



BLUETTI EP800

Quick Guide V2.1

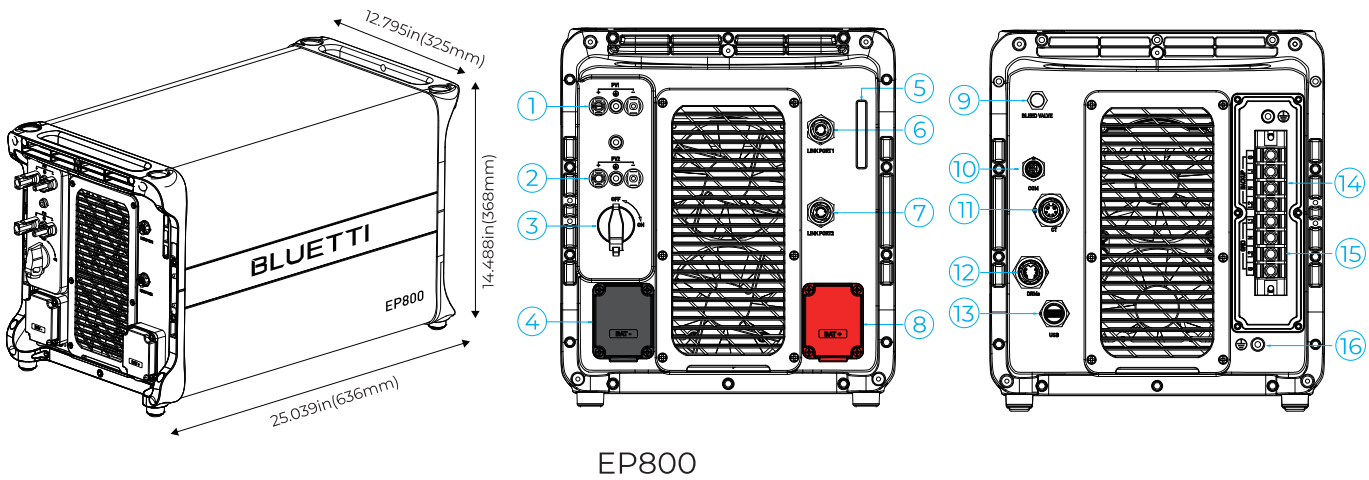
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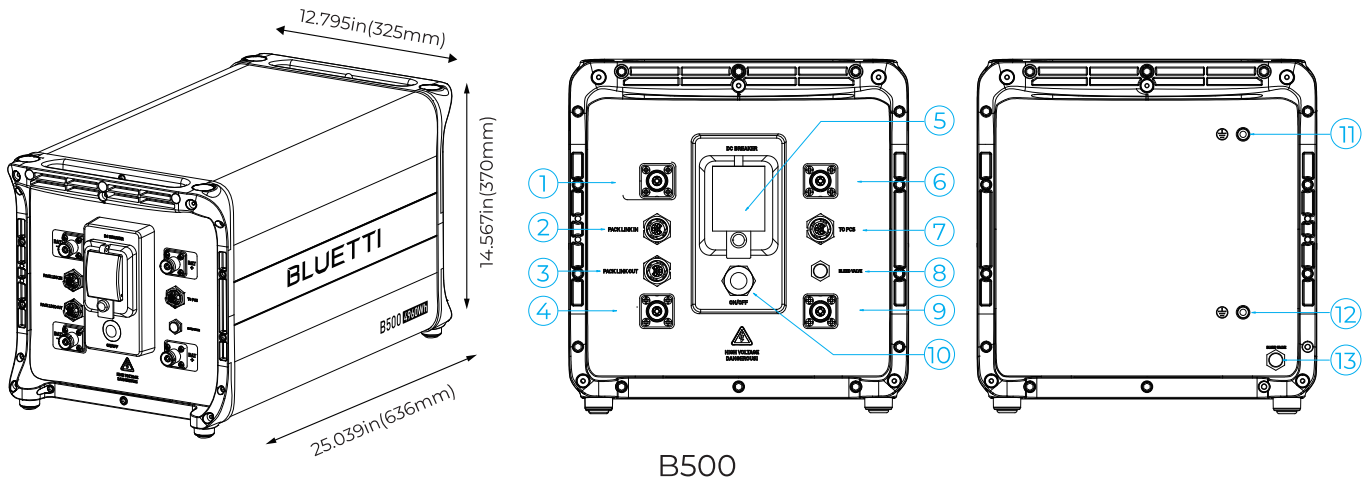
1. Special tools and parts need before installation for EP800

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 . 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



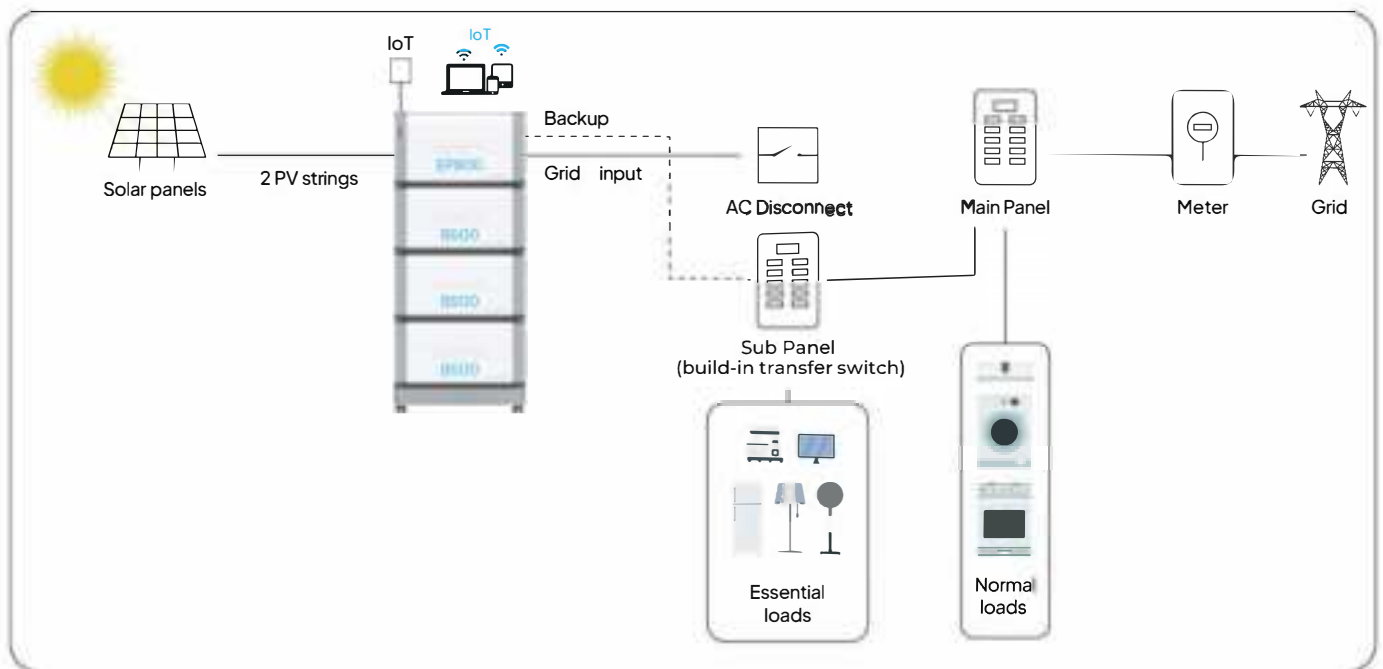
1	PV input 1	5	LED indicator	9	Bleed valve	13	USB port
2	PV input 2	6	IoT signal port (Link Port 1)	10	COM Port (NC)	14	BACKUP Terminal
3	DC switch	7	Battery signal port (Link Port 2)	11	CT	15	GRID Terminal
4	BAT- terminal	8	BAT+ terminal	12	DRMs port (Generator Input)	16	GND Terminal (Grounding)



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

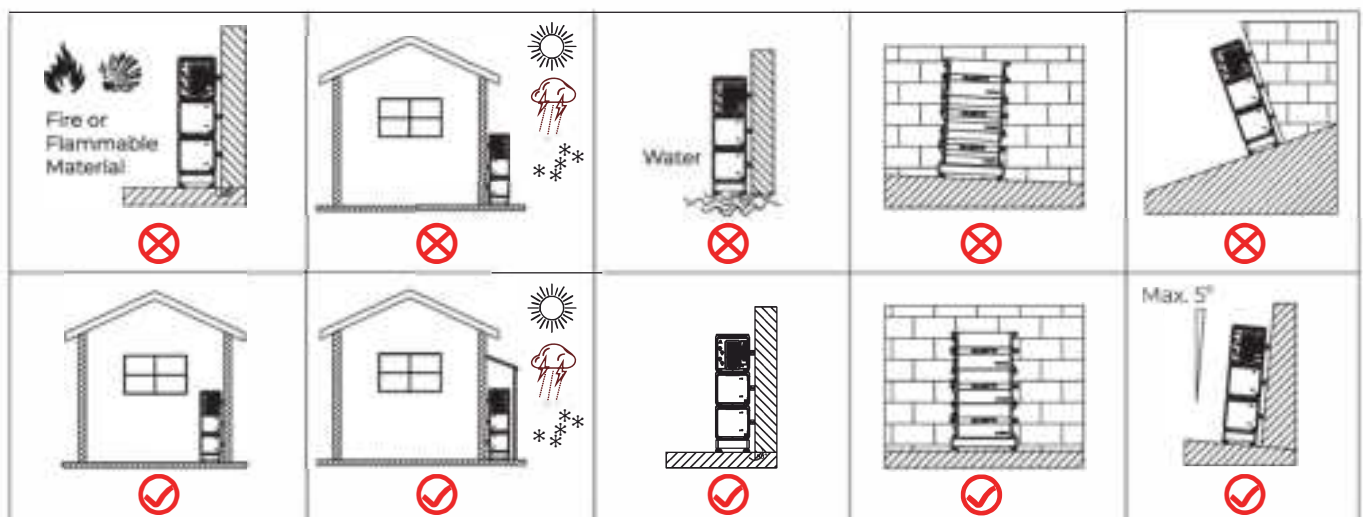


3.2 Installation requirements

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



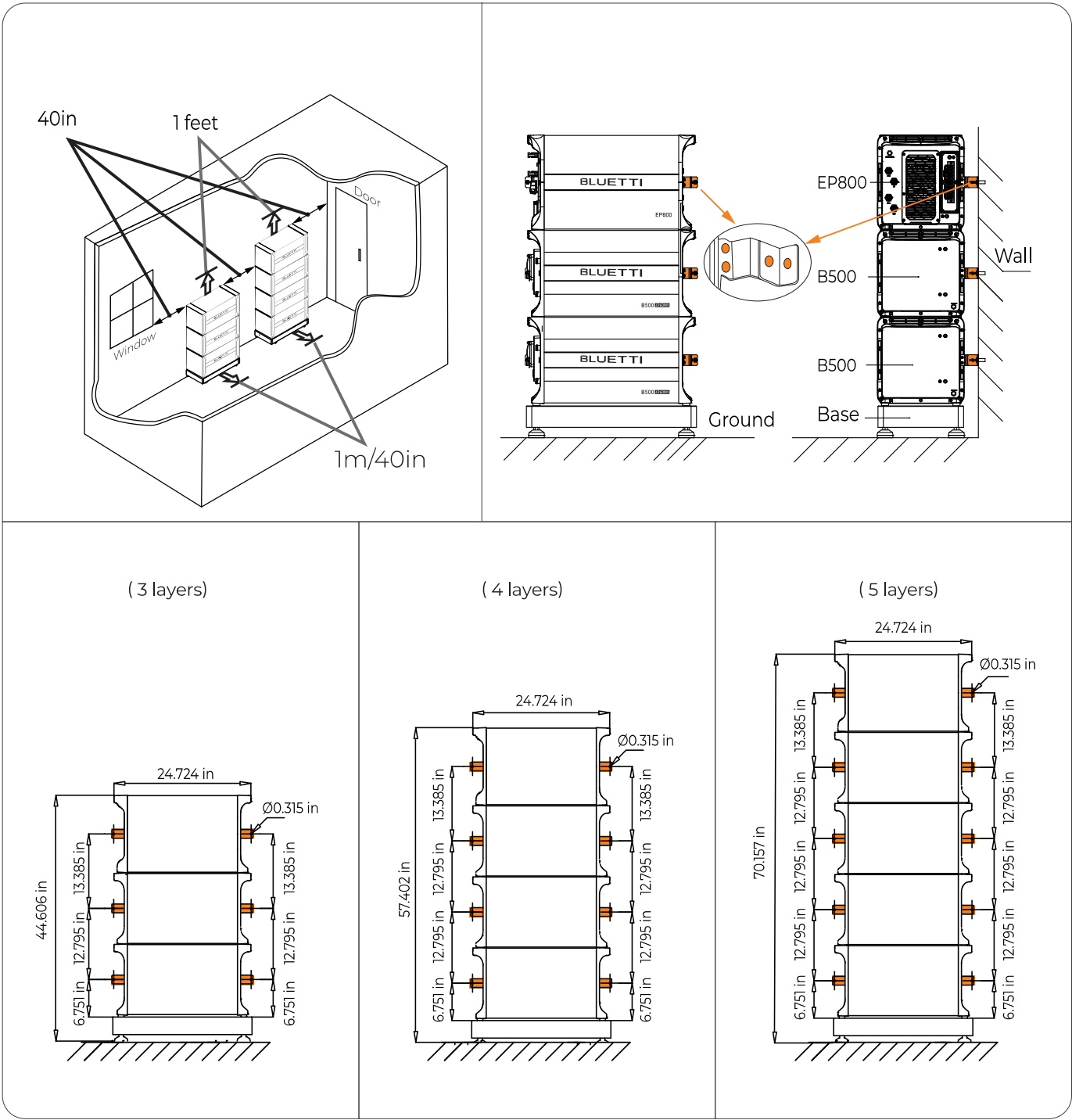
Operating Instructions

- 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% in time 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:

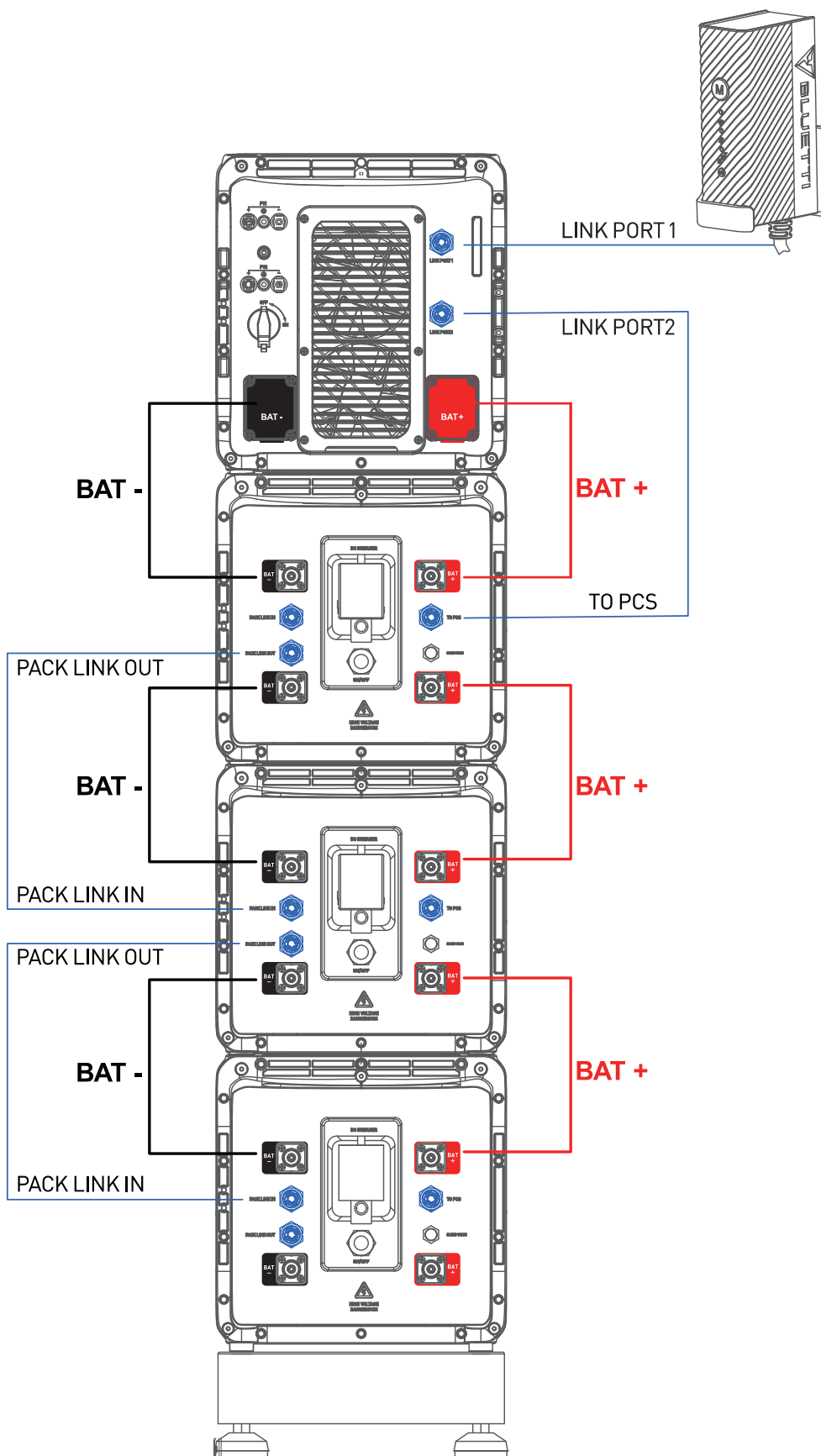
Operating Temperature	Charging	Off-grid: 0°C to 40°C / 32°F to 104°F On-grid: -20°C to 40°C / -4°F to 104°F
	Discharging	-20°C to 40°C / -4°F to 104°F
Storage Temperature	-20°C to 0°C / -4°F to 32°F (Fully cycle monthly) 0°C to 35°C / 32°F to 95°F (Fully cycle every 3 months)	

3.3 Wall mounting

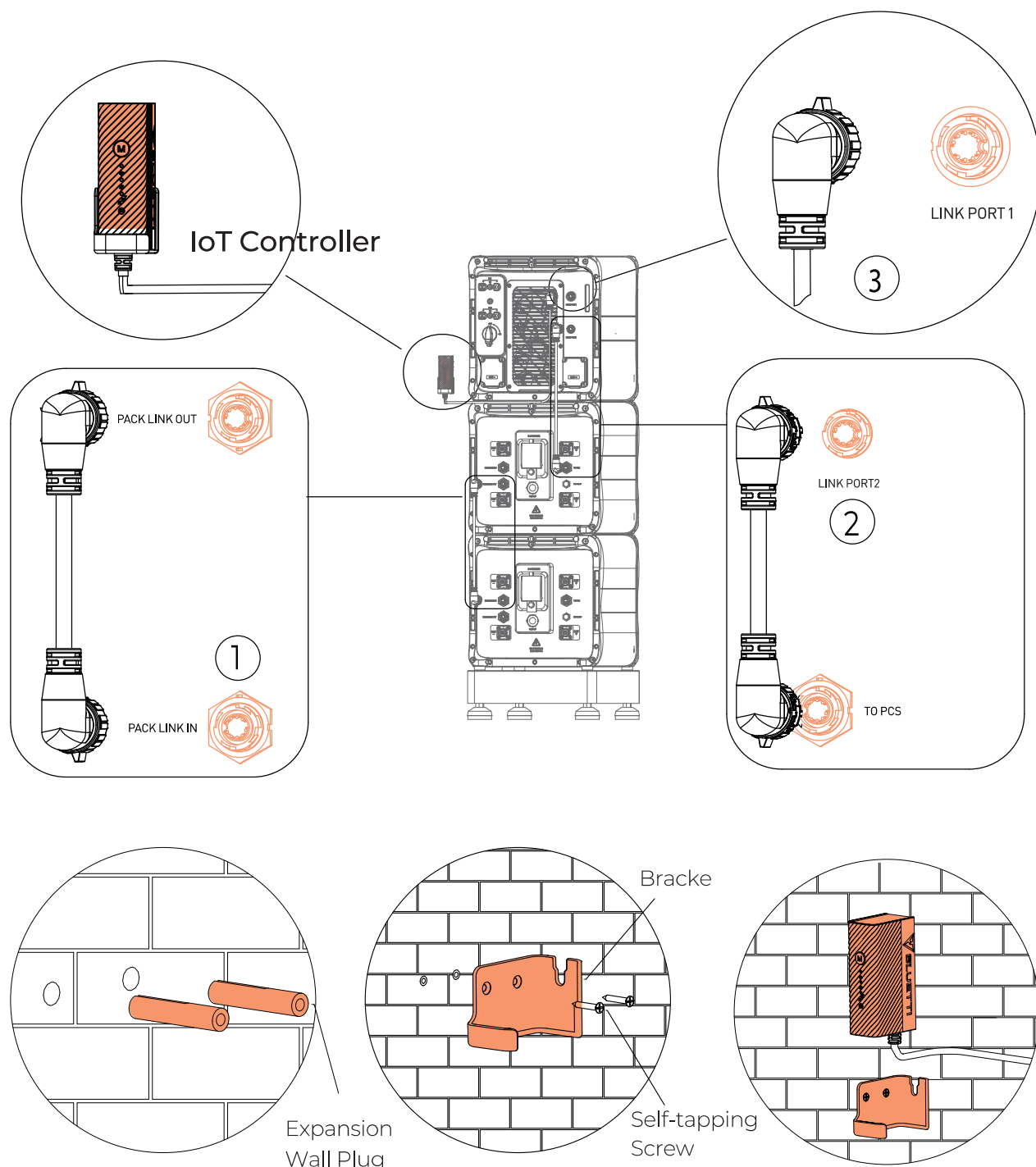


4. Electrical connection

4.1 Overview

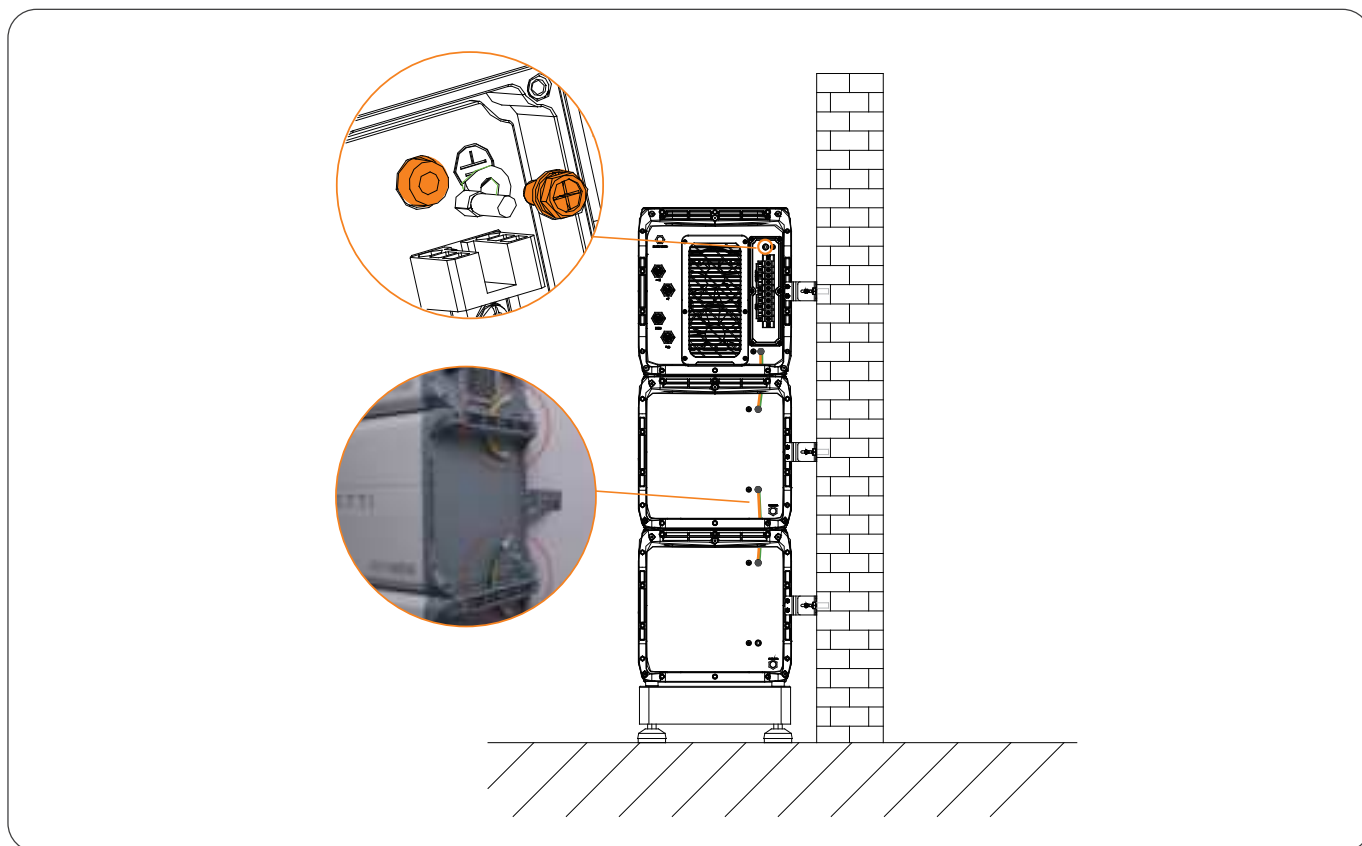


4.2 Connect the communication cable

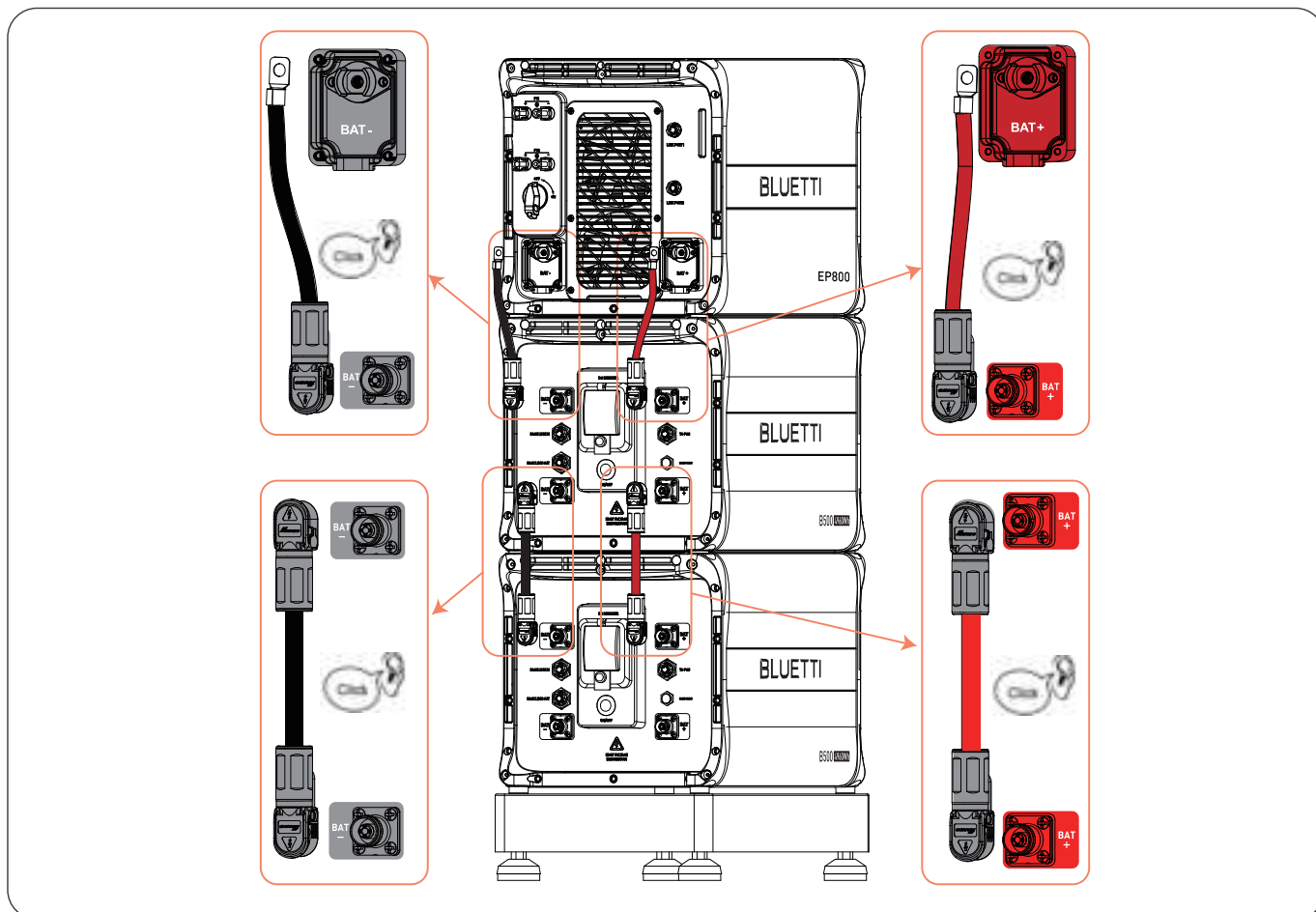


Note: Make sure the router is set to IEEE 802.11 b/g/n 2.4GHz.

4.3 Connect the Grounding Cables



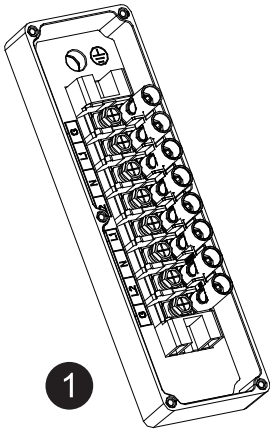
4.4 Connect the battery power cables



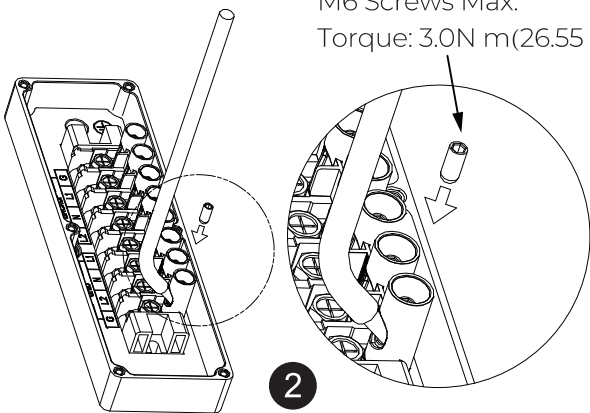
4.5 Connect the GRID and BACKUP cables



0.8in

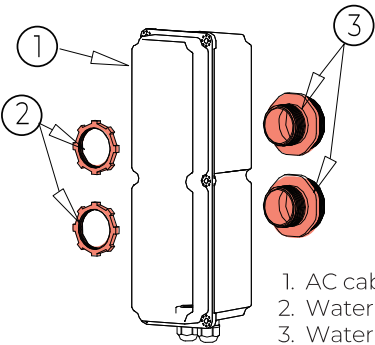


1



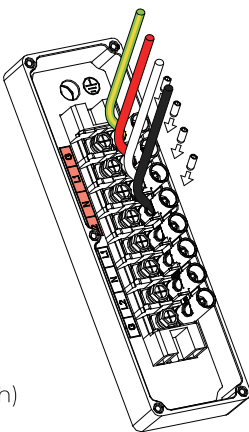
M6 Screws Max.
Torque: 3.0N m(26.55 in-lbs)

2

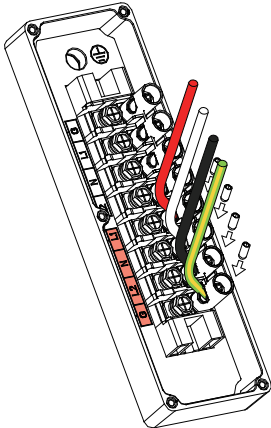


1. AC cable protection case
2. Waterproof hose fitting
3. Waterproof hose (3/4 inch)

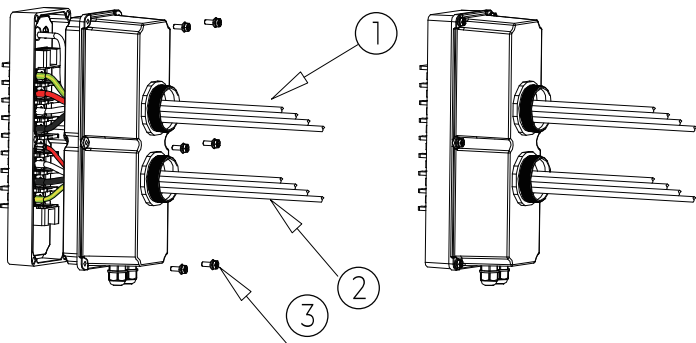
3



4

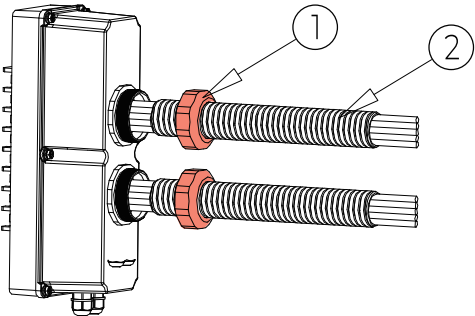


5



1. BACKUP cables
2. GRID cables
3. M4*12 screws, Max. Torque: 1.2N m(10.62 in-lbs)

6



1. Waterproof hose fitting
2. Waterproof hose

7

10 JUST POWER ON

4.6 Connect PV cables

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

0.276-0.354(in)
7-9mm

0.276-0.354(in)
7-9mm

1. Positive metal core

2. Negative metal core

1. Positive metal terminal

2. Negative metal terminal

Press

Crimping pliers

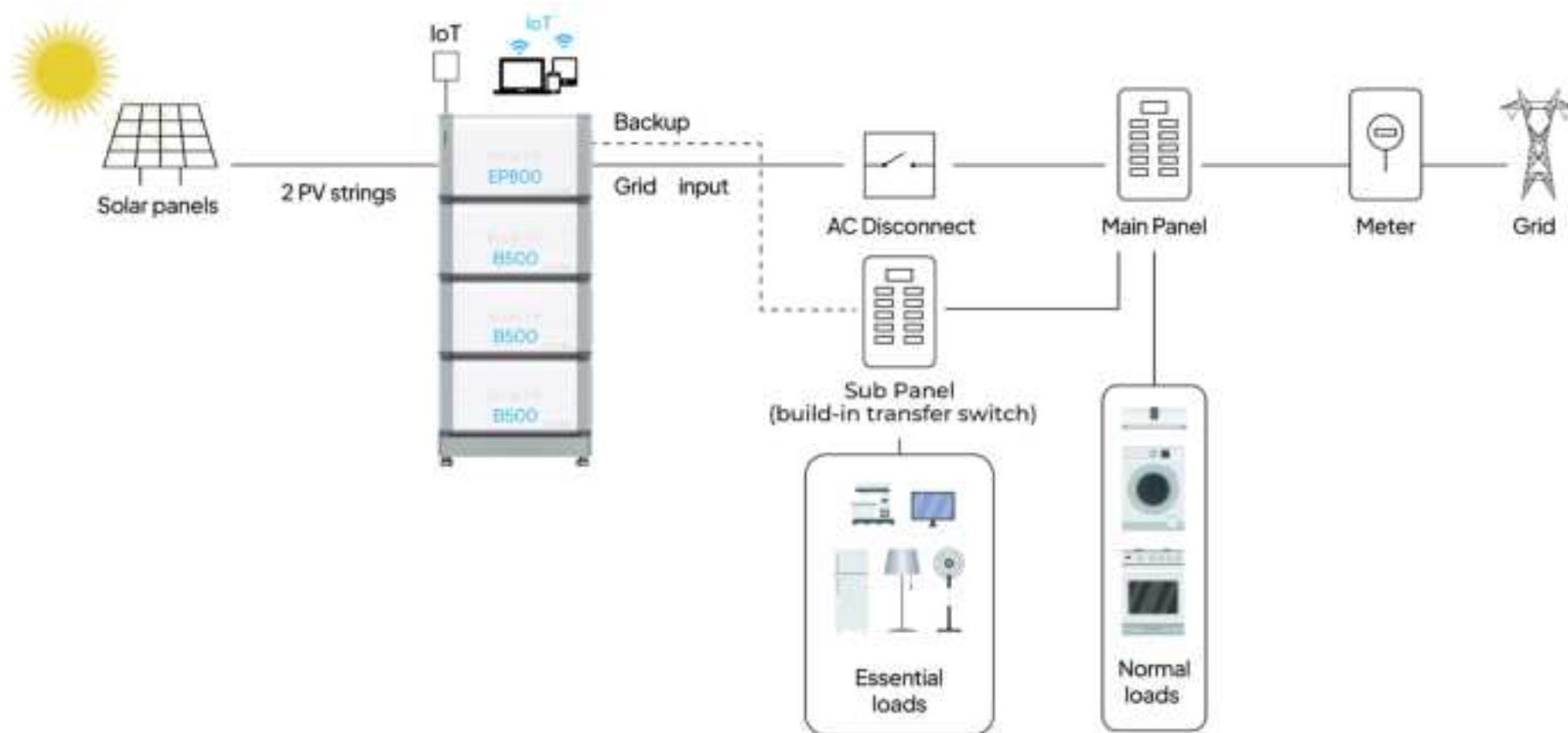
MC4 Wrench

5

6

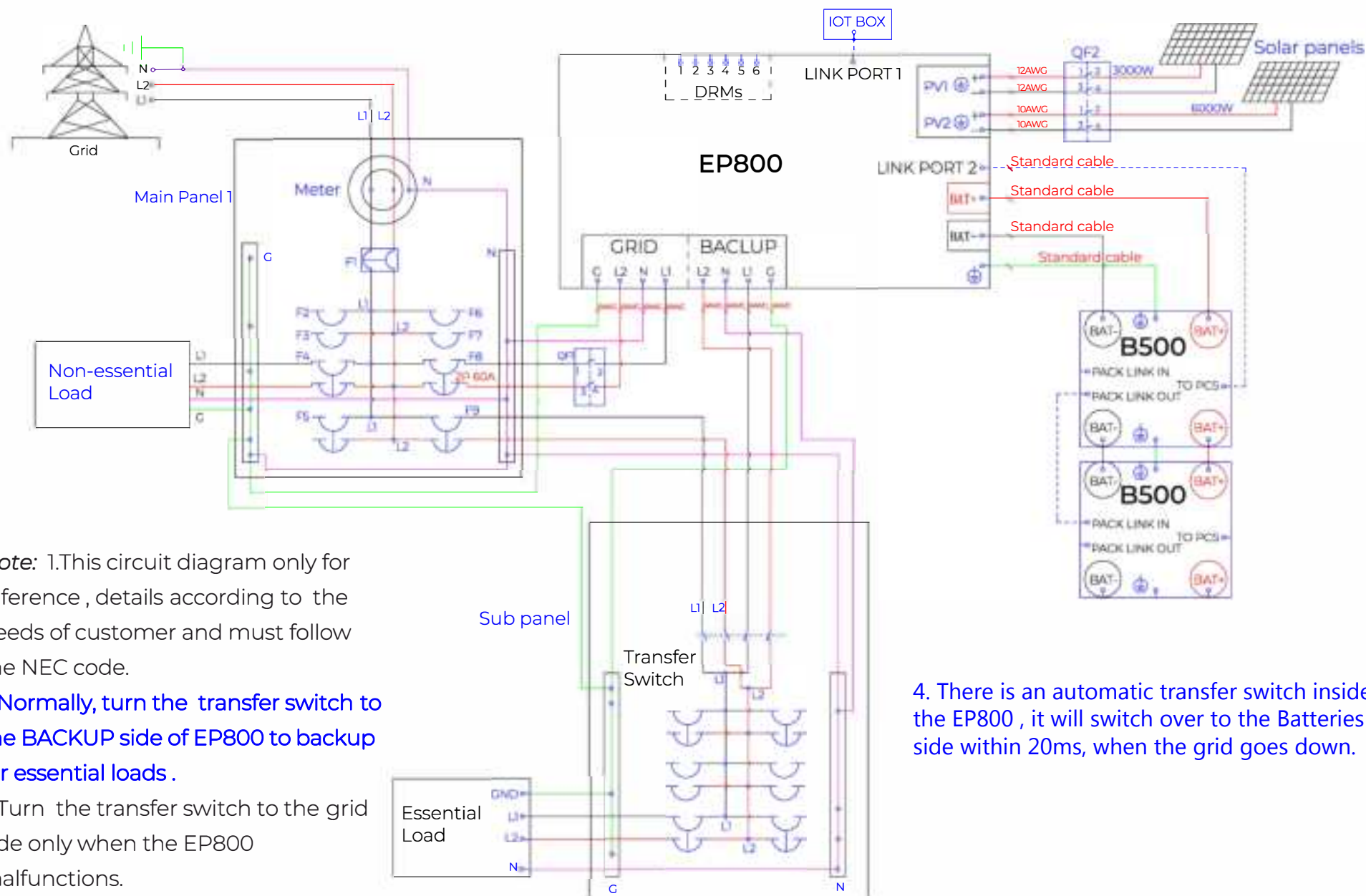
NOTE: Please check the **open circuit voltage** of PV arrays, which should be **between 240V and 500V**.

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



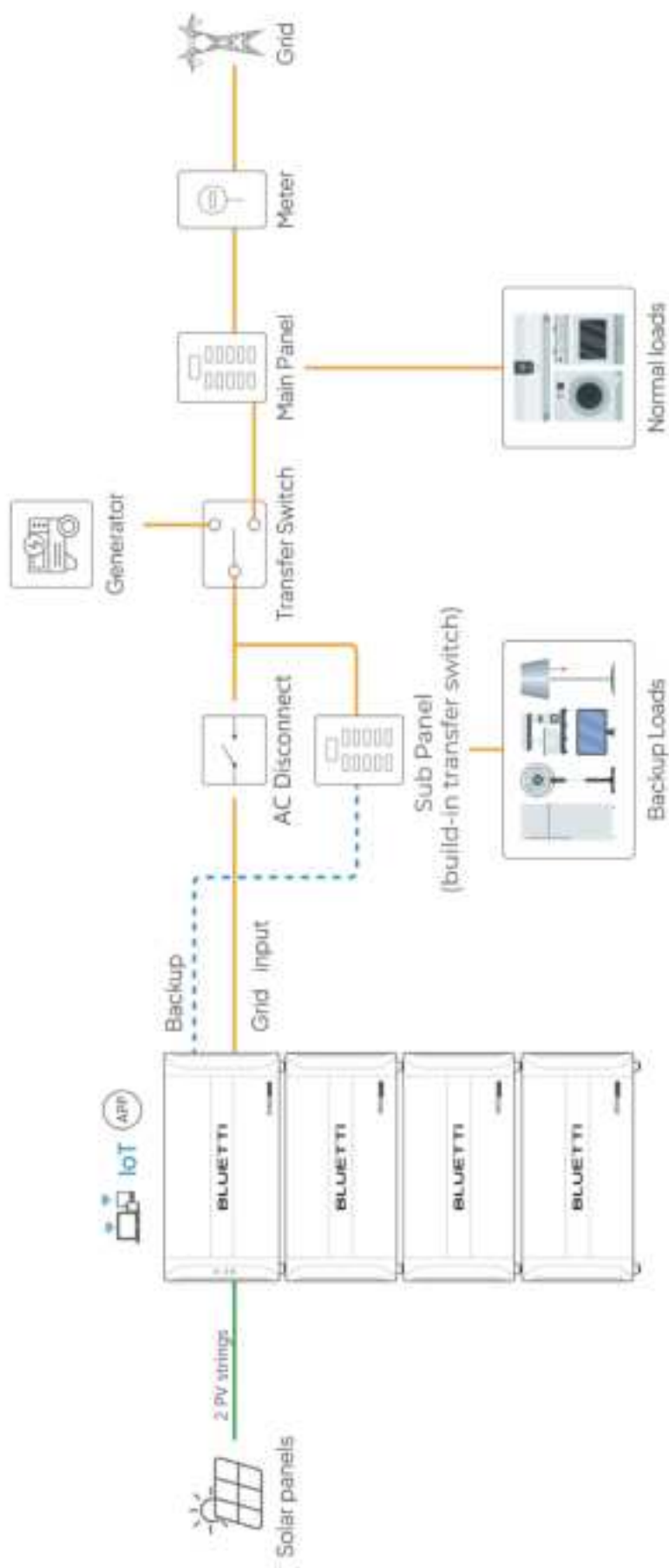
Note: 1.This circuit diagram only for reference , details according to the needs of customer and must follow the NEC code.

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. There is an automatic transfer switch inside the EP800 , it will switch over to the Batteries side within 20ms, when the grid goes down.

Solution 2: Charging from generator and new solar PV system



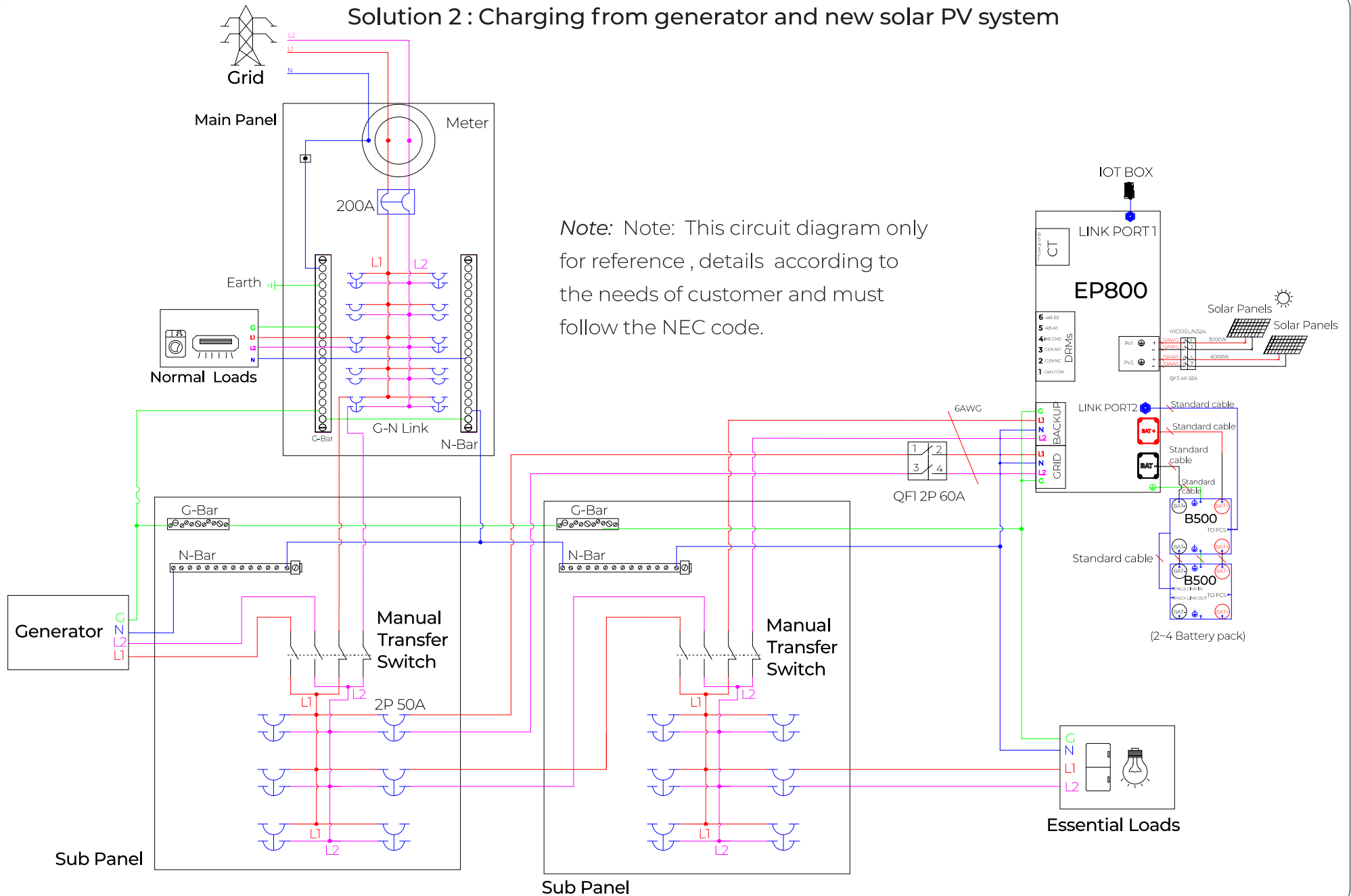
Note: Not all generators are compatible with EP800 , please contact BLUEETTI before installation.

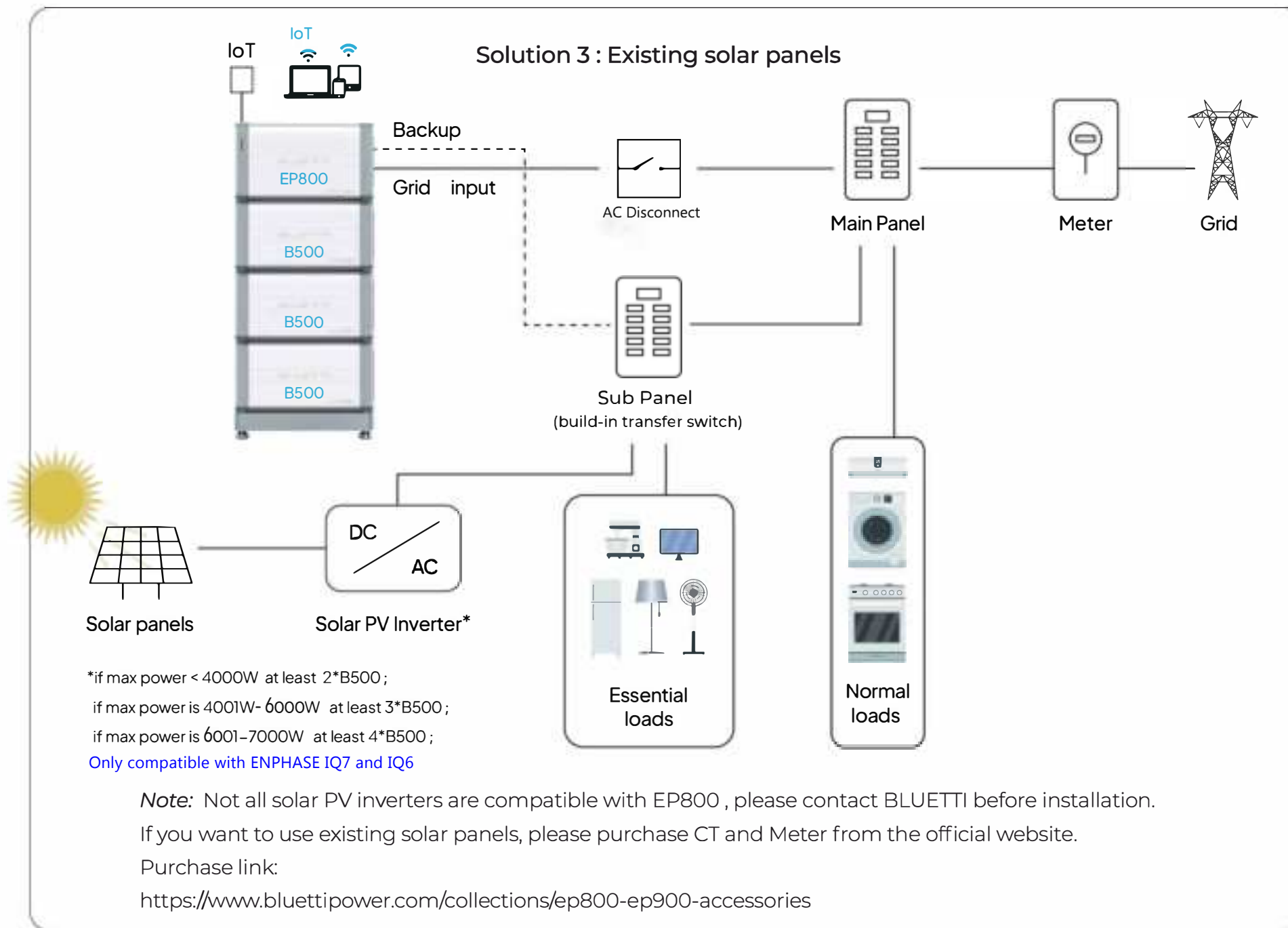
If you want to use a generator for charging, please purchase a Sub Panel with a transfer switch from the official website.

Purchase link:

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

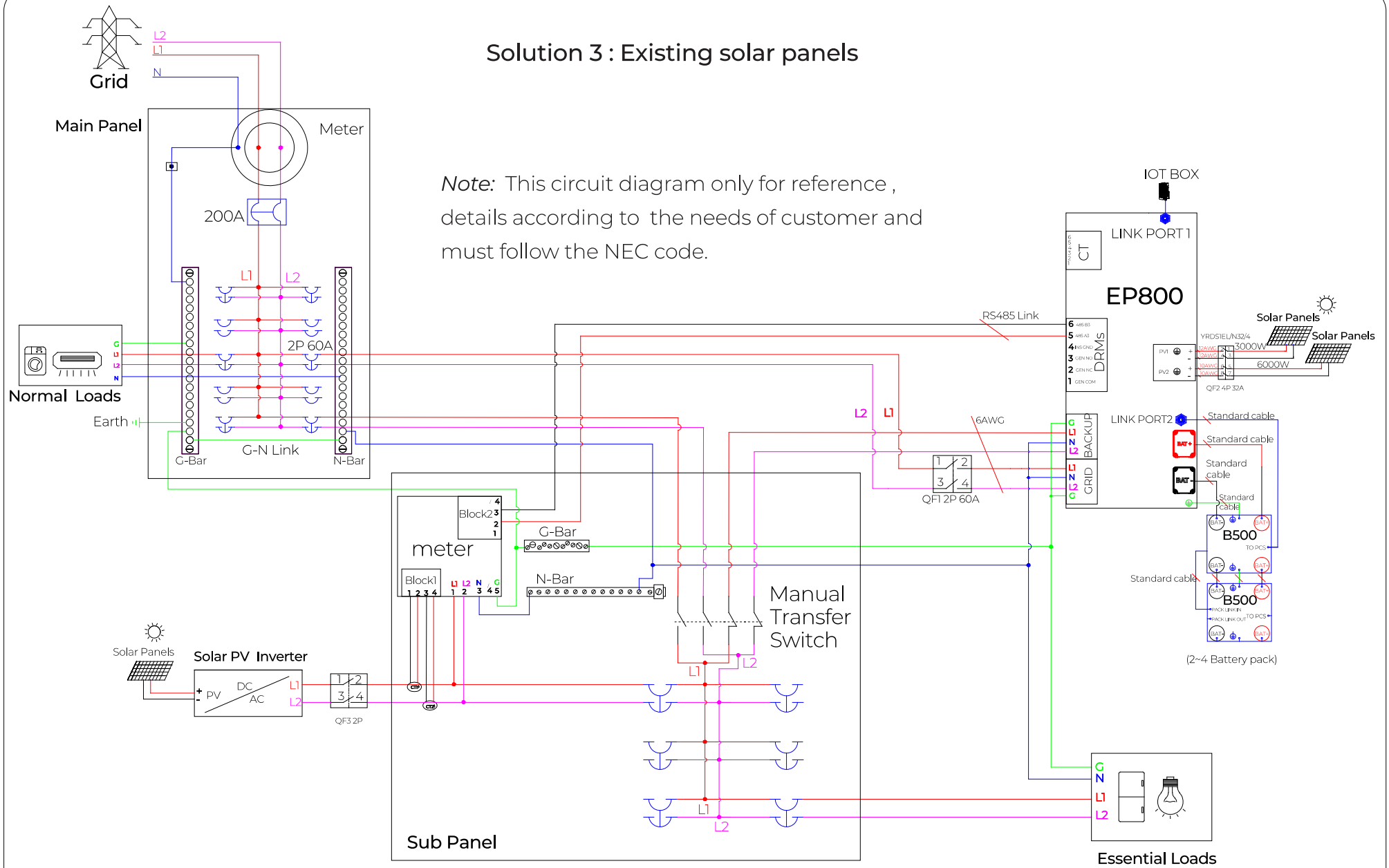
Solution 2 : Charging from generator and new solar PV system





Solution 3 : Existing solar panels

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 and turn on the breakers of generator supply.
- Step 7 Switch on the AC circuit breakers connected to the EP800 load port.
- Step 8 Check the EP800 system operation in the App.



LED System Status	LED		
	Green	Yellow	Red
Run	ON	OFF	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>



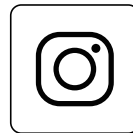
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service@
bluettipower.com

SHENZHEN POWEROAK NEWENER CO., LTD.

Add: F19, BLD No.1, Kaidaer, Tongsha Rd No.168, Xili Street,
Nanshan, Shenzhen, China

USA Company

Company: BLUETTI POWEROAK INC
Add: 6185 S VALLEY VIEW BLVD STE D LAS VEGAS
NEVADA 89118 United States

Customer Service

Tel: 800-200-2980 (Monday to Sunday 9:00-17:00)
Email: sale@bluettipower.com (Pre-sales),
service@bluettipower.com (After-sales)



Just Power On