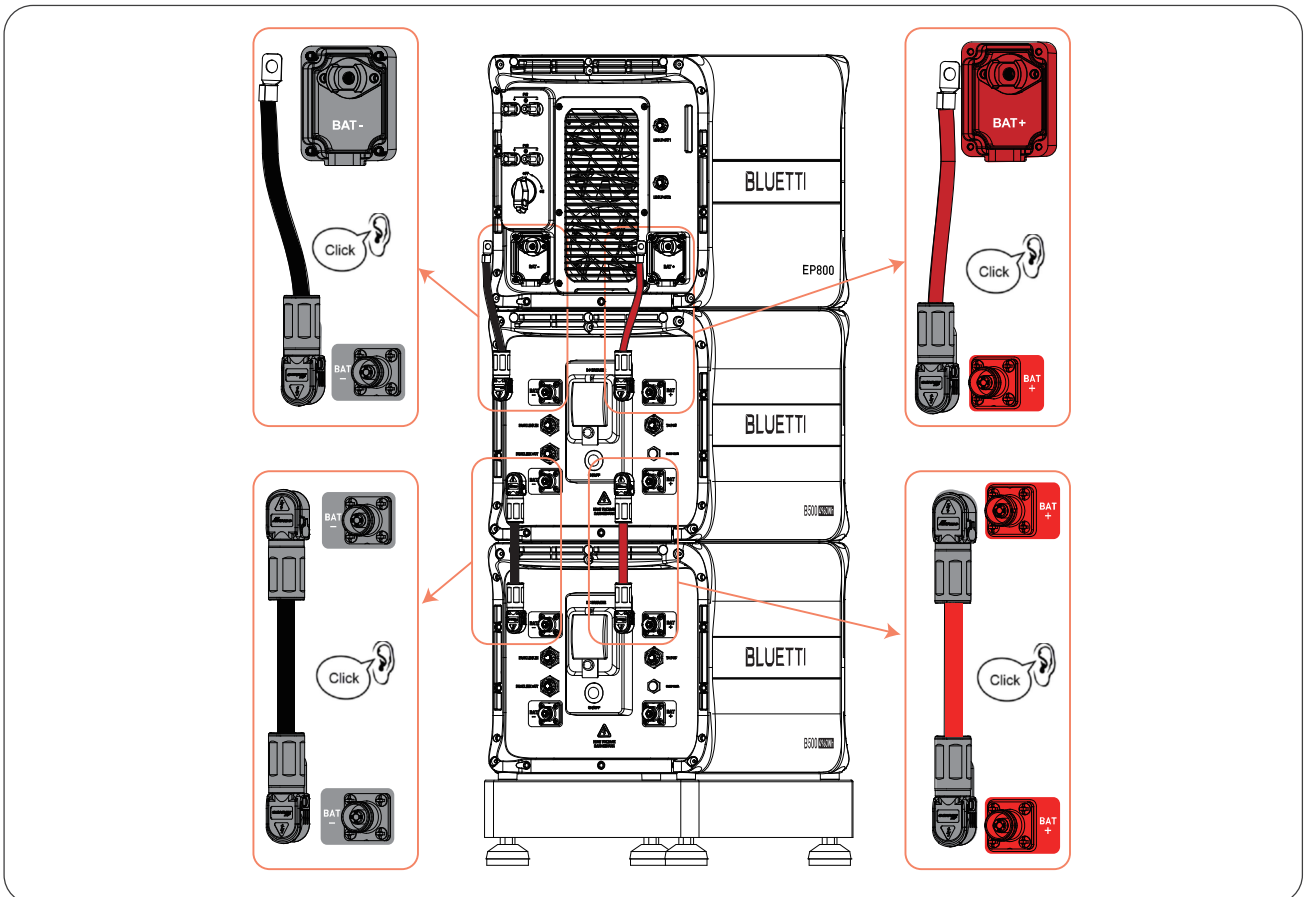
4.2 Connect the communication cable



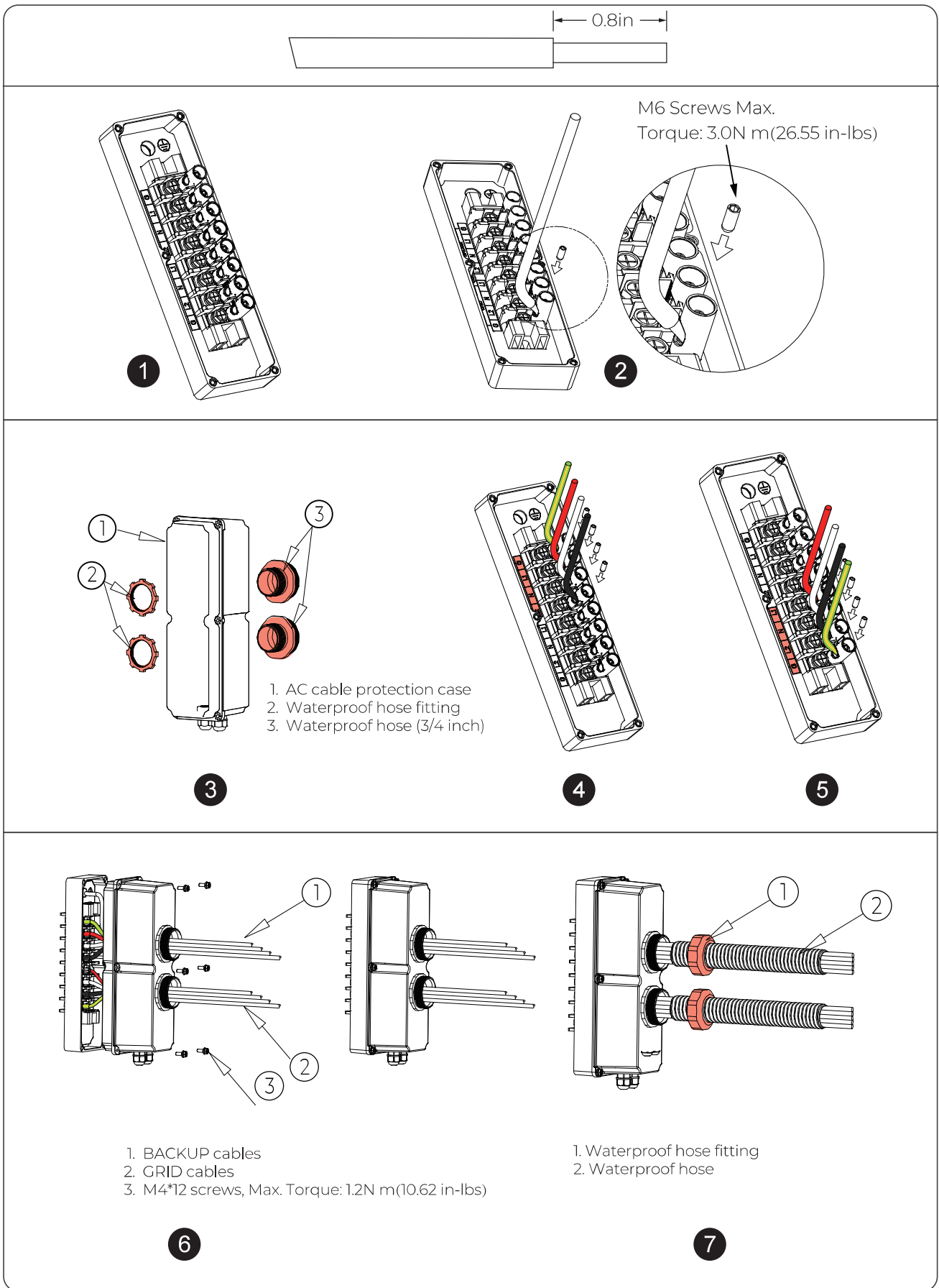
4.3 Connect the Grounding Cables



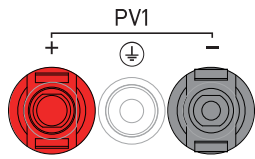
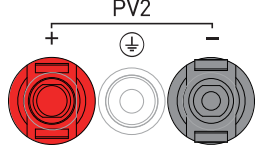
4.4 Connect the battery power cables



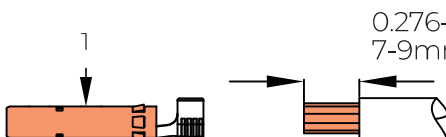
4.5 Connect the GRID and BACKUP cables



4.6 Connect PV cables

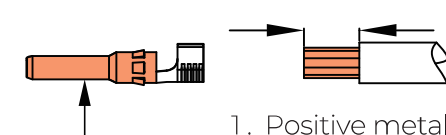
	<p>PV1+: To solar panel positive PV1-: To solar panel negative PV1 PE: PV1 to solar panel ground</p>	<p>Conductor cross-sectional area: PV1 12AWG PV2 10AWG</p>
	<p>PV2+: To solar panel positive PV2-: To solar panel negative PV2 PE: PV2 to solar panel ground</p>	

1



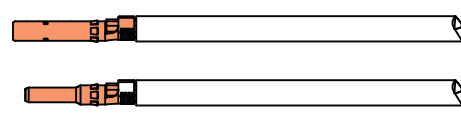
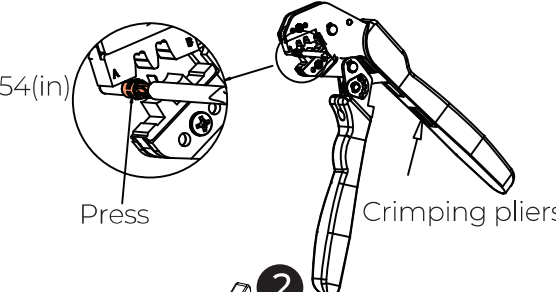
0.276-0.354(in)
7-9mm

2



0.276-0.354(in)
7-9mm

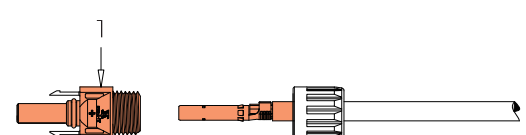
1. Positive metal core
2. Negative metal core

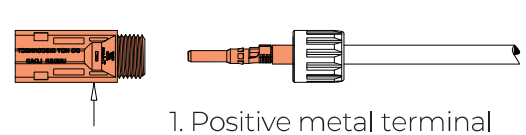
Press

Crimping pliers

1

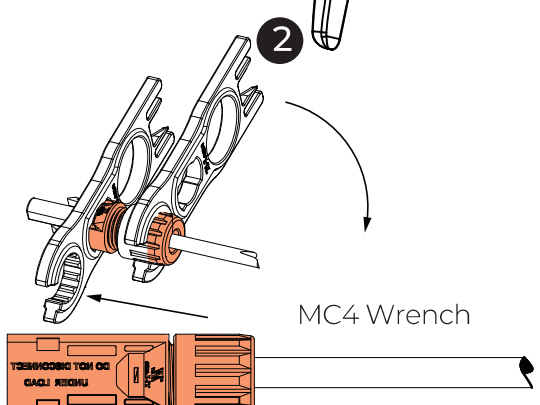


2



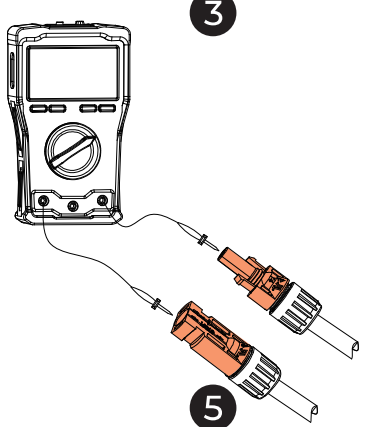
1. Positive metal terminal
2. Negative metal terminal

2



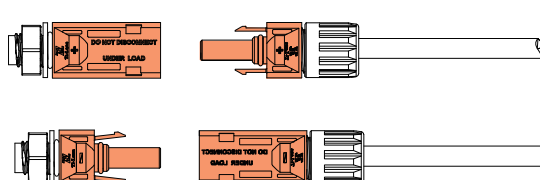
MC4 Wrench

3



5

4

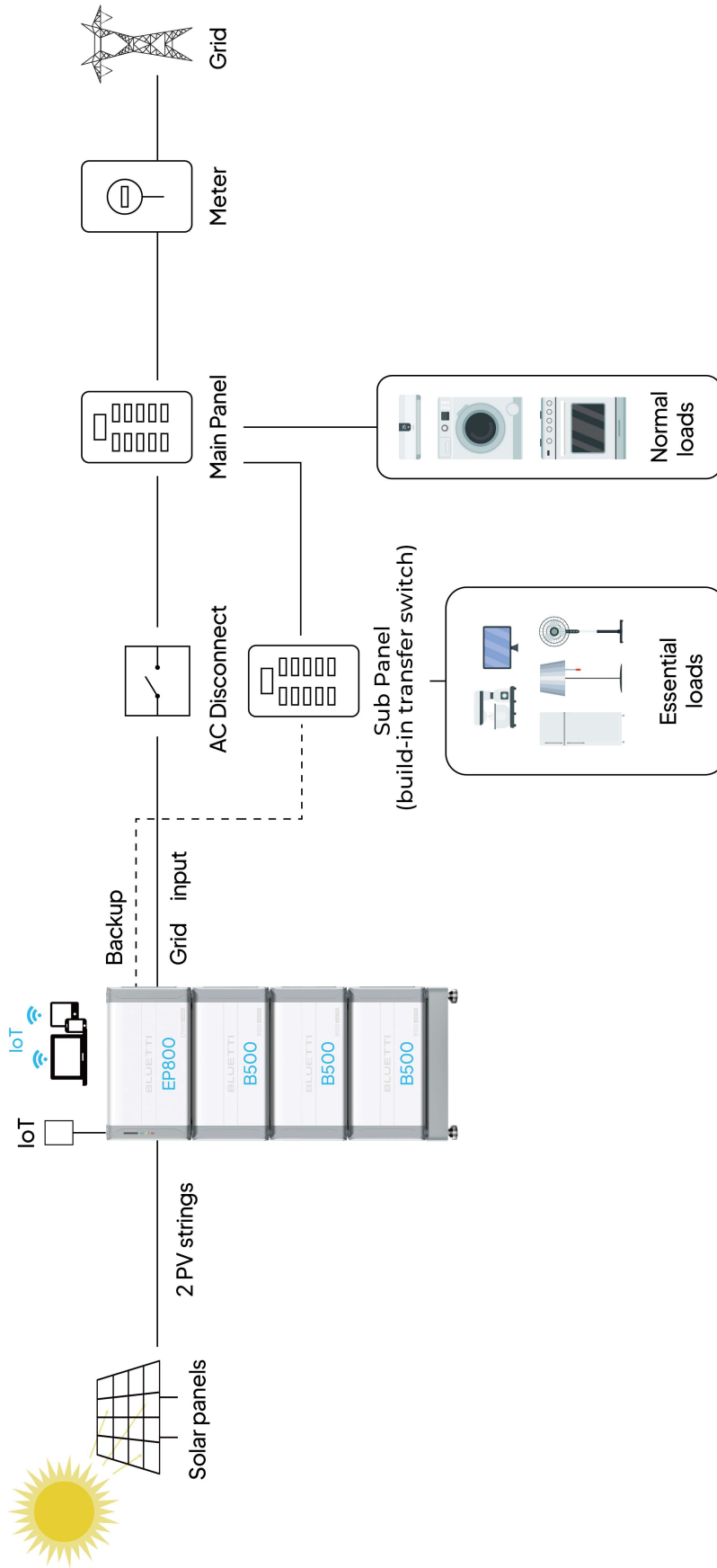


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NOTE: Please check the open circuit voltage of PV arrays, which should be less than 500V.

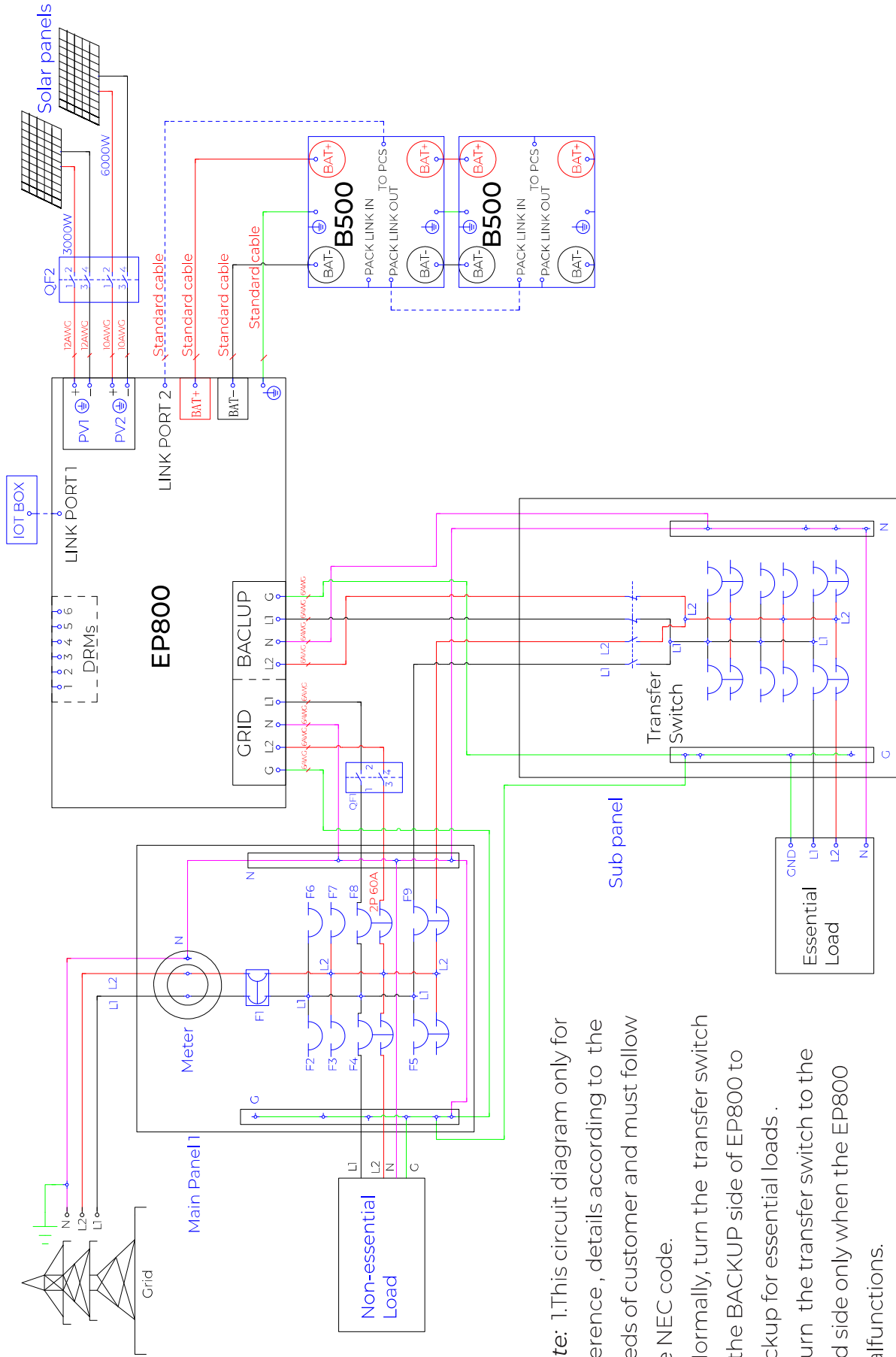
4.7 For new installation solar panels

Solution 1: For new installation solar panels



Note: This circuit diagram is for reference only; details are subject to customer requirements and must follow NEC specifications.

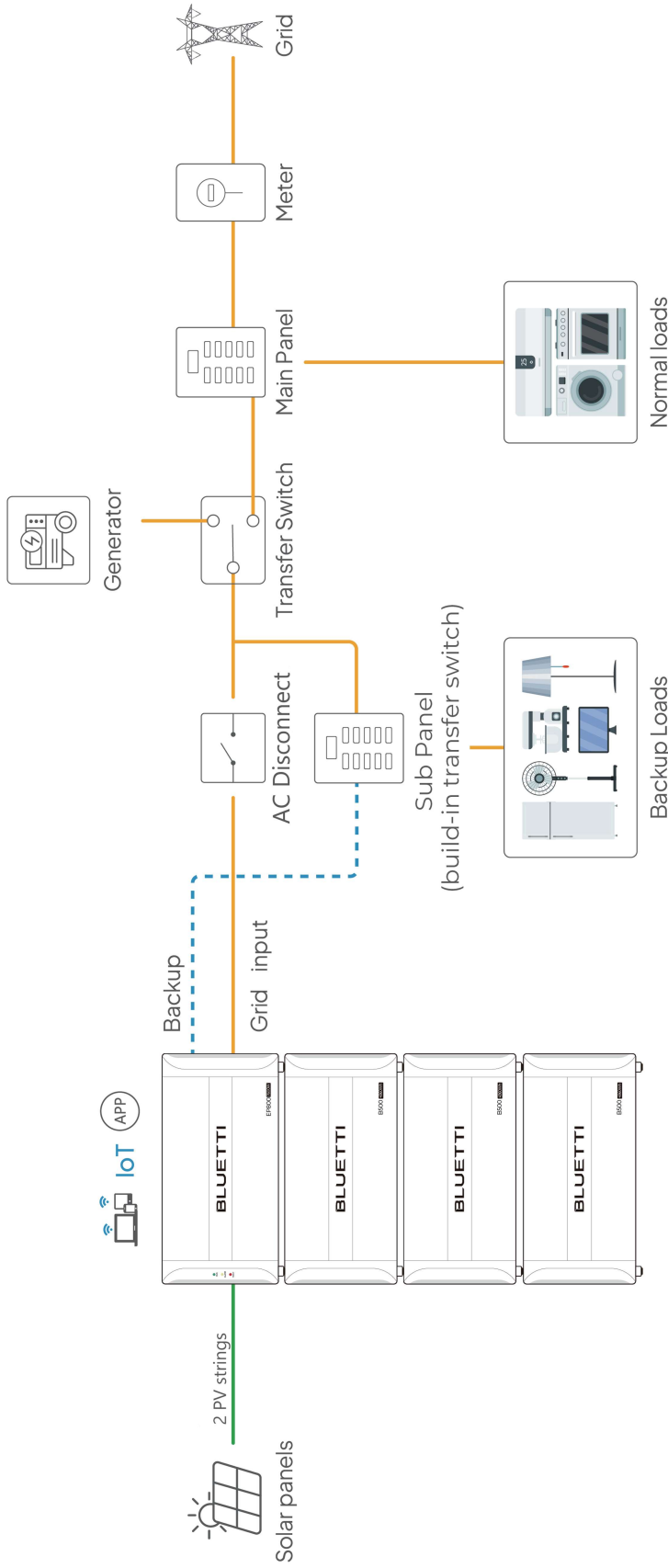
Solution 1: For new installation solar panels



- Note:** 1. This circuit diagram only for reference, details according to the needs of customer and must follow the NEC code.
2. Normally, turn the transfer switch to the BACKUP side of EP800 to backup for essential loads.
3. Turn the transfer switch to the grid side only when the EP800 malfunctions.

4.8 Charging Using Generator

Solution 2: Charging from generator and new solar PV system



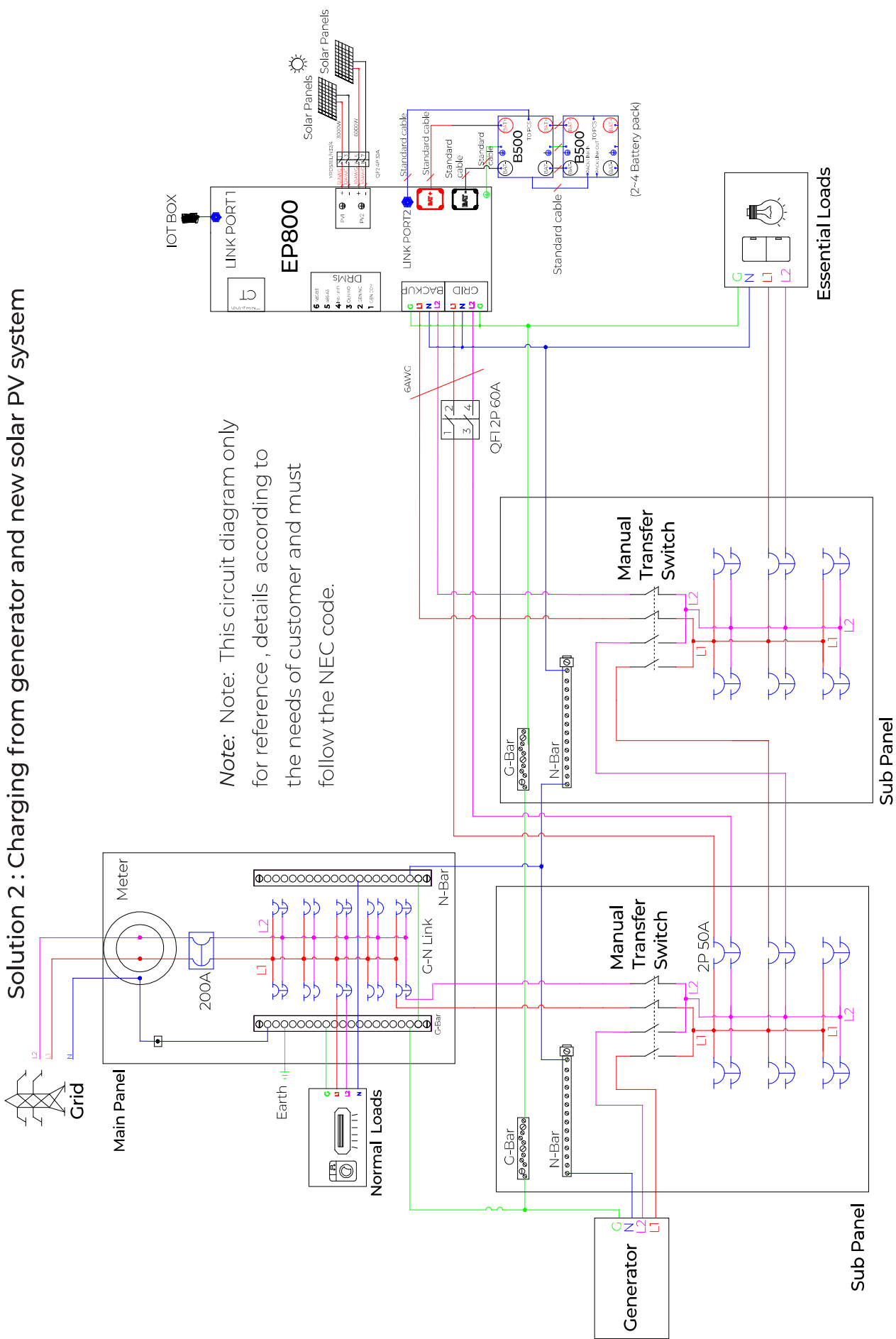
Note: Not all generators are compatible with EP800 , please contact BLUETTI before installation.

If you want to use a generator for charging, please purchase a Sub Panel with a transfer switch from the official website.

Purchase link:

<https://www.bluettipower.com/collections/ep800-ep900-accessories>

Solution 2 : Charging from generator and new solar PV system



Note: This circuit diagram only for reference, details according to the needs of customer and must follow the NEC code.

5. Power on

Step 1 Switch on the DC circuit breakers on EP800.

Step 2 Switch on the DC circuit breakers on B500 battery packs. Press and hold the power button of any battery pack for about 3 seconds, and the green indicator on the button will light up.

Step 3 About 40 seconds later, the indicator on EP800 will stay green.

Step 4 Switch on the AC circuit breakers connected to the EP800 GRID terminal.

Step 5 Power on the system via BLUETTI app.

Step 6 Check the voltage of BACKUP terminal.

Step 7 Switch on the AC circuit breakers connected to the EP800 load port.

Step 8 Check the EP800 system operation in the App.



Indicator

System Status \ LED	Green	Yellow	Red
	Run	ON	OFF
Run +Alarm	ON	ON	OFF
Fault	OFF	OFF	ON
Alarm and fault	OFF	ON	ON

For more information, please visit:

Web: <https://www.bluettipower.com>



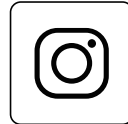
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Just Power On