

## A-Core Container

**The voltage of lithium battery becomes smaller when connected to inverter**



## Overview

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Do inverters and batteries need to match?

The inverter and batteries must match in terms of voltage, capacity, and power output. If you are using a 12V battery, then the input voltage of the inverter must match the battery voltage. If the specifications of the battery and the inverter do not match, the system will not operate stably and may even damage the equipment.

Does a hybrid inverter/charger have low voltage protection?

Both our standard inverter and hybrid inverter/chargers have low voltage protections. In a hybrid inverter, you may get warning about "battery low voltage" or "battery over-discharge", and in a standard system your charge controller and inverter may show a fault or shut off due to low battery voltage.

What happens if a battery is not connected to an inverter?

With the correct connection, the energy stored in the battery can be smoothly transferred to the inverter and converted into stable AC power for the power supply equipment, maximizing system efficiency. Improper connections, such as a battery voltage that does not match the inverter's input requirements, may result in less efficient power transfer.

Do inverters need to be connected to batteries?

Connecting inverters to batteries is an important part of an off-grid power solution or backup power system, and the right connections ensure that the system runs efficiently.

Why are battery and inverter connections important?

Proper battery and inverter connections can prevent equipment damage due to wiring errors or polarity problems. For example, incorrectly connecting the positive and negative terminals of the batteries may cause the inverter to fail

to work properly or even burn out the inverter's circuit system.

Why does a charge controller read a lower voltage?

This is because the charge controller is applying a charging voltage to the batteries to charge them. When there is a current being drawn from the batteries, the voltage will read lower than the true internal voltage of the battery, as there is a voltage drop over the internal resistance inside the battery.

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### Contact Us

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