

# EP500 FAQ's

## Q1: In-Grid UPS Setup Guide

A1:

1) For non-solar-powered household circuits:

An electrician with a professional technician certificate is required to install the in-grid power system, connect the wires of critical equipment from your main electrical box to the BLUETTI UPS BOX. When the power fails, it will automatically switch to EP500 or EP500 Pro for the power supply. The connection method: power grid--home main circuit--BLUETTI UPS box--EP500 or EP500Pro--critical equipment (such as refrigerator, electric light, and server).

2) Solar-powered UPS:

o 1. If the open-circuit voltage of the solar panels is within the specified input range of EP500, they can be directly connected into EP500 or EP500Pro through the MC4 port connectors to build up the UPS system.

o 2. If the open-circuit voltage of your panels exceeds the input limitation of EP500 or EP500Pro, they need to pass the "PV step-down module" to decrease the voltage before connecting into the system. The connection method is solar panels--PV step-down module--EP500 or EP500Pro--critical equipment (such as refrigerator, electric light, and server).

## Q2: Why is there a limitation on the power of the equipment loaded by the US version of EP500 or EP500Pro in the mobile UPS mode?

A2:

When EP500 or EP500Pro is plugged into a home wall outlet, the power output will be limited by the current of the wall plug.

The power of output is subject to:

If your home's socket features 120V/15A, the equipment carried by EP500 or EP500Pro cannot exceed 1800W.

If your home socket features 120V/25A, then EP500 load equipment can be no more than 2000W, and EP500Pro can be 3000W for safety.

## Q3: Can I change the working mode of EP500 or EP500Pro to work as a mobile UPS after the EP500 connected to the home grid?

A3:

Yes, you can. Turn off EP500 or EP500Pro first, and then unplug the cable on it, remind to set the Max. Grid Current to 15A.

## Q4: What is the UPS switching time?

A4:

There are two types of working conditions of UPS for EP500.

- o No delay for online UPS.;
- o 20ms from standby UPS.

**Q5: How much is the loss of AC and DC?**

A5:

- o In standby state: less than 10W,
- o AC\_ON & DC\_OFF: less than 20W,
- o AC-ON & DC\_ON: less than 25W

**Q6: After the stated 6000 battery cycles, how much capacity is left in EP500 and EP500 Pro?**

A6:

EP500 and EP500 Pro can maintain above 50% capacity after 6000 cycles.

**Q7: What's the frequency?**

A7:

- o 60Hz: US, Canada
- o 50Hz: Europe, UK, Australia
- o Frequency 50/60Hz cannot be switched.

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**Q8: What should I do if the solar panels on the roof of my house exceed the open circuit voltage requirement?**

A8:

You can reduce the open-circuit voltage by ordering a BLUETTI PV Voltage Drop Modular. Doesn't require changing the original installation and connection method of solar panels in your house. Through this modular, the open-circuit voltage of roof panels can be matched with the input specs of EP500/EP500Pro

**Q9: Can I use third party solar panel and what conditions need to be met?**

A9:

Yes, you can. However, it must meet:

1)Open Circuit Voltage(OCV):

- o EP500: 55-145V/Max.20A, Max.1200W.
- o EP500Pro: dual MPPT, each is 35-150V/Max.12A,1200W Max. (2400W Max. For dual connection).

2)Suitable MC4 connector.

3)We recommend that the solar panels to be connected should be of the same brand.

**Q10: Are there any restrictions on the use of the 100W USB-C port?**

A10:

The charging power will work at only 60W at most instead of 30W if the USB-C cable does not have 5A MFI certification.

**Q11: After the DC port of 12V30A is opened, can the other DC ports be used?**

A:

No, for the 30A large-current, the other ports besides 12V/30A RV ports won't work. In addition, you must cover the rubber plug when the DC is turned on and the 12V/30A port is idle, otherwise it may cause a short circuit if the cable falls in.

**Q12: Note on the output power of the Split Phase Bonding Function.**

A:

- o 1) There is only one AC port marked 4000W/220-240 (or 6000W/220-240) on the Split Phase Fusion Boxes that can power the High-voltage devices. Other 6 AC ports cannot load more than 2000W on EP500 (3000W on EP500Pro).
- o 2) Under Split Phase Bonding mode, the total load power of all AC ports (on the machine and Split Phase Fusion Boxes) cannot exceed 4000W for EP500 (6000W for EP500Pro).

**Q13: If one of the EP500(or EP500Pro) is out of power, does the Split Phase Bonding Function continue to work?**

A13:

If any one of the two EP500(or EP500Pro) runs out of power, the high-voltage output ports on the Split Phase Fusion Boxes will stop outputting power. The machine which still has the power needs to be set to "Single Phase" mode manually.

**Q14: Does the Split Phase Bonding Function apply to one EP500 and one EP500 Pro?**

A14:

No. Only applicable to units of the same model and specifications. For example, two EP500 or two EP500Pro are recommended. Besides, the Split Phase Fusion Boxes also are different.